



# **Joint Strategic Needs Assessment**

Shetland Health and Social Care Partnership

July 2025

## Acknowledgements

This document has been produced within the NHS Shetland Public Health together with the members of the short life working group:

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## List of Abbreviations

NRS	National Records of Scotland
JSNA	Joint Strategic Needs Assessment
SIMD	Scottish Index of Multiple Deprivation
CACI	Consolidated Analysis Centre Inc
LTC	Long-Term Condition
CHD	Coronary Heart Disease
TIA	Transient Ischemic Attack
COPD	Chronic Obstructive Pulmonary Disease
PCEC	Primary Care Emergency Centres
LGBTQ+	Lesbian, Gay, Bisexual, Transgender and Queer +
ABI	Alcohol Brief Intervention
CJSWR	Criminal Justice Social Work Reports
WEMWBS	Warwick-Edinburgh Mental Wellbeing Scale
SEMI	Severe & Enduring Mental Health
DDD	Defined Daily Dose
DALY	Disability Adjusted Life Year
LFR	Local Financial Return
WTE	Whole Time Equivalent
NES	NHS National Education for Scotland
HIS	Healthcare Improvement Scotland
PHS	Public Health Scotland
HSCP	Health and Social Care Partnership
IJB	Integrated Joint Board

## Executive Summary

This Joint Strategic Needs Assessment (JSNA) outlines the current and future health and social care needs of Shetland's population, serving as a foundation for setting strategic priorities and guiding local health and social care commissioning. It covers a range of topics including demographics, health status, risk factors, healthcare and social care services, workforce, and finances, and provides recommendations for further action. Recognising that need is complex and influenced by social, cultural, and ethical factors, the JSNA aims to promote both improved health outcomes and fairness in health distribution. Emphasising prevention, innovation, and strategic resource allocation, the document highlights the importance of moving away from traditional service models and instead building on community assets and informal support systems. It also underscores the significance of addressing the wider determinants of health - such as housing, education, income, and early life experience - to tackle inequalities and uphold the fundamental right to health for all.

Between 2011 and 2021, Shetland's population remained relatively stable before a slight decline and modest recovery, with a projected long-term decrease and significant ageing trend. The majority live in very remote and rural areas, and while the population of those aged 65+ is growing rapidly, younger cohorts are shrinking. Birth rates have declined steadily, while mortality rates rose sharply in 2021. Life expectancy in Shetland remains higher than the Scottish average, although gains have stalled, particularly for females. Healthy life expectancy is similarly higher but shows signs of decline. Migration trends show net loss, with some increases in younger and working-age migrants recently. Issues like affordability, heating costs, and loneliness affect many residents, with housing needs driven by overcrowding, poor conditions, and homelessness. Homelessness applications fell over the decade but have begun to rise again, particularly among families.

Key population health indicators in Shetland highlight relatively positive trends compared to national figures, alongside persistent challenges. Premature mortality in Shetland is consistently lower than the Scottish average, especially among females, although male rates remain higher. Avoidable mortality is also significantly lower, with 2.2 deaths per 1,000 population compared to 3.9 nationally. Cancer and cardiovascular disease are the leading causes of death, disproportionately affecting men. Alzheimer's disease presents the greatest burden of disease, while conditions like hypertension, depression, and asthma are more prevalent in Shetland than elsewhere in Scotland. Although long-term illness affects 34% of residents, trends have remained stable. Heart disease and cancer incidence have decreased recently, likely due to pandemic-related diagnostic disruption. The link between deprivation and early deaths from coronary heart disease is evident, though inconsistently reported. Falls, particularly among older adults, have risen, aligning with national rates. Cancer incidence shows some socioeconomic variation, and known risk factors remain significant contributors. Learning disability prevalence in Shetland is high relative to other areas, yet data gaps hinder tailored support. Overall, Shetland exhibits lower health loss and better outcomes in many areas, but inequalities and underdiagnosis remain pressing concerns.

Behavioural and clinical risk factors significantly influence health outcomes in Shetland, with behaviours like smoking, alcohol and drug use, and poor diet being shaped by broader social and environmental determinants such as income, access to healthy commodities, and levels of deprivation. While clinical risk factors like high blood pressure, cholesterol, and obesity are major contributors to chronic diseases, they are often interlinked with behavioural factors and the structural contexts in which people live. Smoking remains the leading preventable cause of illness and death, with notable gender and deprivation differences, though prevalence and related hospital admissions in Shetland are lower than national levels. Alcohol use is similarly concerning, particularly among men, with declining but still significant rates of hazardous drinking and associated health outcomes. Drug use, though lower than national averages, has shown increasing hospital admissions and deaths, particularly among deprived populations. Across these behaviours, inequality plays a central role, underscoring the need for public health approaches that address the root causes of risk, not just the symptoms.

Between 2017 and 2021, Shetland saw an increase in direct payments for care services, growing by 175%, significantly higher than the Scottish average. However, the number of registered care home places for older people has decreased by 28% since 2013, with care home occupancy rates declining by 27% since 2017. The number of long stay admissions and residents has fluctuated, with recent years showing lower admissions and a decline in long stay residents overall. Home care clients also declined from 2011 to 2017 but increased thereafter. The cost of residential care in Shetland is much higher than the Scottish average, and home care costs have risen as well. Additionally, the use of community alarms and telecare has increased, while the number of short stay and respite admissions has significantly decreased since 2020. Criminal justice social work reports and community payback orders have been in decline, with Shetland consistently reporting lower levels than Scotland.

Shetland has consistently reported slightly higher average scores on the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) compared to Scotland, with scores remaining stable since 2012. However, the prevalence of mental ill health has risen, with dementia diagnoses increasing by 23% from 2017/18 to 2020/21 and a 27% rise in depression diagnoses by 2020/21. The use of mental health medications has also grown, including a significant increase in antidepressant, antipsychotic, and hypnotic prescriptions, though rates remain lower than the national average. Mental health care demand is reflected in a 212% increase in psychological therapy referrals from 2014 to 2018, followed by a decline, but climbing again in 2021. Inpatient activity for mental health conditions shows a steady number of admissions related to psychoactive substance use and organic mental disorders. Additionally, hospitalisations for psychiatric care in Shetland display a disparity based on socio-economic status, with the most deprived areas seeing higher rates of hospitalisations.

Shetland's health and social care expenditure has seen an increase from £76.25 million in 2014/15 to £82.75 million in 2017/18, an 8.5% rise, with the largest increases in day case and care home spending. NHS Shetland's expenditure is divided between hospital and community care, with the community share growing from 43.2% to 46.7% between

2014/15 and 2017/18. The NHS workforce has grown from 24.3 WTE per 1,000 population in 2015/16 to 30.6 in 2021/22, outpacing Scotland's growth in workforce numbers. However, NHS Shetland faces higher turnover rates compared to the national average, though this gap has narrowed in recent years. The GP workforce in Shetland is one per 1,000 population, slightly higher than the national average, and social care services in Shetland are primarily provided by the public sector, differing from the national trend of private sector dominance in social care.

To improve health outcomes, there is a need for systemic change in public services and population health, emphasising collaboration across sectors, as highlighted by the Christie Commission's call for reform in public service delivery, focusing on integration and resource efficiency. Community planning plays a key role in addressing social determinants of health and reducing inequalities. Tackling health inequalities requires a broad approach, as emphasized by the Marmot review, which advocates for universal actions and addressing social factors that impact health. The importance of healthy ageing is also noted, with a focus on improving quality of life and delaying disease onset. The role of communities and public spaces in wellbeing is significant, with a shift towards greater community involvement and cross-sector responsibility for health. There is learning to be had from successful models like the Wigan Deal, which emphasises collaborative, long-term approaches, and the Liberated Method, which prioritises efficacy and relationships in public services. In order to move away from costly hospital care and provide care closer to home primary and community services must be adequately funded.

The challenges that Shetland faces are: 1. poverty and cost of living, 2. An ageing population, with more complex health issues, 3. Children who will become adults with poorer health status than recent generations, 4. Ongoing recruitment and retention challenges, 5. A growing burden of poor mental health, 6. buildings that are becoming less fit for purpose, and, 7. less money available.

This JSNA presents a comprehensive and evidence-based picture of Shetland's current and emerging health and social care needs, offering a clear call to action for sustained, collective effort. It highlights the importance of shifting towards preventative, person-centred, and community-led approaches while recognising the structural and resource challenges that persist. Addressing inequality, supporting healthy ageing, and investing in early intervention must be central to future strategies. By promoting collaboration across sectors, embracing innovation, and building on community strengths, Shetland can work towards a more equitable, sustainable, and resilient health and care system that meets the needs of all its residents - now and into the future.

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## 1. Introduction

### 1.1. Purpose and Scope

A Joint Strategic Needs Assessment (JSNA) is an assessment of the current and future health and social needs of the local community. This JSNA is intended to be a mechanism for setting strategic priorities for Shetland 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 Shetland Community Planning Partnership, and the updating of the Shetland Local Outcomes Improvement Plan.

The JSNA is set out under the following headings:

- Population demographics
- Population health
- Social, clinical and behavioural risk factors
- 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'. Capacity to benefit 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>. Supply (what is provided) and demand (what individuals/communities ask for) don't always match need. Demand can be influenced by factors such as the social and educational background of an individual, the media and the medical profession, while 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>3</sup>

## **1.2. Data Sources**

This report includes both publicly available and locally sourced data. Sources for publicly available data include among others National Records Scotland (NRS), the Scottish Public Health Observatory (ScotPHO) and Public Health Scotland (PHS).

Where previous relevant work was available it is referenced and summarised in the JSNA. The most commonly cited previous work is the local Shetland Population Health Survey completed in 2021. Publicly available data was supplemented by locally sourced information that was provided by members of the HSCP.

## **1.3. Method and Limitations**

A desk-based research and analysis of information was carried out. The resulting report is a snapshot of information available at the time of writing. Small area information for many areas is limited. Data aggregated to higher geographical levels, may fail to identify localised trends and characteristics of the population.

The JSNA is a continuous and iterative process that allows us to identify gaps in our intelligence and areas that need further in-depth analysis moving forward.

## **2. Demographics and Determinants of Health**

### **2.1. 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>4</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<sup>5</sup> (Figure 1) is used to describe the interconnection between these determinants and health inequalities.



Figure 1: The Dahlgren and Whitehead model of the main determinants of health

## 2.2. Population Size

### Mid-year population estimates (2011-2021)

The population estimates for Shetland remained largely stable between 2011 and 2016 at around 23,200 per year. Between 2016 and 2020, there was a noticeable decline in the population, with mid-year estimates falling by 1.4% to 22,870. In 2021, there was a slight increase in the estimated population against the previous year, which rose to an estimated 22,940.

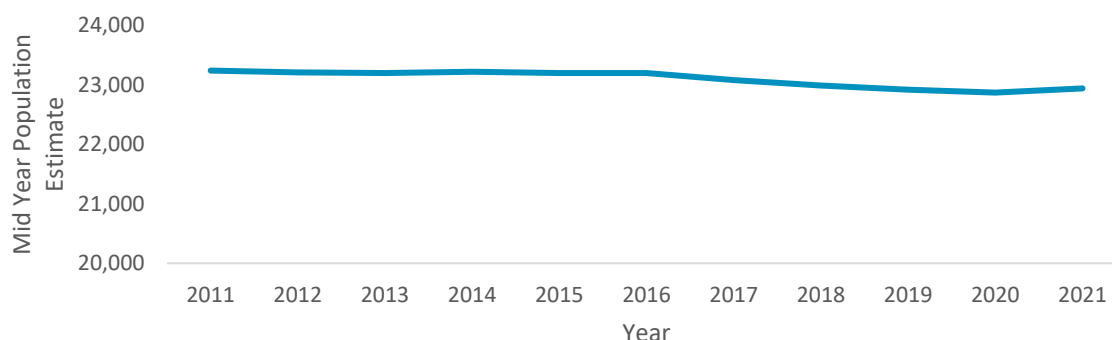


Figure 2: Shetland Islands mid-year Population Estimate (2011-2021)

### Age/Sex breakdown: Mid-year population estimates 2021

The figure provided shows the population distribution of Shetland by age strata and sex. In 2021, the total population was estimated at 22,940, and is effectively split 50/50 between males and females. One in five (20%) of the population were under 18 years of age, over half (58%) were aged between 18 and 64 years, with the remaining 22% aged 65 and over.

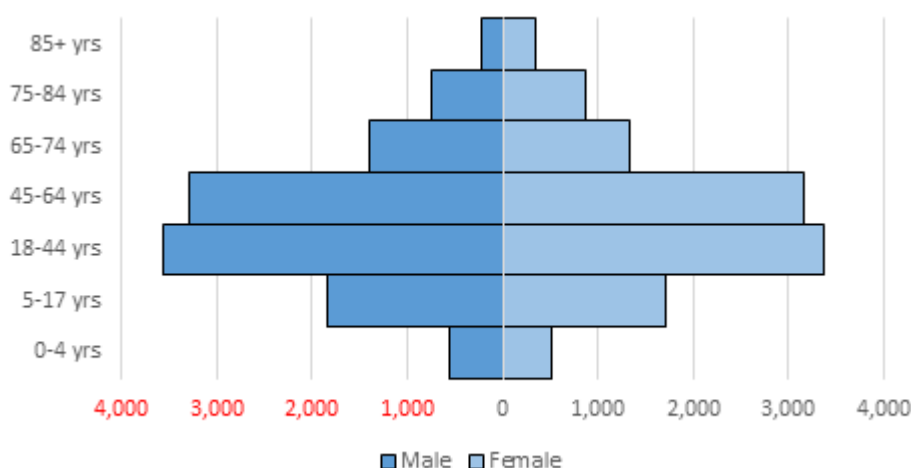


Figure 3: Mid-year population estimates 2021: Age/sex breakdown

### Urban/Rural population structure: 2011-2021

The Shetland population is geographically dispersed in terms of the Scottish Government's 8-Fold Urban Rural Classification. In 2020, 6,831 people in Shetland lived in very remote small towns, and 16,039 lived in very remote rural settings. This equated to around 30% of the Shetland population living in very remote small towns. This proportion has remained relatively unchanged since 2011.



*Figure 4: Urban/Rural population structure: 2011-2021*

### **Projected total population**

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

National Records of Scotland (NRS)<sup>6</sup> estimates the population in Shetland will decline by 2.8% between 2020 and 2035 and then contract by a further 3.4% between 2035 and 2043, to 21,579.

### **Change in population structure by age group 2014-2019**

Figure 5 shows the population change in Shetland compared to Scotland by age cohort between 2014 and 2019. In Shetland, the cohort aged 75-84yrs witnessed the largest change over the period, with the population increasing by 22%. There was a decline in the population aged 44yrs and below in Shetland, with the most noticeable contraction amongst the 0-4yr age cohort (-12%). There was no change in the population aged 45-64yrs in Shetland during the five-year period presented.



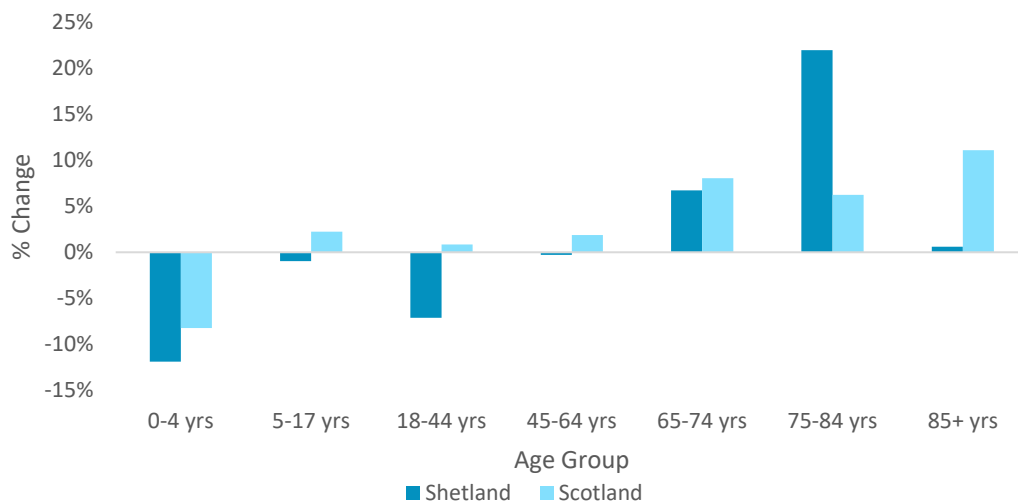


Figure 5: Change in population structure in Shetland by age group between 2014-2019 compared to the rest of Scotland

### Change in population structure by age group and sex 2014-2019

Figure 6 shows a breakdown of the population changes by age and sex across Shetland in the five-year period between 2014 and 2019. The cohorts of those aged 65 and over witnessed consistent growth across both genders, except for females aged 85yrs+. Females aged 75-84 increased by 19%, while the number of males in the same age group went up by 25%. In Shetland, there was a 15% decline in males aged 0-4yrs over the five-year period presented, and an 8% reduction in females in the same cohort.

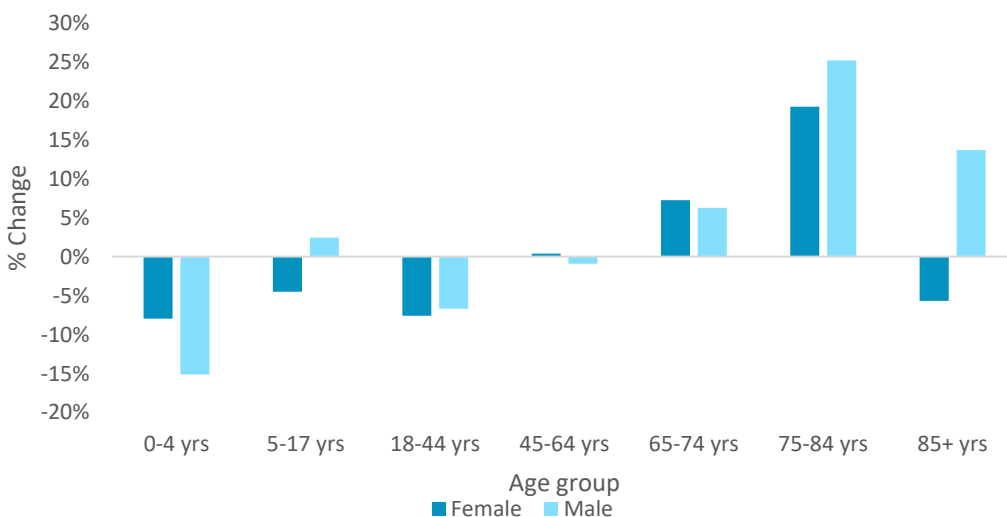


Figure 6: Change in population structure in Shetland by age group and sex between 2014-2019

### Projected change in population structure by age group 2020-2035

There is estimated to be a 35% increase in the Shetland population aged 65yrs+, by 2025, equivalent to that forecasted across Scotland. The biggest increase is expected in those aged 85yrs+ in Shetland, with a 61% increase estimated by NRS. The number of people aged between 18 and 64 years is forecast to decrease by 8%, with a 13% reduction in the number of children and young people. If these predictions are borne out, there will be 620 fewer children

and young people in 2035 than in 2020, and the number of people aged between 18 and 64 years will reduce by 1,021. In contrast, there are expected to be an additional 1,151 inhabitants aged 65+ in 2035 compared to 2020.

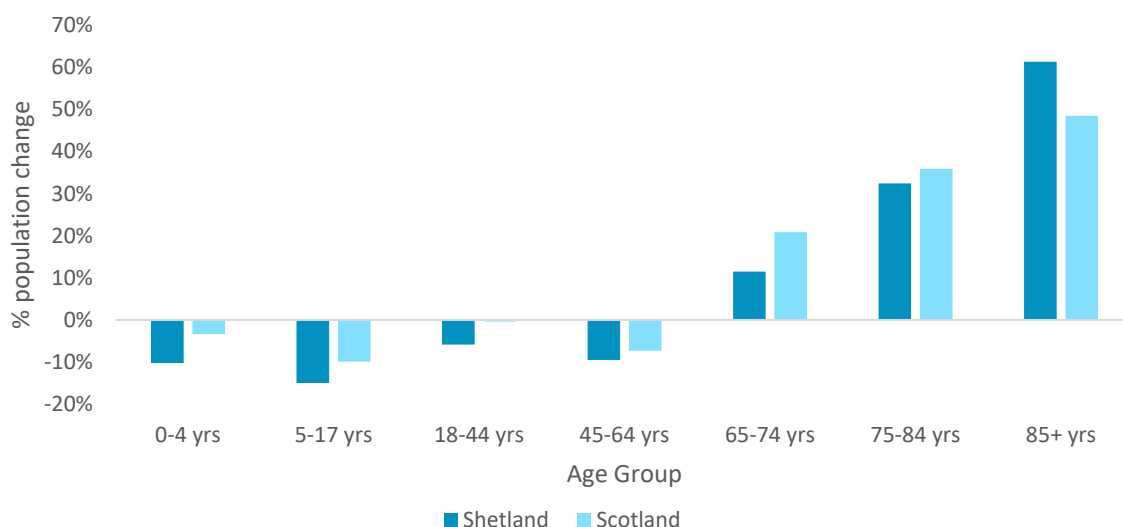


Figure 7: Projected change in population 2020-2035 by age group

### Project change in population dependency 2018-2043

The figure here summarises the level of children and younger people, combined with those aged 65+, relative to the working age population. This is otherwise known as the population dependency ratio and is a useful measure to summarise the dynamics of age-based population change. The dependency ratio in Shetland is set to increase by 1.1% in the medium term to 2030, and by 10% over the long term to 2043.

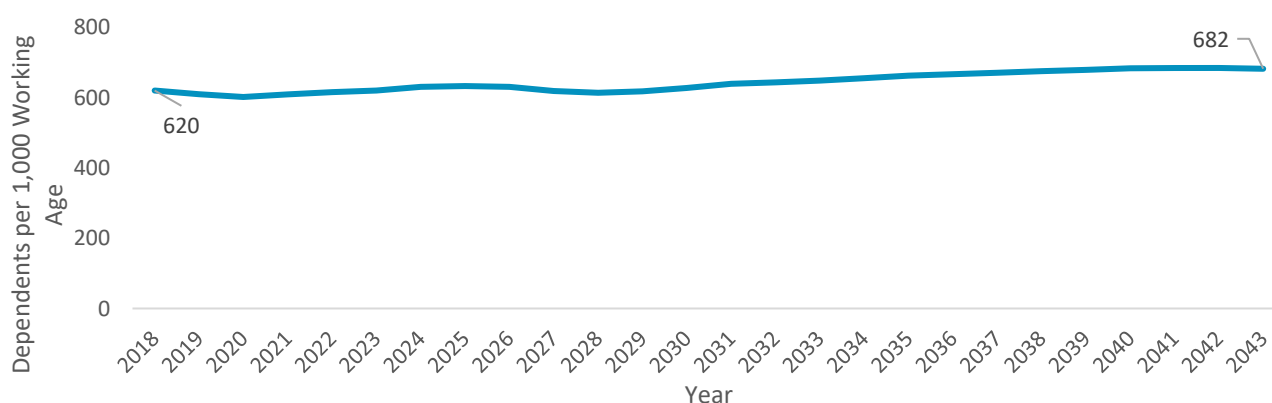


Figure 8: Projected change in population dependency in Shetland: 2018-2043

### 2.3. Birth Rate

There has been a declining trend in births since 2012 in Shetland. The birth rate fell from 11.9 per 1,000 at the start of the decade to 8.7 per 1,000 in 2021. The decline in birth rates has been comparable between Shetland and Scotland as a whole. In 2021, there were 200 births recorded in Shetland.

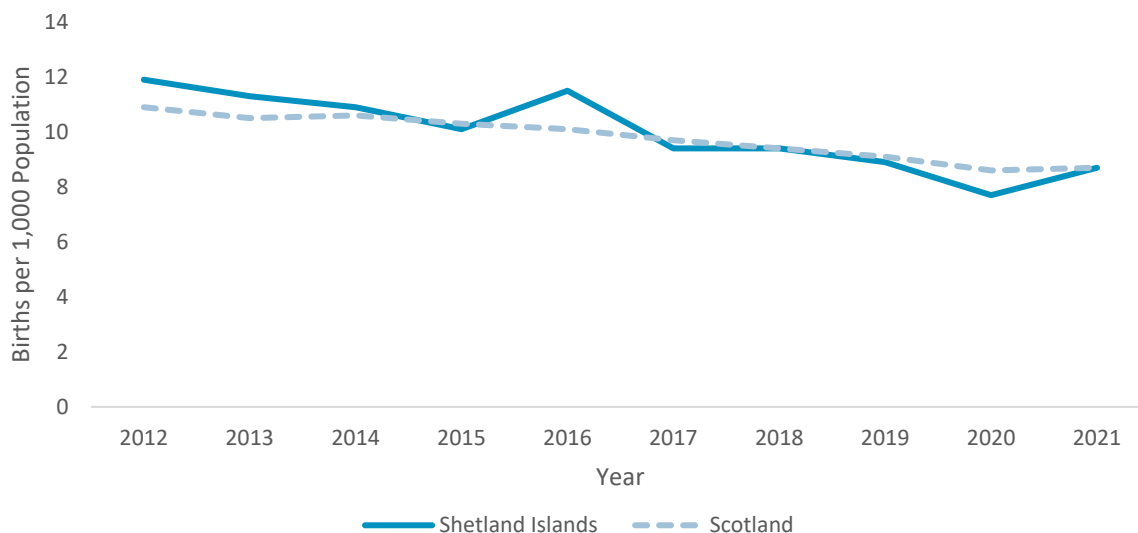


Figure 9: Birth rate 2012-2021

## 2.4. Mortality (death) rate

Between 2006 and 2016 the mortality rate in Shetland was broadly stable, except for two peaks in 2010 - 2011 and 2015 - 2016 where rates exceeded the Scottish mortality rate. 2019 saw the lowest death rate recorded since 2006 at 8.8 deaths per 1,000 population. This was followed by a marginal increase in 2020 to 9 deaths per 1,000 and a sharper increase in 2021 to 10.9 deaths per 1,000.



Figure 10: Age-standardised death rates per population compared to Scotland

## 2.5. Life Expectancy

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 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>7,8</sup>.

The latest estimate for life expectancy at birth (2019-21) for females was 83.2 years. This is over 2 years greater than the comparative figure for Scotland (80.6 years). Life expectancy at birth has remained static in Shetland for females since 2015-17.

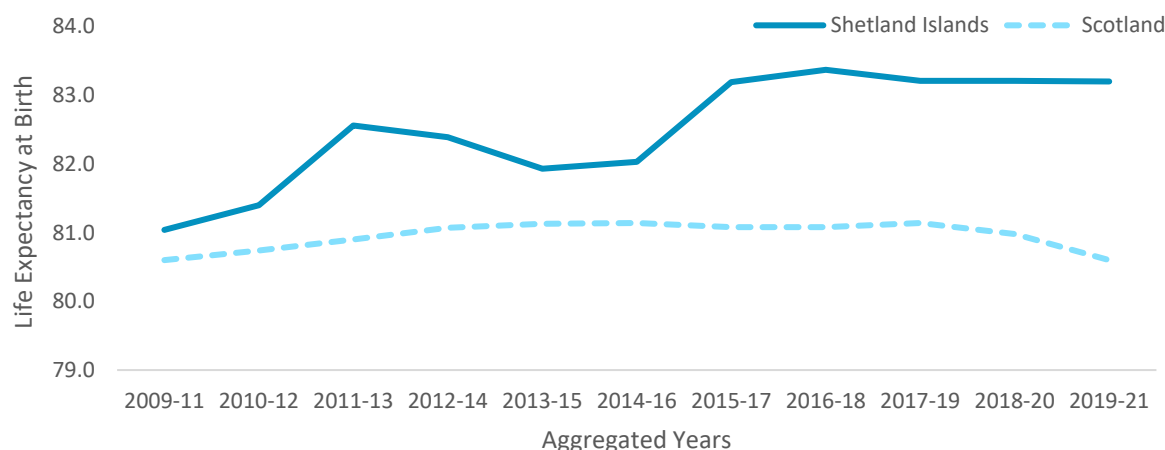


Figure 11: Female life expectancy at birth (years)

For males, life expectancy in Shetland in 2019-21 was 79.6 years, which is over 3 years lower than their local female counterparts. Male life expectancy on Shetland was three years greater than the Scottish average (76.8 years). Male life expectancy in Shetland has increased 1.3 years from 2015-17.

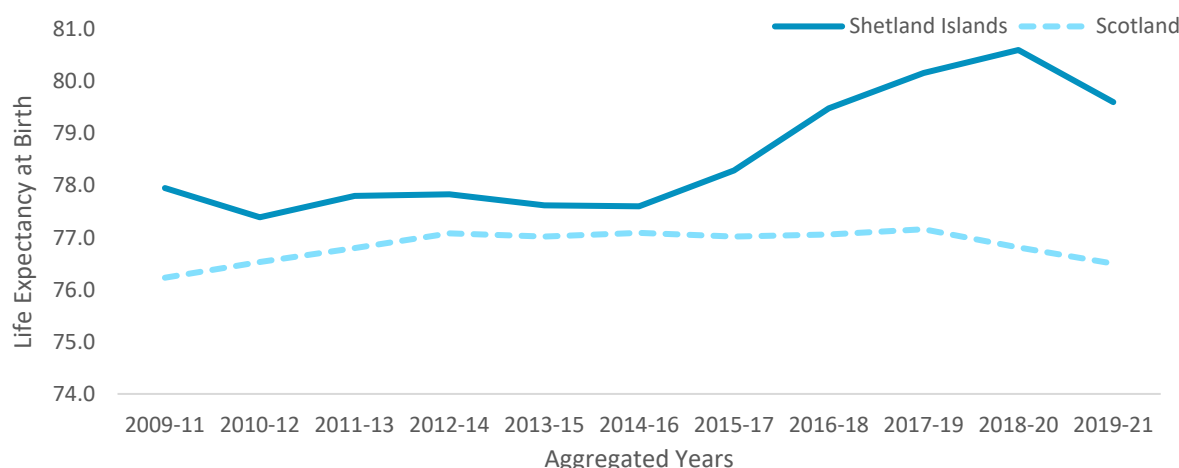


Figure 12: Male life expectancy at birth (years)

Female life expectancy is estimated to rise 1% by 2029/30 and 2% by 2042/43. In comparison, male life expectancy is set to stagnate over the period between 2018/19 and 2029/30, then increase by 2.6% by 2042/43. Scottish life expectancy follows a broadly similar pattern, although there is less change for females in the medium term indicated in an estimated 0.7% increase by 2029/30.

These estimates were calculated before the pandemic and therefore may not represent as accurate a picture due to the impact this had on mortality.

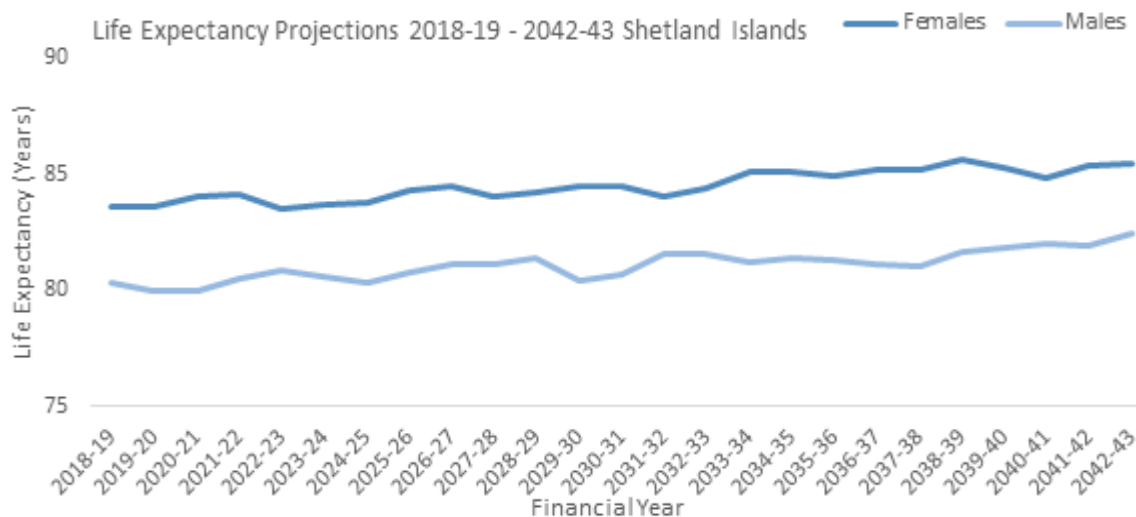


Figure 13: Life expectancy projections 2018-19 - 2042-43

## 2.6. Healthy life expectancy

Healthy Life Expectancy is the average number of years of life that people are expected to spend in good health at birth. Good health is based on how people rate their own health in the annual population survey<sup>9</sup>.

Over the period 2018-2020 female births on Shetland were estimated to have a healthy life expectancy of 62.5 years at birth. This was marginally higher than the Scottish average for females of 61.8 years. There was some variation in female healthy life expectancy, this is likely linked to the estimation methods used in the annual population survey. For example, 2015-17 estimates were 67 years, and 2016-18 estimates were 58 years. In more recent years have fallen in line with Scottish levels of healthy life expectancy.

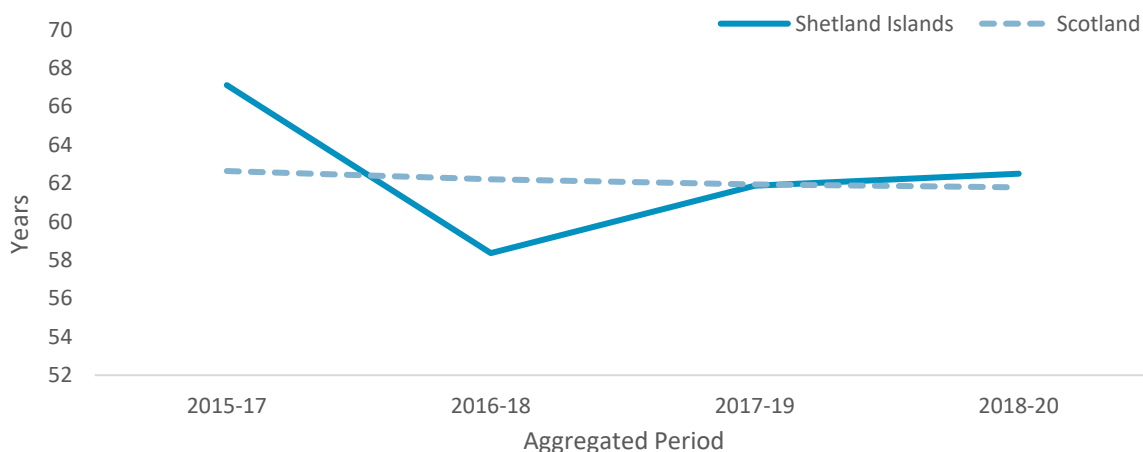


Figure 14: Female healthy life expectancy at birth (years)

Male healthy life expectancy on Shetland was estimated as 63.5 years during 2018-20, which was higher than the Scottish average for males by 2.6 years. The male level of HLE was reportedly higher than the Scottish estimate over each estimate period since 2015. The most recent aggregated period, 2018-20, was the lowest since 2015 for male HLE following a period of stable estimates.

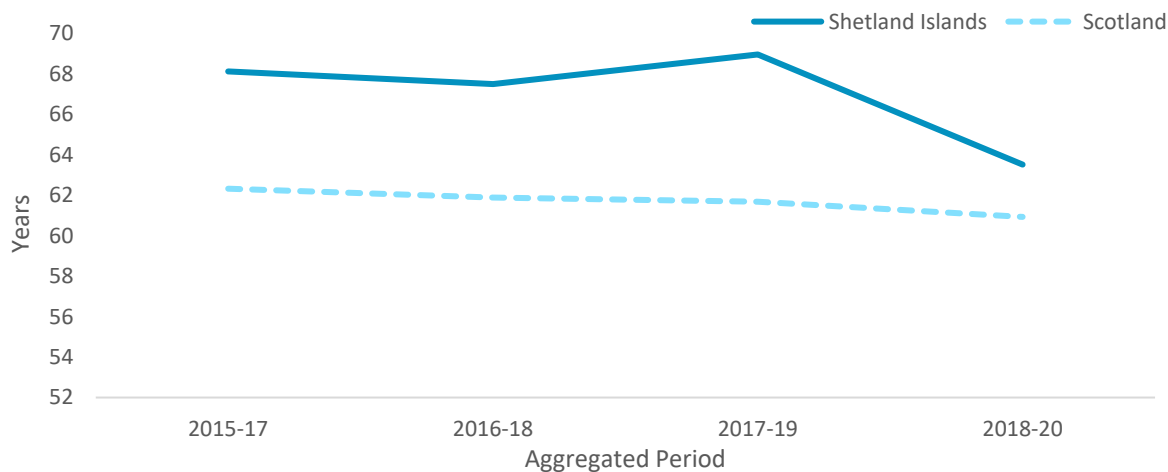


Figure 15: Male healthy life expectancy at birth (years)

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.

The number of years women spend in poor health increased between 2015-2017 and 2018-20, from 16.1 years to 20.7 years. This means that females spent almost a quarter of their lives in poor health in 2018-20. The number of years females spend in poor health also increased across Scotland in the same time period, from 18.5 years to 19.2 years. In 2018-20, females in Scotland spent just under a quarter (24%) of their lives in poor health.

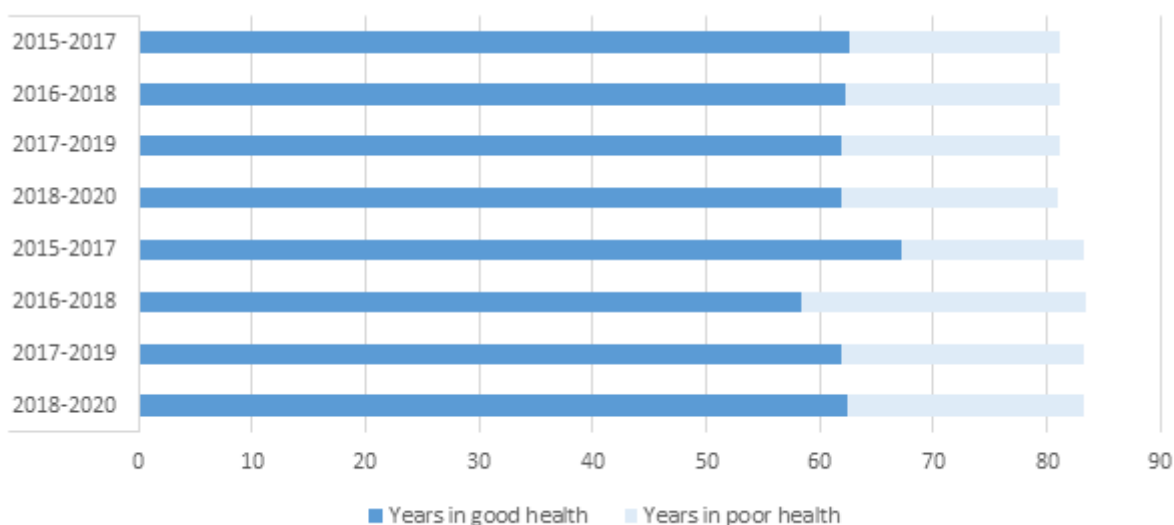


Figure 16: Female number of years in good health vs number of years in poor health

The number of years males spend in poor health increased between 2015-2017 and 2018-20, from 10.2 years to 17.1 years. This means that males spent over a fifth (21%) of their lives in poor health in 2018-20. The number of years males spend in poor health also increased across Scotland in the same time period, from 14.7 years to 15.9 years. In 2018-20, males in Scotland spent the same proportion of their lives in poor health (21%).

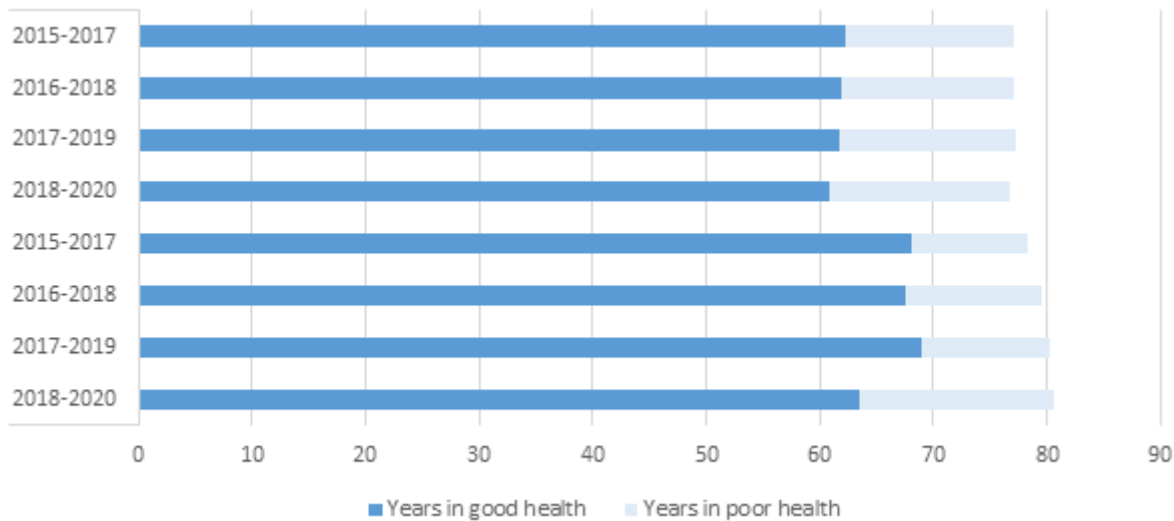


Figure 17: Male number of years in good health ver number of years in poor health

## 2.7. Migration

Migration plays another important role in shaping the population of an area and is a key factor NRS use when developing population estimates. During the decade presented, levels of migration out of Shetland have generally out-weighted levels of inward migration. Typically, people migrating out of Shetland have left to settle within other regions of Scotland, whereas inward migration has largely occurred from other regions of the UK. In 2019/20, 60 people left Shetland for other regions within Scotland, with an additional 50 migrating to overseas regions. In contrast, 70 people arrived from parts of the UK out with Scotland, meaning net migration for the financial year was -30. The chart below illustrates net migration into Shetland over the last 10 years, split between age groups.

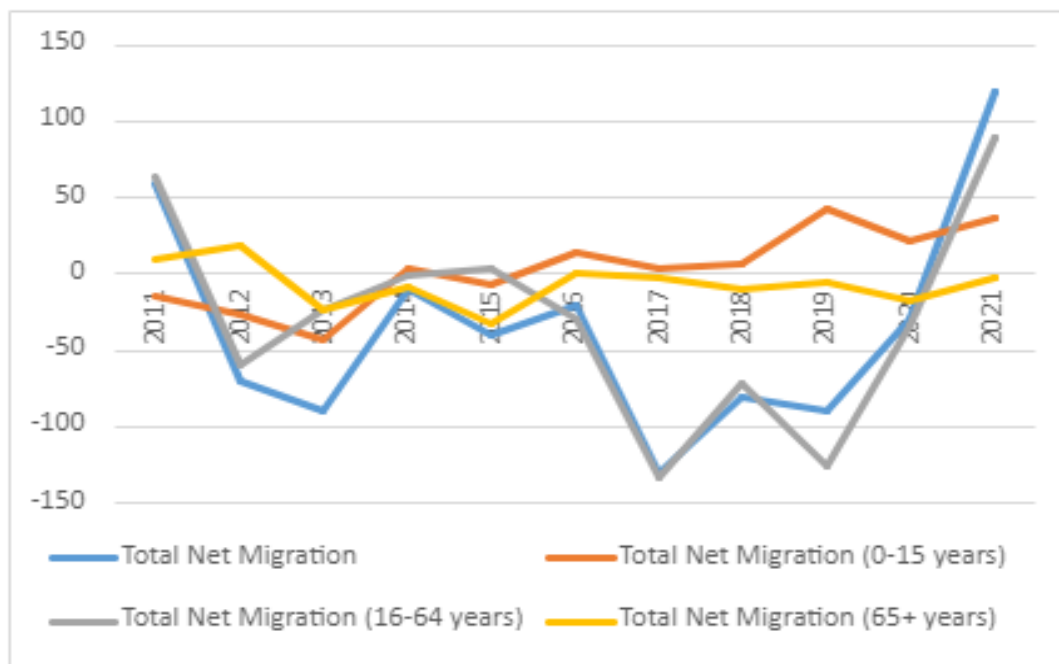


Figure 18: Net migration by age group 2011-2021

This shows that the number of children under the age of 15 migrating into Shetland over the last ten years has been gradually increasing, outweighing the numbers leaving Shetland. It appears that the numbers of 16–64-year-olds moving into Shetland seems to have started a sharp upward shift from 2019 onwards and it will be interesting to see whether this continues. It

appears that the numbers of people over 65 years narrowly outweighs the numbers moving into Shetland.

## **2.8. Ethnicity**

Ethnicity data enables us to better understand the communities living in Shetland. 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).

## **2.9. Housing and household structure**

In 2022, Shetland had 10,633 houses, an increase of 16.7% from 9,109 in 2001. This aligns with the average growth in houses across Scotland over the period. The average household size decreased from 2.38 people per house in 2001, to 2.16, a slightly sharper decrease than many areas across Scotland, but still higher than Argyll and Bute, for example, which has an average household size of 1.98 people.

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<sup>10</sup>. Housing also plays a crucial role in enabling healthy independent living and care at home. 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"<sup>11</sup>.

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

## **Property prices**

In the past decade, average house prices have increased by an average of 31% across Scotland. While the average house price on Shetland remains lower than the national average, the percentage increase in price (48%) during the same period is higher on Shetland and that of its peer group local authorities. The closest comparable increases among these peer local authorities were Orkney Islands (47%) and Western Isles (40%), perhaps an indication of increasing demand for remote/island living. Of the local authorities across Scotland, only Midlothian (50%) and West Lothian (54%) experienced higher percentage increases between the decade's beginning and end.



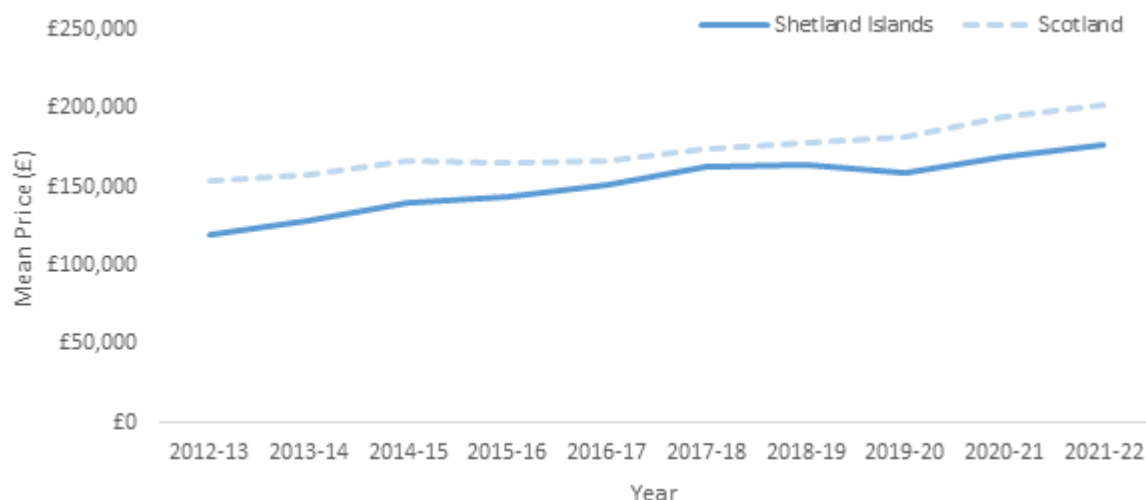


Figure 19: Mean residential property sale prices (£)

### Single parent households

In each year, with the exception of the most recent Scottish Household Survey (2019), the Shetland Islands recorded a lower proportion of single parent households than Scotland overall. The number of single parent households has however increased year on year since 2016, to a high of 6.3% for the period between 2012 and 2019.

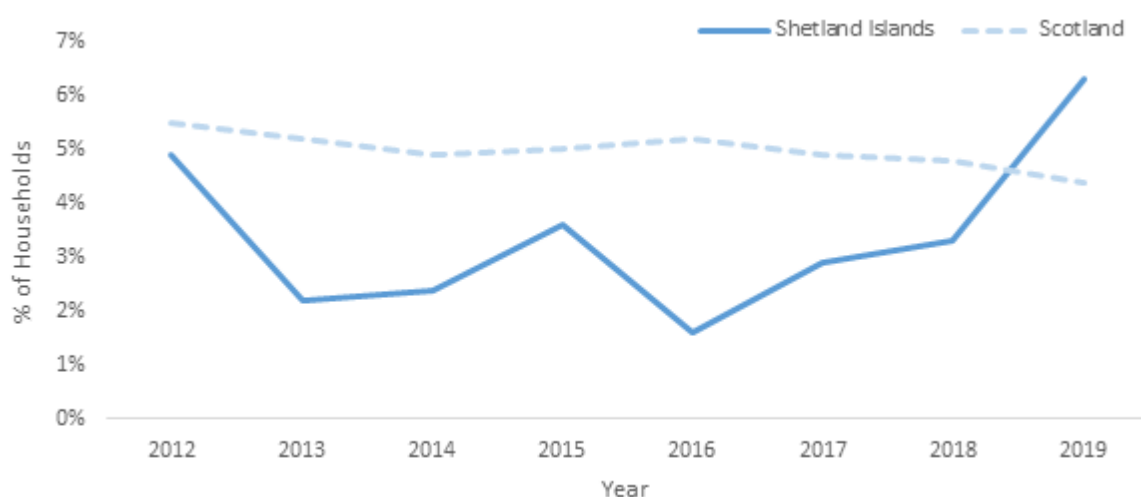


Figure 20: % households with a single parent

Within the Population Health Survey 2022, individuals across all age bands identified issues with their current home that affected their day to day activities; however the majority of those that identified issues were aged 40-64 years.

Heating costs that are not affordable were identified as a bit of/a serious problem across all age bands. While a high proportion of those in younger age bands also reported rent or mortgage costs not being affordable and feeling isolated and lonely at home as a bit of/a serious problem.

### Estimate of households in existing need

The local estimate of existing housing need was developed by partners, informed by the housing system evidence of households currently in unsuitable housing and who need to move to a new home. Existing need is driven by several factors, such as: homelessness, insecurity of

tenure, overcrowding, concealed households, poor quality housing or lack of basic amenities and unmet need for specialist housing.

In some cases, existing need can be met using in-situ solutions through aids, adaptations or repairs to existing properties. However, a proportion of need must be met through additional housing where an in-situ solution cannot be found e.g. for homeless households in temporary accommodation. The basis of the local estimate of existing housing need is shown in Table 1 below<sup>12</sup> with further detail provided in Figure 21.

*Table 1: Local estimate of existing housing need in Shetland*

Homeless Households & Those in Temporary Accommodation (June 2020)	75
Concealed & Overcrowded Households & Specialist Housing (Waiting List Points Awarded for Sharing Amenities, Overcrowding, Insecurity of Tenure)	316
Backlog Need	391



Figure 21: Reasons for un-met need in housing

Local findings from the Scottish House Condition Survey<sup>13</sup> on proportion of households with one or more long term sick or disabled person are presented in Table 2.

Table 2: Local findings from the Scottish House Condition Survey

		Households containing one or more long term sick or disabled person by Dwelling Characteristics				Households containing one or more long term sick or disabled person by Household Attributes				
		Age of Dwelling		Number of Bedrooms		Tenure		Household Type		
	% of LA	Pre-1945	Post 1945	2 or fewer	3+	Owner-occupied	Social Housing	Older	Families	Other
<i>Long term sick or disabled</i>	39%	41%	39%	45%	36%	35%	54%	57%	29%	33%
<i>Receiving care services</i>	8%	9%	7%	15%	4%	5%	18%	12%	5%	7%
<i>Dwellings with Adaptations</i>	29%	29%	29%	37%	26%	24%	43%	40%	25%	25%
Dwellings containing an LTSD individual who is restricted by the dwelling	29%	29%	29%	37%	26%	24%	43%	40%	25%	25%
% of dwellings requiring adaptations	29%	29%	29%	37%	26%	24%	43%	40%	25%	25%

## 2.10. Homelessness

Someone is considered homeless if they do not have access to permanent accommodation, which it is reasonable for them to occupy.

The number of homelessness applications per year fell steadily between 2013/14 and 2020/21, from 145 to 85, a decrease of over 40%. However, there was a slight increase in the most recent two years with 111 applications being submitted in 2022/23.

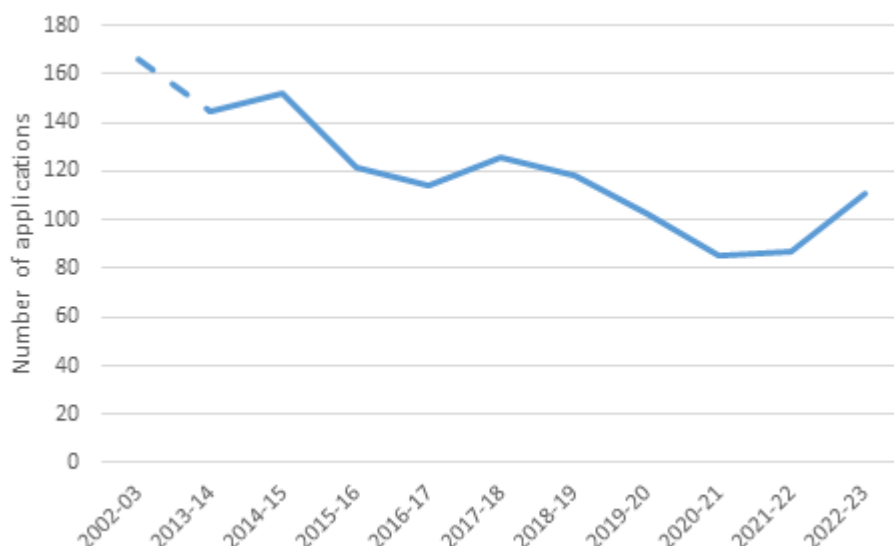


Figure 22: Number of homelessness applications per year

Similarly, the number of households with children or a pregnant woman in temporary accommodation has fluctuated in the period, peaking in 2015 and 2016 with 30 households in each year. In 2023 there were 15 households with children or a pregnant woman in temporary accommodation.

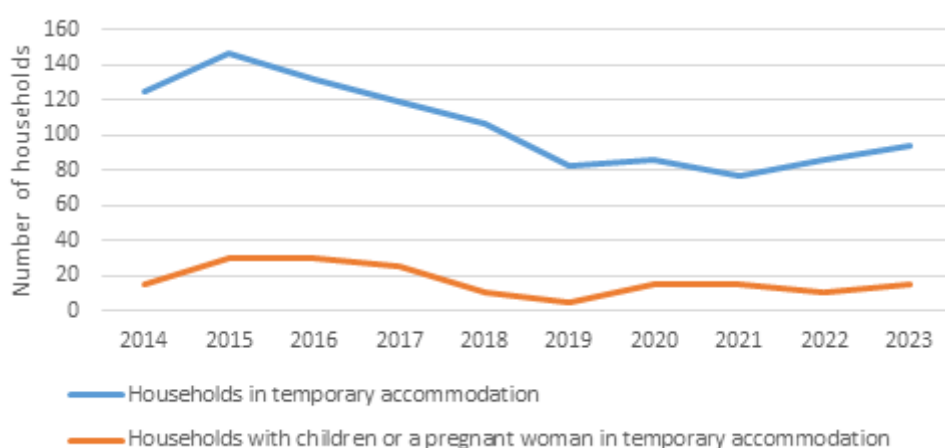


Figure 23: Number of households in temporary accommodation with children or pregnant women

Many homeless people in Scotland live in temporary accommodation. The causes of homelessness are complex. They usually include a combination of structural factors (such as poverty and lack of affordable housing) and individual vulnerabilities (such as relationship difficulties, mental health problems, or substance use). Poor health can be both a cause and consequence of homelessness. Homelessness is associated with poorer physical and mental health, and higher mortality rates.

Homeless people are much less likely to be registered with a GP and more likely to go to emergency services than the wider population.

## **2.11. Scottish Index of Multiple Deprivation**

The Scottish Index of Multiple Deprivation is a relative measure of deprivation across 6,976 small areas (called data zones). If an area is identified as 'deprived', this can relate to people having a low income but it can also mean fewer resources or opportunities. SIMD looks at the extent to which an area is deprived across seven domains: income, employment, education, health, access to services, crime and housing<sup>14</sup>.

SIMD is the Scottish Government's standard approach to identify areas of multiple deprivation in Scotland<sup>15</sup>. It can help improve understanding about the outcomes and circumstances of people living in the most deprived areas in Scotland. It can also allow effective targeting of policies and funding where the aim is to wholly or partly tackle or take account of area concentrations of multiple deprivation.

SIMD ranks data zones from most deprived (ranked 1) to least deprived (ranked 6,976). People using SIMD will often focus on the data zones below a certain rank, for example, the 5%, 10%, 15% or 20% most deprived data zones in Scotland.

SIMD is an area-based measure of relative deprivation: not every person in a highly deprived area will themselves be experiencing high levels of deprivation.

However, data zones in rural areas tend to cover a large land area and reflect a more mixed picture of people experiencing different levels of deprivation. This means that SIMD is less helpful at identifying the smaller pockets of deprivation found in more rural areas, compared to the larger pockets found in urban areas.

Given that national SIMD is not always appropriate, especially in remote/rural contexts a local relative SIMD can be derived by ranking the SIMD scores of all datazones within a specific geographic area - such as a health board or a council area - then assigning to appropriate quintiles. This approach provides a better understanding of how deprivation is spread in the local geographic area as it is not impacted by the scores assigned to datazones in other very different geographic areas.

## **2.12. 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. At a UK-wide level, even when looking only at 'very deep poverty' (<40% of median income), more than half of people in this category live in a working family.

### **Household income**

CACI Paycheck income data was used for the income analysis. CACI Paycheck provide valuable information regarding household income which can be broken down at the housing market area level<sup>16</sup>. In 2020, the mean income for Shetland was £39,097. Unfortunately, data from the UK Government on households below average income is not published at local authority or health board level<sup>17</sup>.

Table 3: Household income

Area	Total Households	Mean Income	Median Income	Lower Quartile	Upper Quartile
Shetland	10,425	£39,097	£31,898	£18,338	£52,459
Orkney	10,497	£38,800	£31,581	£18,257	£51,921
Eilean Siar	12,737	£34,436	£27,577	£16,141	£45,767
Highland	109,242	£40,334	£32,889	£18,878	£54,022
Scotland	2,500,236	£38,817	£30,666	£17,115	£52,354

### 2.13. Benefits

You will usually only be able to claim Universal Credit if you are aged 18 or over, therefore population estimates include those aged 18+ years

Mid-2022 population estimates were not available at the time of this assessment, so mid-2021 population estimates have been used for 2022/23<sup>18</sup>.

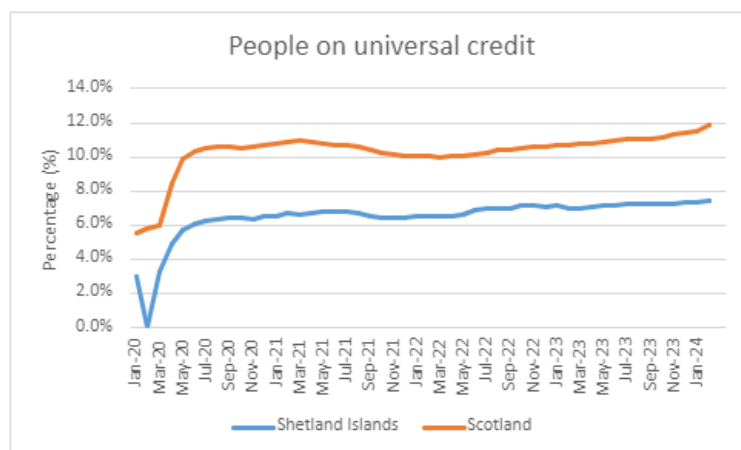


Figure 24: People on universal credit

The proportion of the population claiming Universal Credit is consistently lower on the Shetland Islands than across Scotland, with an average of 6.5% of the population claiming UC between January 2020 and February 2024, this compares to a national average of 10.3% of the population during the same period.

### 2.14. Fuel poverty

The Scottish House Condition Survey 2017-2019 also details that 22% of Shetland households in extreme fuel poverty compared to an average of 12% across Scotland. The local authorities which had significantly higher extreme fuel poverty rates included Na h-Eileanan Siar (24%), Orkney (22%), Shetland (22%) and Highland (22%).

According to the Census in 2011, the majority of Shetland properties were heated by electric central heating (48.3%), followed by oil central heating (27.9%). Comparing this with Scotland shows that the majority of Scottish stock is heated by gas with only 13.4% heated by electricity.

According to the Scottish House Condition Survey 2016-2018, 76% of all dwellings in Shetland have full central heating, which is lower than the proportion in Scotland of 96%. Stock is generally in good condition, although it is noted that climate conditions require higher standard quality in build materials.

Table 4: Number of households experiencing fuel poverty

		Number of Households by Dwelling Characteristics					Number of Households by Household Attributes				
	Total	Age of Dwelling		House or Flat	Number of Bedrooms		Tenure		Household Type		
		Pre-1945	Post 1945	House	2 or fewer	3 +	Owner-occupied	Social Housing	Older	Families	Other
	000s	000s	000s	000s	000s	000s	000s	000s	000s	000s	000s
Fuel poverty	3	1	2	*	1	2	2	*	1	1	1
Fuel poor	31%	36%	29%	30%	40%	27%	25%	53%	36%	34%	26%
Fuel poverty gap	£1,500	*	£1,390	£1,820	£1,350	£2,000	£1,760	£1,390	*	*	£1,900
Fuel poverty gap adjusted	£1,420	*	£1,340	£1,720	£1,250	£1,880	£1,670	£1,290	*	*	£1,800
Extreme fuel poverty	22%	25%	21%	21%	27%	19%	17%	38%	25%	17%	22%
Dwellings that fail the energy efficient definition	58%	76%	53%	59%	67%	54%	57%	63%	62%	46%	63%



## 2.15. Child poverty

A child is defined as an individual aged under 16 or 16-19 who is not married, in a civil partnership nor living with a partner; and are still living with parents/a responsible adult; and are in full-time non-advanced education or in unwaged government training.

The chart below shows the numbers of children in low income families, both absolute and relative, increasing steadily between 2015 and 2021, before falling slightly in 2022. We do not yet know whether this fall will continue<sup>19</sup>.

The Shetland Islands recorded a consistently lower proportion of children living in low income families in the financial years between 2014/15 and 2022/23 inclusive. There is a trend of an increasing proportion of children in low income families in the data shown, increasing from 6.6% to 9.8%.

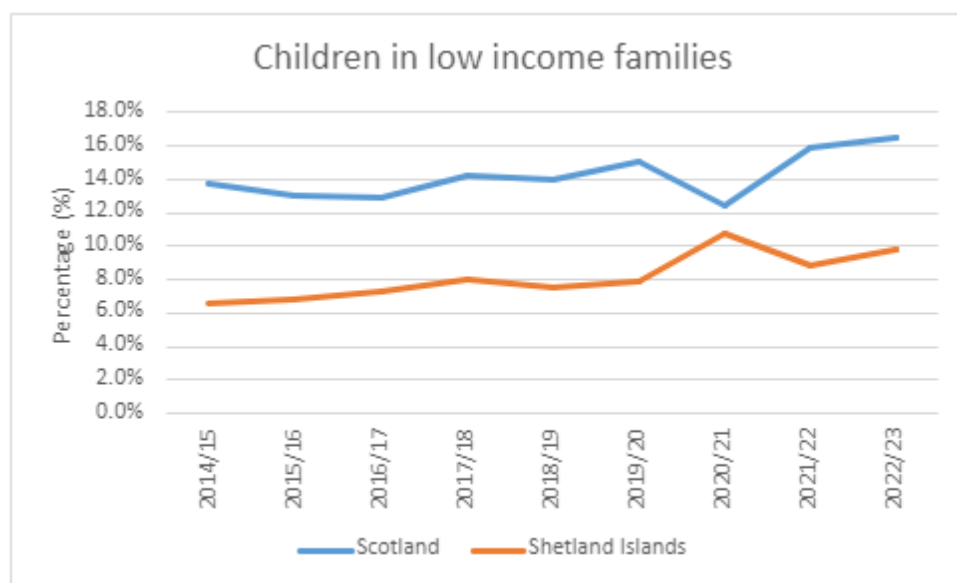


Figure 25: Children in low income families

Relative low income is defined as a family in low income Before Housing Costs (BHC) in the reference year. A family must have claimed Child Benefit and at least one other household benefit (Universal Credit, tax credits, or Housing Benefit) at any point in the year to be classed as low income in these statistics.

Absolute low income is defined as a family in low income Before Housing Costs (BHC) in the reference year in comparison with incomes in financial year ending 2011. A family must have claimed Child Benefit and at least one other household benefit (Universal Credit, tax credits, or Housing Benefit) at any point in the year to be classed as low income in these statistics.

The figure below describes cost of living and environmental concerns described by respondents to the Population Health Survey 2022, by age band.

## 2.16. Poverty and health

The image below, from the Health Foundation, illustrates the impact that poverty can have on health<sup>20</sup>.



## Money and resources

**1 IN 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.

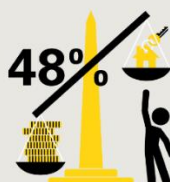
An inadequate income can cause poor health because it is more difficult to:

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



References available at [www.health.org.uk/healthy-lives-infographics](http://www.health.org.uk/healthy-lives-infographics)  
© 2018 The Health Foundation.

Figure 26: Impact of poverty on health

### 2.17. Recorded crime

During 2019/20, Shetland Islands experienced a rate of recorded crime less than half that of Scotland. However, crimes of Violence, Sexual Crime, Crimes of Dishonesty and Public Order criminality (Fire raising, vandalism etc.) were all higher per capita on Shetland than the other island local authorities.

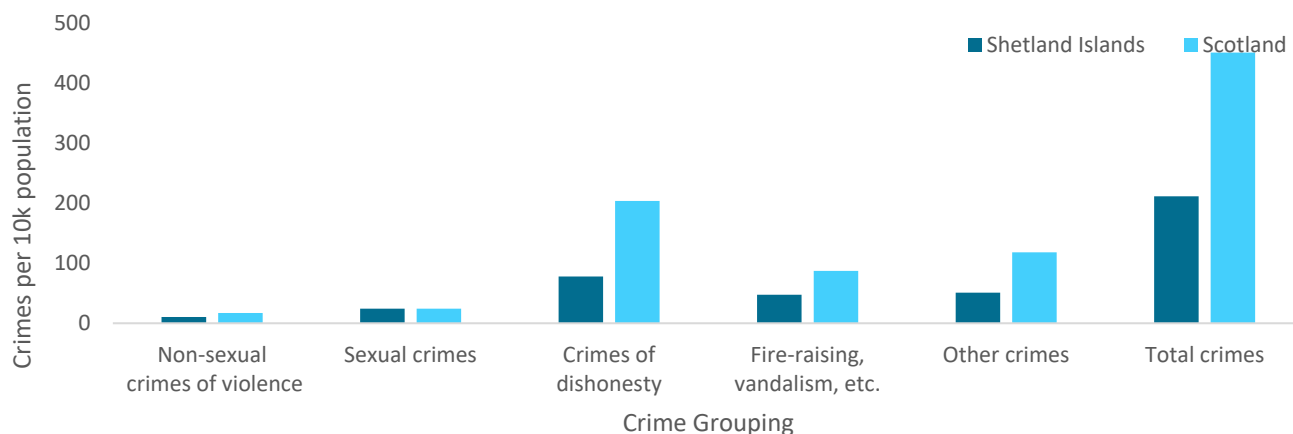


Figure 27: Rate of crime recorded by Police Scotland per 10,000 population 2019-2020

### 3. Population Health

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

#### 3.1. Premature Mortality

A premature death is one that occurs before a person has reached the age of 75 years. The premature mortality rate across Shetland in 2021 was 3.7 deaths per 1,000 population. This is 24% lower than Scotland (4.7 per 1k). The premature mortality rate decreased from a high in 2014 (4.4 per 1000) to a low of 2.9 per 1,000 population in 2016 and has steadily increased since then.

*Table 5 Premature Mortality Rates – All*

Local Authority	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Shetland Islands	3.5	3.6	4.4	4.1	2.9	3.2	3.0	3.3	3.6	3.7
Scotland	4.5	4.4	4.2	4.4	4.4	4.3	4.3	4.3	4.6	4.7

The female rate of premature deaths decreased each year since 2019 and, in 2021, was 41% lower than Scotland (2.5 per 1000 in Shetland versus 3.8 per 1000 in Scotland). The same rate in males has increased since 2019, however is still 17% lower than Scotland (4.8 per 1000 in Shetland versus 5.7 per 1000 in Scotland).

In 2021, the male premature mortality rate in Shetland was 63% higher than females. This is compared to a 40% difference between males and females in Scotland.

*Table 6 Premature Mortality Rates - by Sex*

Local Authority	Sex	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Shetland Islands	Female	2.3	3.0	3.7	3.0	2.1	2.0	2.3	3.3	2.7	2.5
	Male	4.7	4.1	5.2	5.1	3.7	4.3	3.7	3.3	4.5	4.8
Scotland	Female	3.6	3.5	3.3	3.5	3.5	3.4	3.5	3.4	3.6	3.8
	Male	5.4	5.3	5.2	5.4	5.4	5.2	5.2	5.2	5.7	5.7

#### 3.2. Avoidable Mortality

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. During the period 2018-2020, 1.4 Shetland deaths per 1,000 population were preventable and 0.9 deaths per 1,000 population were treatable. Preventable and treatable mortality rates were both significantly lower on Shetland compared to Scotland - 67% and 20% lower respectively during 2018-2020. Avoidable mortality is a composite measure comprised of both preventable and treatable mortality; 2.2 deaths per 1,000 Shetland population during 2018 - 2020 could have been avoided, 56% lower than the Scottish avoidable mortality rate of 3.9 deaths per 1,000 population.

Table 7 Avoidable Mortality Rates – All

Local Authority	Avoidable Mortality	Preventable Mortality	Treatable Mortality
Shetland Islands	2.2	1.4	0.9
Scotland	3.9	2.8	1.1

### 3.3. Leading Cause of Death

Malignant neoplasms (abnormal growths in the body) were the leading cause of death (36% of deaths) in Shetland in 2021. Males accounted for over half (58%) of all deaths in Shetland during 2021. Neoplasms and Circulatory disease were in particular higher for Shetland males, accounting for 66% and 57% of deaths within each category respectively. Male deaths caused by Neoplasms were 47% higher than the rate across Scotland. It is unclear, however, what impact the pandemic had on deaths, particularly because of a known fall in Cancer diagnosis rates nationally.

Table 8 Leading Cause of Death (2021)

Cause of Mortality	Number of Deaths		
	Female	Male	All
Neoplasms	31	61	92
Diseases of the Circulatory System	27	37	64
Diseases of the Nervous System	16	12	28
External Causes of Morbidity and Mortality	6	12	18
Mental and Behavioural Disorders	6	8	14
Diseases of the Respiratory System	6	6	12
<b>All Causes</b>	<b>109</b>	<b>148</b>	<b>257</b>

### 3.4. 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>21</sup>.

The three leading groups of causes of ill-health and early death in Shetland are cancers, cardiovascular diseases and neurological disorders. These groups account for 51% of the total burden of health loss. The largest differences in burden - compared to Scotland - occur due to chronic respiratory diseases, cardiovascular diseases and other non-communicable diseases.

Alzheimer's disease and other dementias reported a Disability Adjusted Life Year (DALY) of 1,749 per 100,000 population in 2019. This was the most burdensome disease on the Shetland population during this period. This indexed measure weighs both mortality and the lived experience of disease providing a rate referred to as a Disability Adjusted Life Year.

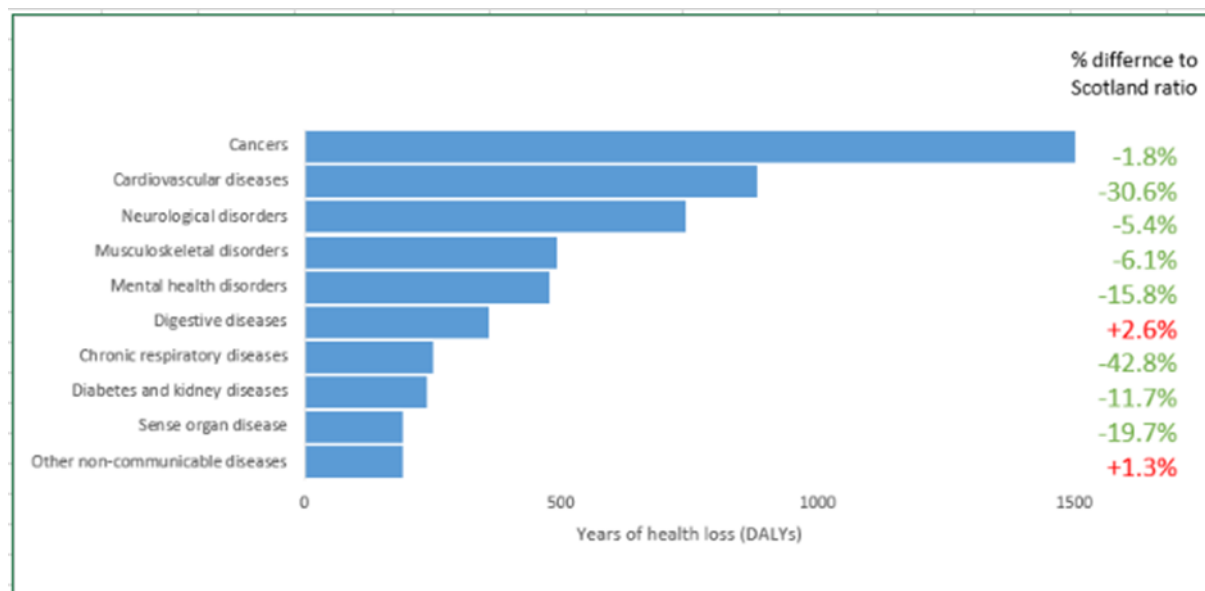


Figure 28 Leading Grouped Causes of Ill Health and Early Death

Overall, the rate of health loss in Shetland Islands is 17% lower than the Scottish rate. We estimate the total burden in 2019 has decreased 4.2% compared to the burden in 2016.

Figure 29 shows the leading individual causes of ill health and early death in Shetland and comparison with Scotland. The leading cause of ill health in Shetland is low back and neck pain, the rate of which is 2.7% lower than in Scotland. The leading cause of early death in Shetland is Alzheimer's disease and other dementias, the rate of which is 0.2% lower than in Scotland.

Ill health		% difference from Scotland	Ill health		% difference from Scotland
1	Low back and neck pain	-2.7%	1	Alzheimer's disease and other dementias	-0.2%
2	Depression	-14.8%	2	Other cancers	15.6%
3	Headache disorders	2.6%	3	Ischaemic heart disease	-46.2%
4	Anxiety disorders	-15.3%	4	Lung cancer	-25.3%
5	Osteoarthritis	-1.1%	5	Cirrhosis and other chronic liver disease	60.3%
6	Diabetes mellitus	-4.0%	6	Breast cancer	93.0%
7	Other musculoskeletal disorders	1.8%	7	Prostate cancer	132.0%
8	Age related and other hearing loss	7.9%	8	Self-harm and interpersonal violence	-0.0%
9	Cerebrovascular disease	-9.5%	9	Other cardiovascular and circulatory disease	-3.6%
10	Skin and subcutaneous diseases	1.1%	10	Cerebrovascular disease	-55.0%

Figure 29 Leading Individual Causes of Ill Health and Early Death in Shetland

### 3.5. Long-Term Conditions

Long-term conditions are conditions for which there is currently no cure, and that are managed with drugs and other treatments. 34% of Shetland respondents reported they had a limiting long-term illness in 2017-21. This has remained broadly stable over the years, increasing by 4 % since 2012-15. This is similar to Scotland figures, where 34% of the population reported they had a limiting long-term illness, an increase of two percentage points from 2012-15.

Table 9 Long-Term Conditions: 2012-2021

	2012-15	2013-16	2014-17	2015-18	2016-19	2017-21
Limiting long-term illness	30%	29%	29%	31%	32%	34%
No long-term illness	55%	53%	53%	54%	53%	55%
Non-limiting long-term illness	15%	17%	17%	16%	15%	11%

### Breakdown of Long-Term Conditions

The latest Health and Care Experience Survey indicated 29% of respondents stated they suffered from another long-term condition, other than those listed above. 12% reported deafness or severe hearing impairment as did respondents reporting chronic pain lasting at least months. 9% stated they had a mental health condition and 8% stated physical disability.

Table 10 Breakdown of Long-Term Conditions - Health and Care Experience Survey (2022)

Local Authority	Shetland Islands	Scotland
No reported LTC	49%	48%
Another LTC	29%	30%
Deafness or severe hearing impairment	12%	10%
Chronic pain lasting at least 3 months	12%	16%
A mental health condition	9%	11%
A physical disability	8%	10%
Blindness or severe vision impairment	2%	2%
A learning disability	1%	2%
Full or partial loss of voice or sig. difficulty speaking	0%	1%

### Primary Care Disease Register

According to the Primary Care Disease register, in 2021/22, hypertension was the most prevalent long-term condition in Shetland (173.9 per 1,000) and was 27.9% higher than the Scottish rate. Continually all long-term conditions reported, except for COPD, diabetes, osteoporosis  $\geq 74$  years and stroke and TIA, had a higher prevalence in Shetland compared to Scotland.

Table 11 Long-Term Conditions - Primary Care Disease Register

Long Term Condition	Shetland Islands	Scotland
Hypertension	173.9	131.3
Depression	117.7	81.9
Asthma	83.4	63.5
Diabetes	51.4	52.9
Chronic Kidney Disease	39.2	27.7
CHD	36.5	36.3
Cancer	35.9	30.7
Atrial Fibrillation	26.7	19.0
Stroke and TIA	21.2	22.1
COPD	16.9	23.9
Heart Failure	14.1	8.3
Mental Health	10.2	9.8
Dementia	9.1	6.8
Peripheral Atrial Disease	8.4	7.2
Rheumatoid Arthritis	8.3	6.1
Palliative Care	5.5	2.6
Osteoporosis ≥ 74yrs	0.3	0.8

Monthly count of all activity within Primary Care between January 2018 and December 2023, shows changes in prevalence of long term conditions in Shetland over time. Recent increases are likely due to more people being diagnosed with long term conditions as well as improved and more consistent reporting within Primary Care.

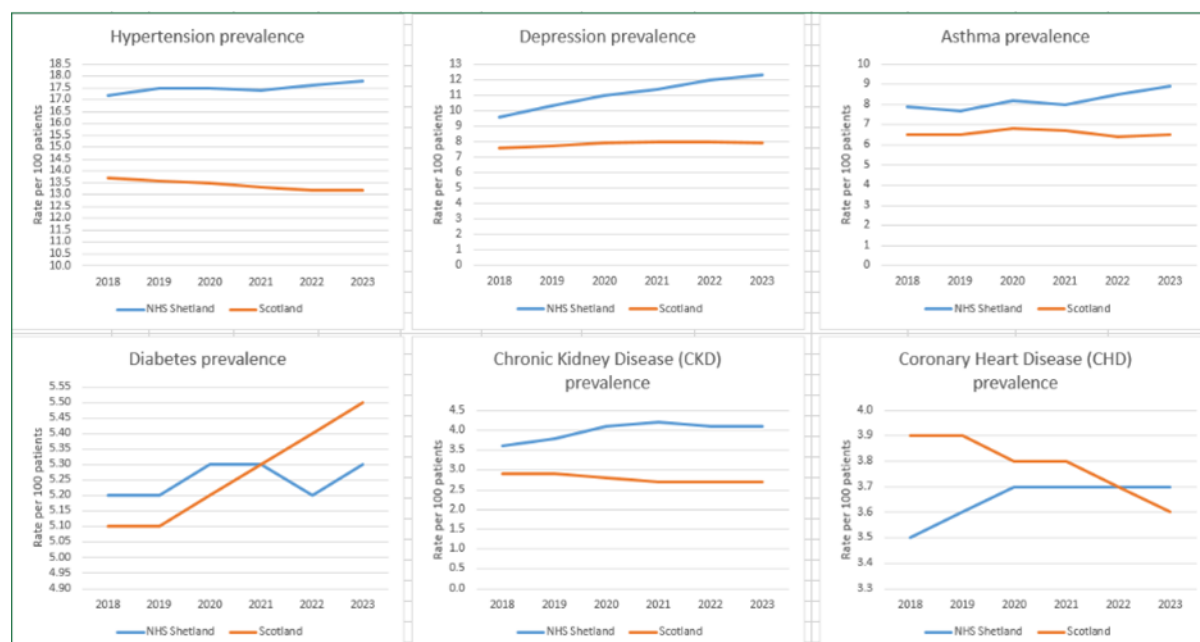


Figure 30 Long-Term Condition Prevalence in Shetland: 2018-2023



### 3.6. Heart Disease Incidence

In 2021, the Shetland heart disease incidence was 5.3 per 1,000 population. This is lower than the Scotland rate of 6.3 per 1,000. The Incidence of heart disease in Shetland decreased 25% from a high of 174 during 2013/14 to 129 cases during 2020/21.

Compared to the five-year average of 145 (2014/15 - 2018/19), new diagnosis rates of heart disease were 12% lower in 2019/20 and 11% lower in 2020/21. This may suggest cases have been missed due to the impact of the pandemic.

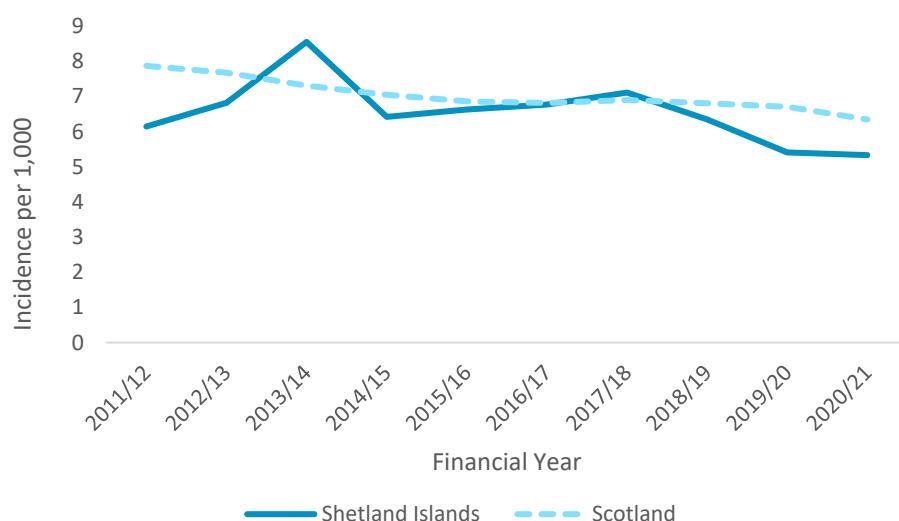


Figure 31 Heart Disease Incidence in Shetland: 2011-2021

### 3.7. Early Deaths – Coronary Heart Disease

Coronary heart disease (CHD), also known as ischaemic heart disease, is a heart condition that occurs when the heart's blood vessels, the coronary arteries, become narrowed or blocked and cannot supply enough blood to the heart. The incidence of CHD is higher amongst men, older people and people with a family history of early heart disease.

Risk factors for CHD include high blood cholesterol, physical inactivity, smoking, high blood pressure, obesity, poor diet and diabetes. These risk factors are modifiable, although the circumstances that people live in can often make it harder to implement changes.

There is a some difference between deprivation groups in terms of the level of early death due to heart disease in Shetland. The latest period available (2018-2020) indicates there were no related deaths with people from the least deprived areas of Shetland. In comparison, 5.5 people per 10,000 population died an early death due to heart disease and lived in the most deprived area of Shetland.

Given the impact of the pandemic in 2020, previous years present a more reliable report on relative deprivation and heart disease in Shetland. During the period 2017-2019 people living in the most deprived areas in Shetland were more likely to suffer an early death due to heart disease compared to people living in the least relatively deprived Shetland areas. This trend was broadly consistent since 2015 however, it should be noted there was a degree of variation across the period reported and between deprivation quintiles.



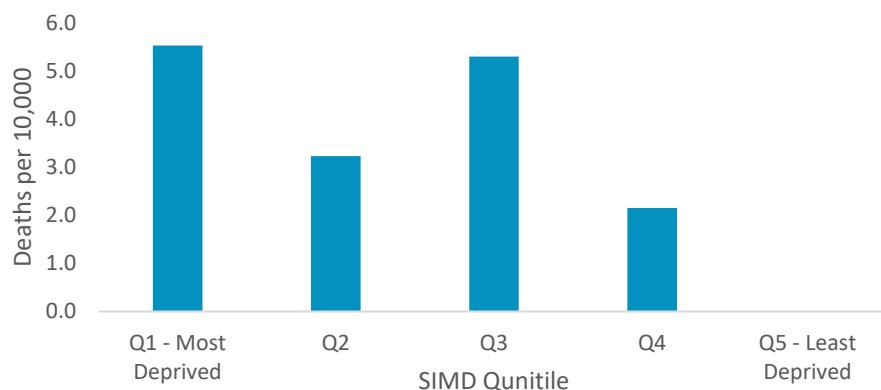


Figure 32 Early Deaths from Coronary Heart Disease and Relative SIMD: 2018-2020

### 3.8. Falls

The 2020/21 level of fall related hospital admissions in Shetland reported a rate 14% higher than the five-year average of 19.2 (2015/16 - 2019/20). This followed a gradual decline and a period low during 2019/20 of 16 admissions per 1,000 population. Rates in 2020/21 were on par with the Scottish falls rate.

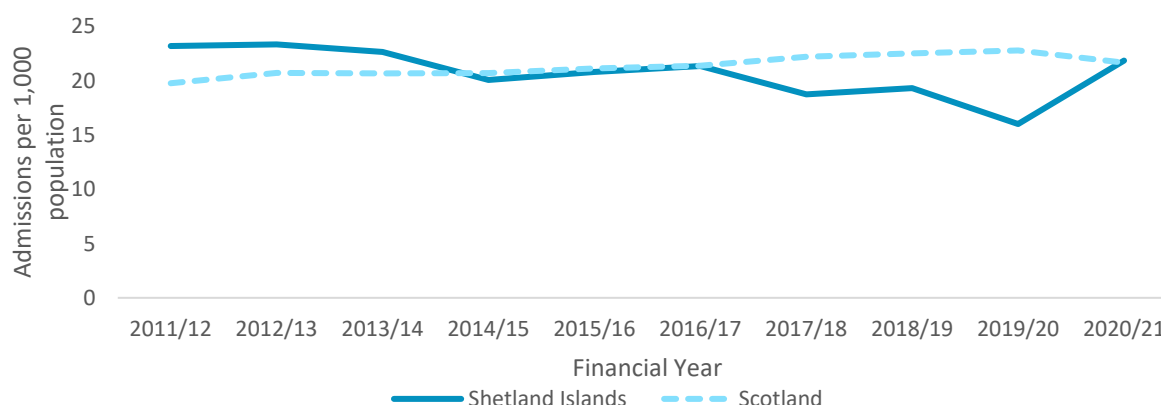


Figure 33 Fall Related Hospital Admissions (65+ years)

### 3.9. Cancer

There were on average 148 new cancer registrations in Shetland during the period 2015 - 2019. In 2020 the Shetland cancer incidence was 23% lower than the five-year average 2015- 2019. This is to be expected considering the impact of the pandemic in 2020 and is consistent with Scotland wide trends.

The five-year Shetland Cancer incidence rate was 6.5 registrations per 1,000 population which was marginally higher than the Scottish five-year average of 6.4 registrations per 1,000 population. In 2020 Shetland reported an incidence rate 17% lower compared with Scotland.



Figure 34 Cancer Incidence

Non-Melanoma skin cancer reported the highest cancer incidence associated with the Shetland Islands population. In 2020 there were 26 new diagnoses of non-melanoma skin cancer which was 25% lower than the five-year average. Colon and Colorectal cancer were found to report the greatest decrease against the five-year average incidence rates at 60% and 66% below respectively.

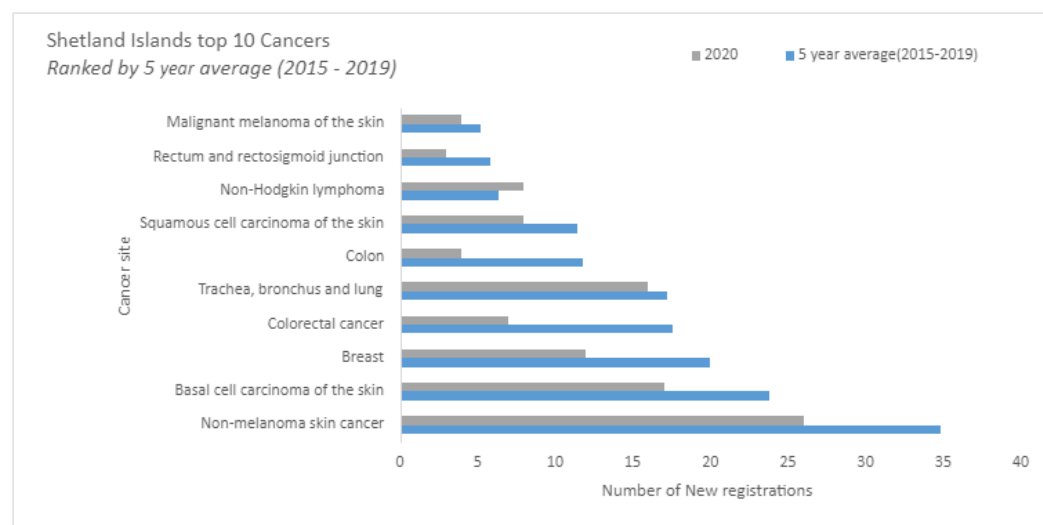


Figure 35 Top 10 Cancers: 2015-2019

The level of cancer incidence reported broadly similar rates across all relative SIMD quintiles during the period 2017-2019. Shetland residents living in the least deprived quintile were found to have a marginally lower level of cancer diagnosis during 2017-2019.

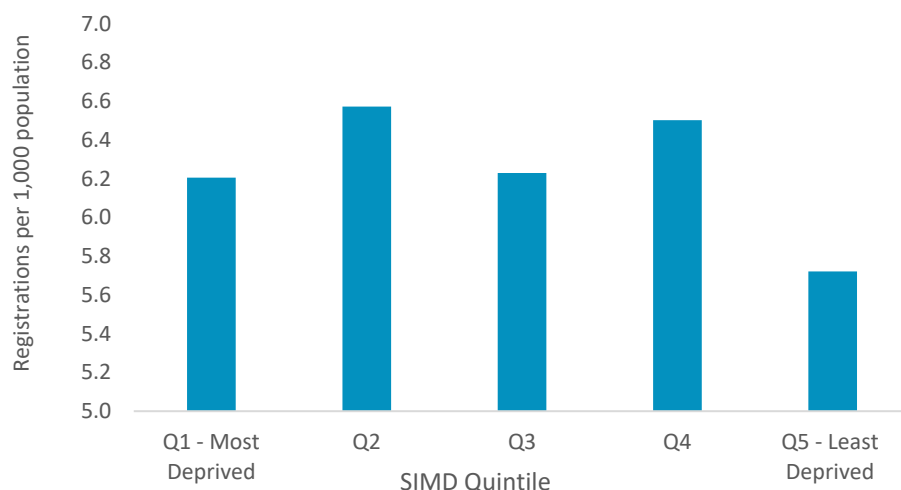


Figure 36 Cancer Registrations in Shetland by SIMD Quintile: 2017-2019

However, this was not the case for early deaths from cancer, where Shetland residents living in the least deprived areas reported the highest rate of early deaths. There was little difference between those living in the most and least deprived quintiles.

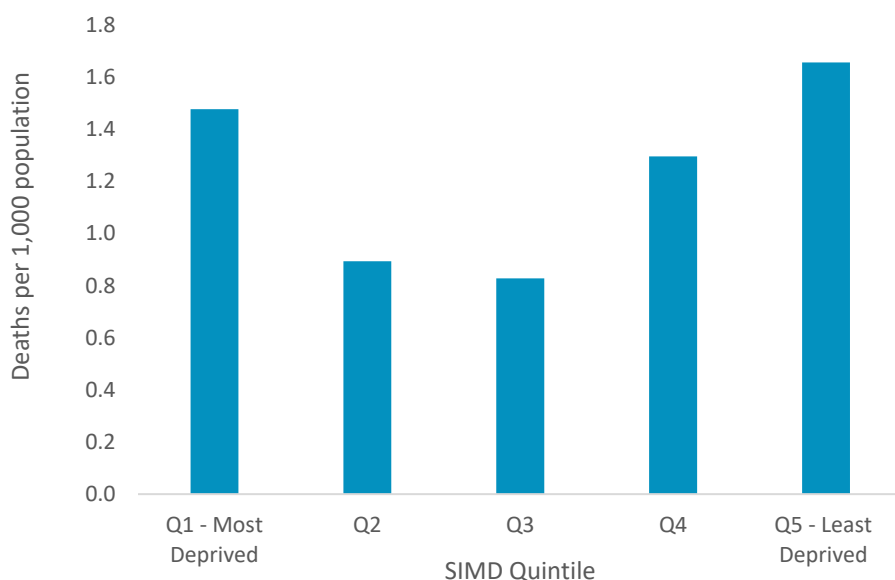


Figure 37 Early Deaths from Cancer by Relative SIMD: 2017-2019

Not all cancers are preventable, and some people are more likely to develop cancer though genetic susceptibility, for example, however nearly four in ten (37.7%) cancer cases in 2015 in the UK were attributable to known risk factors, and this increased to 41.5% in Scotland. Tobacco smoking contributed by far the largest proportion of attributable cancer cases, followed by overweight/obesity, accounting for 15.1% and 6.3%, respectively, of all cases in the UK in 2015. For 10 cancer types, including two of the five most common cancer types in the UK (lung cancer and melanoma skin cancer), more than 70% of UK cancer cases were attributable to known risk factors<sup>22</sup>.

### 3.10. Learning Disability

The most recent available data reports 23,584 people with learning disabilities living in Scotland, equating to 5.2 per 1000 in the general population, and 4383 adults identifying as being on the autism spectrum<sup>23</sup>. Shetland reported a known population of 164 individuals with a Learning Disability, equating to 8.7 per 1000 in the general population.

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). This is the second highest of the 30 local authorities in Scotland who provided data, below Dundee City Council at 8.8 per 1000. Orkney's known Learning Disability population was seventh lowest in Scotland at 91, equating to 4.9 per 1000 in the general population<sup>23</sup>.

*Table 12 Estimates for Learning Disability Population*

Learning Disability Estimates		
Local Authority	Total	Adults known per 1,000 Adult pop.
Shetland Islands	164	8.7
Argyll & Bute	330	4.5
Aberdeenshire	1,042	4.9
Dumfries & Galloway	900	7.2
Highland	1,028	5.2
Na h-Eileanan Siar	152	6.8
Orkney Islands	91	4.9
Scottish Borders	555	5.8
Scotland	23,584	5.2

While we don't have specific data for the Learning Disability and Autism populations in Shetland, 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>24</sup>

However, we do know that in Shetland and Orkney, 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>25</sup>.

### 3.11. Disability Prevalence

Disability is difficult to define, and the prevalence of disability is therefore difficult to measure; however, it is critical to do both for reasons of policy, service provision and planning.

It is important to understand the different definitions, and perceptions, of disability. 'Individual' definitions focus on the person and their impairment and functioning, whereas 'social' definitions emphasise the restrictions imposed upon the person by their social and physical environment.

In November 2016, 8% of adults aged 16-64 years in Scotland were classed as unable to work due to illness/disability and in receipt of Employment and Support Allowance (this amounted to 270,970 people).

In 2019, it was estimated that 26% of adults (aged 16 years and over) in Scotland had a limiting long-term physical or mental health condition or illness, while 8% of adults self-rated their health as 'bad' or 'very bad'.

The proportion of adults rating their health as 'bad' or 'very bad', or reporting a limiting long-term health condition or illness, increases as area deprivation increases.

7% of the Shetland Islands population reported they lived with a highly limiting long term health problem at the most recent Census in 2011. This was slightly lower than the Scottish proportion of 9.6%. 10.3% of the Shetland Islands population stated they suffered from a slightly limiting long term health condition which is broadly in line with the Scottish level at the time of the 2011 Census.

*Table 13 Long-Term Health Problem or Disability*

Level of limitation	Shetland Islands	Scotland
Limited a lot	7.0%	9.6%
Limited a little	10.3%	10.1%
Not limited	82.7%	80.4%

### 3.12. Sensory Impairment

There are an estimated 770 people in Shetland living with sight loss in 2021. This translates to a rate of 34 per 1,000 population, which is slightly higher than the Scottish rate of 33 per 1,000 population.

Of the people estimated to be living with sight loss, approximately 13% of these people (100) have severe sight loss. This is approximately the same rate as Scotland.

Table 14 Estimated Sensory Impairment

Local Authority	Severity of Sight Loss			Estimated total no. living with sight loss	Rate of people with sight loss per 1,000
	Mild	Moderate	Severe		
Shetland Islands	490	170	100	770	34

### 3.13. Autism

Autism is a lifelong developmental condition that affects the way a person communicates, interacts and processes information. The autism spectrum refers to the range of ways the condition can present in the individual which can vary greatly from person to person and throughout their life<sup>26</sup>.

While some people will have more subtle difficulties, others will have complex needs requiring more intensive support.

In 2019, there were 54 adults in Shetland known to local authorities with an Autism Spectrum Diagnosis. 32% of all adults known to Shetland Islands council learning disability services had an Autism spectrum diagnosis.

Table 15 Adults on the Autism Spectrum

Local Authority	Total with Autism Spectrum Diagnosis	No Autism Spectrum Diagnosis	Not Known	Autism Spectrum Diagnosis as % of all adults know to LD service
Shetland Islands	54	36	74	32.9%
Scotland	4,383	14,520	4,681	18.6%

### 3.14. End of Life

The percentage of people who spent their last 6 months of life living at home or in a community setting has remained broadly unchanged in Shetland since 2011/12. During 2020/21, 93.6% of people who passed away spent their last 6 months of life lived at home or in a community setting. Shetland reported a consistently higher level compared to the Scottish rate.

Table 16 % of Last 6 Months of Life Lived at Home or in a Community Setting

Local Authority	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Shetland Islands	90.3	87.5	92.1	92.3	92.5	93.8	95.0	94.0	93.0	93.6
Scotland	86.3	86.5	86.4	86.6	87.0	87.3	88.0	88.0	88.4	90.4

### 3.15. Prevention (Screening and Vaccination)

Screening tests identify certain diseases and conditions before symptoms appear so that treatment can be started early. In Scotland there are five screening programmes for adults:

- [abdominal aortic aneurysms](#)
- [bowel cancer](#)
- [breast cancer](#)
- [cervical cancer](#)
- [diabetic retinopathy](#)

### 3.16. Community Health Services

#### Musculoskeletal (MSK) Referrals

In order to gauge demand on Allied Health Professionals (AHP) MSK services, this section reviews referrals from all sources to the following AHP services for MSK conditions: Physiotherapy, Chiropody/Podiatry, Occupational Therapy and Orthotics. MSK conditions are wide ranging with both short- and long-term conditions related to joints, bones, cartilage, ligaments, tendons and muscles. These figures also include pre or post orthopaedic surgery peripheral nerve lesions and complications of fractures/dislocation or trauma.

AHP MSK referrals showed a declining trend during the first three quarters of the financial year 2019/20, prior to the sharp fall associated with the COVID-19 pandemic and the suspension of routine referrals. Referral rates in Shetland have been consistently above the national average and in line with Scottish trends and have generally shown a steady increase since the low recorded during Q1 of 2020/21.

*Table 17 MSK Referral Rate: 2020-2022*

	Per Quarter									
	Q1 19/20	Q2 19/20	Q3 19/20	Q4 19/20	Q1 20/21	Q2 20/21	Q3 20/21	Q4 20/21	Q1 21/22	Q2 21/22
NHS Board										
NHS Shetland	4,110	3,591	2,624	2,314	689	1,940	1,929	1,758	2,870	2,164
NHS Scotland	2,545	2,524	2,313	2,100	455	1,250	1,440	1,447	2,056	2,035

#### GP Out of Hours Consultations

When GP practices are closed patients are able to access urgent care via the Primary Care Out of Hour's (OOH) service. This could include a phone consultation or home visit, and in some cases both. The number of primary care OOHs contacts (including Covid related) remained relatively unchanged between 2015 and 2021, with an average of 1,623 consultations per year.

*Table 18 Rate of GP Out of Hours Consultations per 1,000 Population: 2015-2021*

Local Authority	2015	2016	2017	2018	2019	2020	2021
Shetland	68.1	59.2	74.9	67.9	71.9	73.5	77.9
Scotland	176.9	173.8	172.3	166.4	165.5	164.7	180.6

The proportion of non-Covid related OOH consultations delivered in Primary Care Emergency Settings (PCEC) declined from 40.7% pre-pandemic to an average of 34.4% during 2020 and 2021. There was a noticeable shift towards Doctor/Nurse phone consultations, increasing from an average of 22.5% pre-pandemic to 37.5% in the previous two years.

The rate of OOH consultations (including Covid related) in Shetland was lower than in comparison with the national rate. The highest rate both in Shetland and nationally occurred in 2021.

*Table 19 Number of Out of Hours Consultations by Consultation Type: 2015-2021*

Year	Consultation Type				
	Doctor/Nurse Advice	Home Visit	PCEC	Other	Total
2015	414	581	511	75	1,581
2016	319	484	468	103	1,374
2017	344	506	760	119	1,729
2018	318	394	746	102	1,560
2019	363	420	734	132	1,649
2020*	527	287	456	69	1,339
2021*	470	280	457	109	1,316

\*Excludes Covid-19 related consultations; PCEC - Primary Care Emergency Centres

### Minor Ailment Scheme and Pharmacy First

The chart highlights the monthly comparison between the number of items prescribed under the Minor Ailment Scheme between 2017 and 2019, and Pharmacy First since it began in 2021. Prescribing rates in community pharmacies under the Minor Ailment Scheme picked up in the latter half of 2020, with rates increasing above the 3yr average between 2017 and 2019. Similarly, prescribing rates during the first three months of 2021, under Pharmacy First, remained below those recorded between 2017-19 and in 2020. Prescribing rates then steadily increased throughout the year and largely remained above the rates of the comparison periods month on month.

*Table 20 Number of Paid Items under Minor Ailment Scheme and Pharmacy First*

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
Pharmacy First 2020	162	214	190	111	106	135	117	166	203	197	220	215	2036
Pharmacy First 2021	141	172	172	205	198	222	202	252	188	203	318	260	2533
3-year average (2017 - 2019)	188	219	221	156	169	152	150	119	148	152	194	185	2053



## 4. Behavioural Determinants of Health

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>27</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 risk of 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>28</sup>. Evidence also suggests that current social security levels do not currently allow families to make informed, healthy choices<sup>29</sup>.

Evidence shows a clear link between increased availability of alcohol<sup>30</sup>, tobacco<sup>31</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>32</sup>. Increased exposure to health harming products has been shown to influence our consumption and is driving health inequalities in Scotland<sup>33</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.

### 4.1. 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 Shetland (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>34</sup>. The risk of developing smoking-related diseases (cancer, respiratory, circulatory) increases with how long and how much someone has smoked. These risks fall substantially if smoking is stopped, even for long-term smokers.

## Smoking Status

Results from the latest Scottish Health Survey available at a local level suggests that 14% of the Shetland adult population report being a 'current' smoker. This compares to 16% of people across Scotland and is a reduction from 17% in the previous release of locally available survey data.

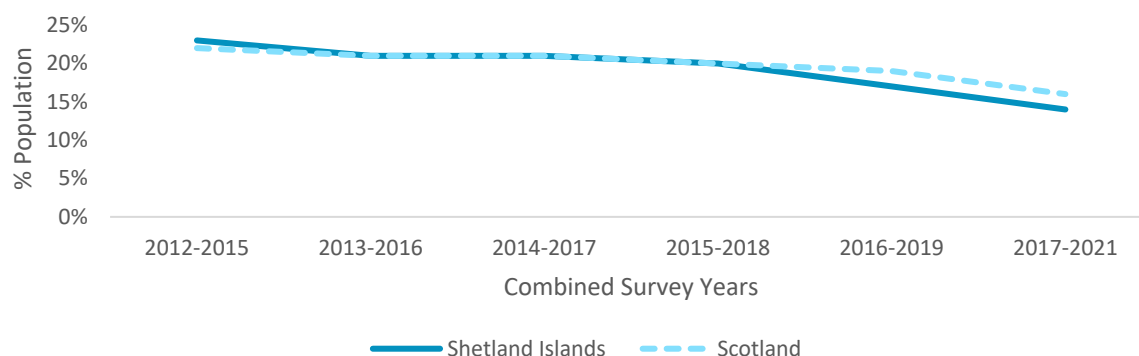


Figure 38 % of Population with Current Smoker Status

In Shetland, 19% of the adult male population indicated they were current smokers, compared to 9% of adult females. Smoking rates amongst males in Shetland are marginally higher than Scottish estimates (18%). Reported rates amongst females are lower than national estimates (15%).

Table 21 Current Smokers by Sex

Local Authority	Both Sexes	Female	Male
Shetland Islands	14%	9%	19%
Scotland	16%	15%	18%

## Smoking Prevalence

Public Health Scotland use collated smoking prevalence estimates from the Scottish Survey Core Questionnaires and apply them to the NRS population estimates. The figure below shows the number of people estimated to be smokers in Shetland between 2012/13 and 2019/20. Estimates had remained broadly stable between 2012/13 and 2017/18, with an average of 3,700 people estimated to be current smokers before a noticeable drop in 2018/19 that was maintained in 2019/20 at around 1800 people.

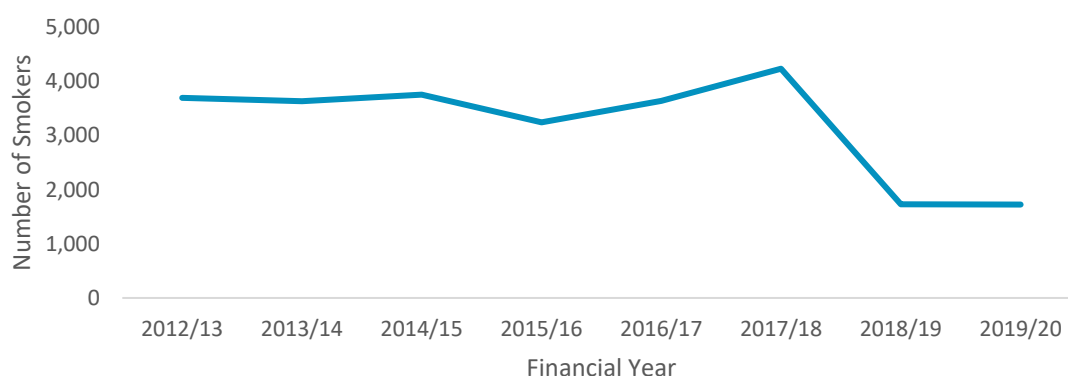


Figure 39 Estimated Number of Smokers

## Maternal Smoking

Since 2003 the level of women smoking during their first antenatal appointment generally declined in Shetland and across Scotland. There were two periods where this increased in Shetland: between 2004/05 to 2008/09 and between 2011/12 to 2015/16. However, these were marginal increases of at most, 2%. The three-year period 2016/17 to 2018/19 saw the lowest level on record of women smoking during the first antenatal appointment at 8.2%. 2018/19 - 2020/21 witnessed a slight increase of 1.5% to 9.6%. At no point since 2003/04 has the level of maternal smoking breached the Scottish level.

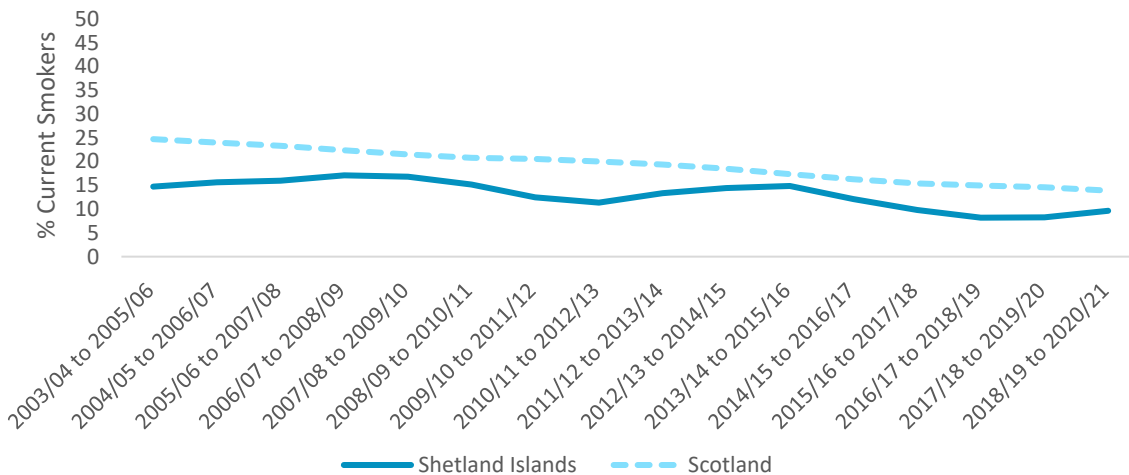


Figure 40 Smoking Status at First Antenatal Appointment

## Smoking Cessation

Smoking cessation services provide evidence-based interventions to support people to stop smoking. The figures below present both the number of quit attempts made through smoking cessation services, and the number of successful quit attempts at 12 weeks follow-up between 2009/10 and 2019/20. A separate table has been created, highlighting the proportion of quit attempts considered successful at 12 weeks based on self-reported quit rates. A high of 83 successful quit attempts were recorded in 2016/17, a year in which 41% of quit attempts across Shetland were successful at 12 weeks. In 2012/13, a high of 347 quit attempts were registered, however the proportion of successful attempts at 12 weeks was the lowest recorded during the period at just 13%.

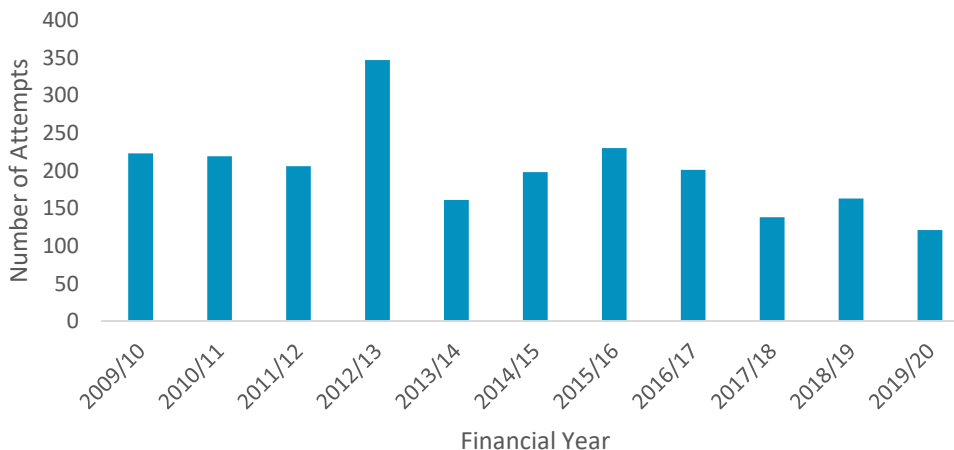


Figure 41 Number of Quit Attempts

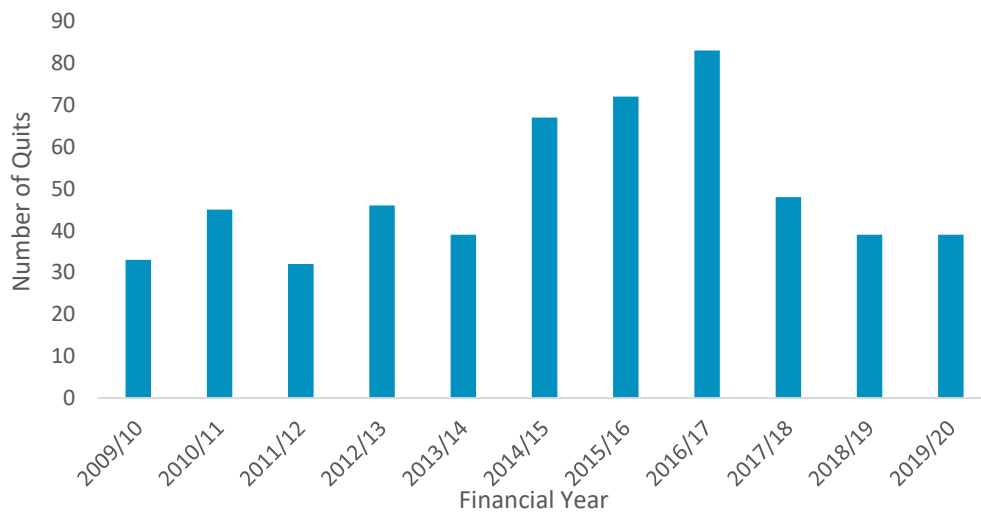


Figure 42 Number of Successful Quit Attempts at 12-weeks

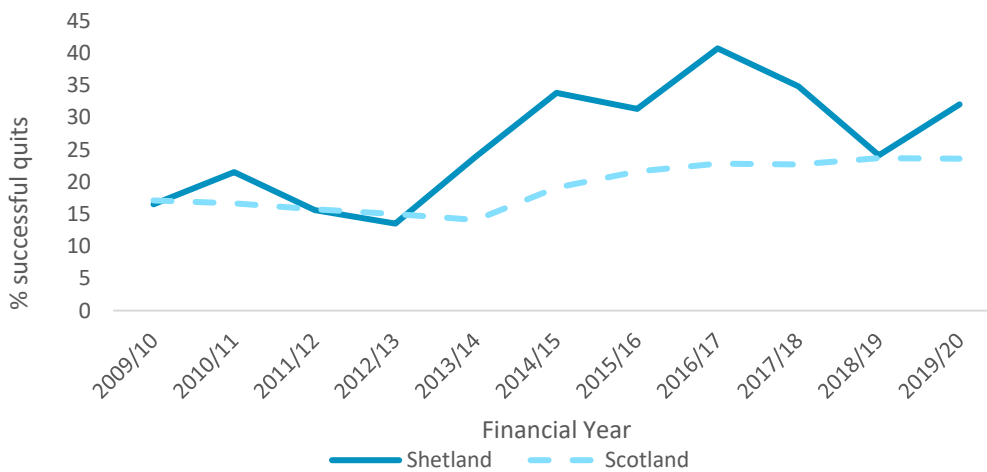


Figure 43 Proportion of Successful Quit Attempts

## Smoking Related Admissions

The rate of smoking related hospital admissions remained broadly stable in Shetland, with an average of 13.3 admissions per 1,000 population since 2012. Smoking attributable admissions in Shetland remained consistently below national rates, which have averaged nearly 18 per 1,000 population over the same period. Since 2012, the number of admissions has ranged from 169 (2016 to 2017) to 194 (2013 to 2014) in Shetland.

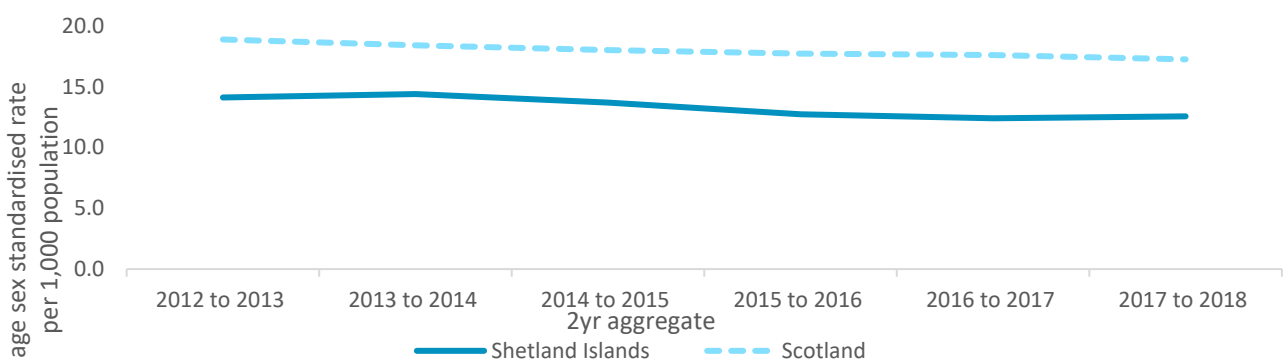


Figure 44 Rate of Smoking Attributable Hospital Admissions

## Smoking Related Deaths

The rate of smoking related deaths in Shetland has remained broadly stable, with an average of 2.7 smoking attributable deaths per 1,000 population since 2012. Rates have again remained consistently below national levels. The number of smoking attributable deaths in Shetland has ranged from 29 in the most recent aggregated period to a high of 38 for the period 2015 to 2016.

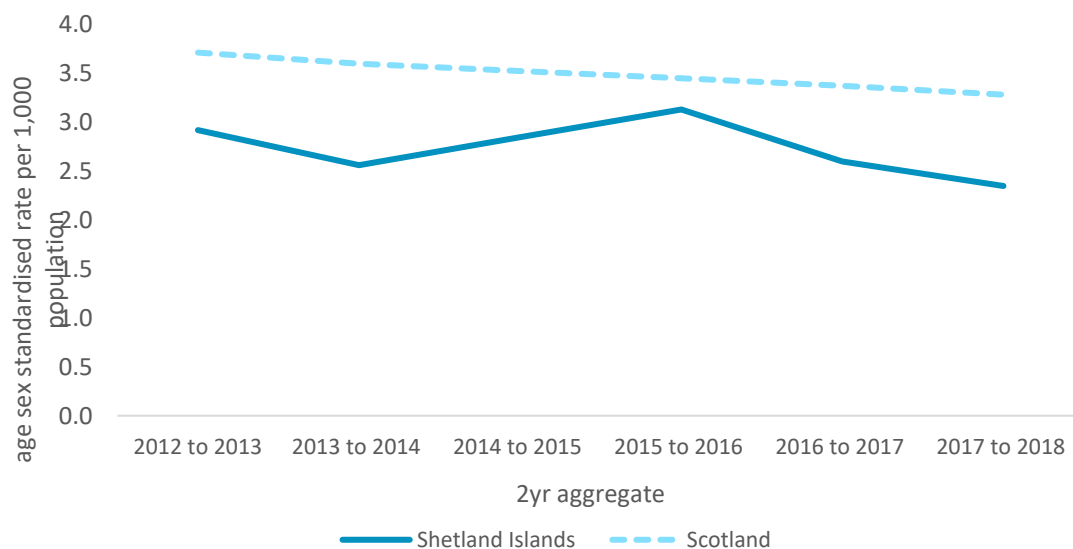


Figure 45 Smoking Attributable Deaths

## Smoking and Deprivation



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

ASH Scotland reports that people who suffer deprivation, people with mental health issues, and people in LGBTQ+ communities are more likely to smoke<sup>35</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, which is why tobacco companies target children to start vaping and smoking as it's much harder to persuade adults to take up the habit.

## 4.2. Alcohol

### Alcohol Use

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. 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).

Findings from the Scottish Health Survey suggest that a fifth of residents in Shetland responding between 2017 and 2021 drink to hazardous levels. There has been a steady decline in the proportion of adults drinking above the 14-unit recommendation each week in Shetland, falling from 27% in the combined period 2012 - 2015. Twenty-nine percent of males in Shetland reported drinking to a hazardous level, compared to 10% of females. Sixty-nine percent of respondents in Shetland reported moderate drinking levels, with the remaining 20% stating they were non-drinkers during the combined period between 2017 to 2021.

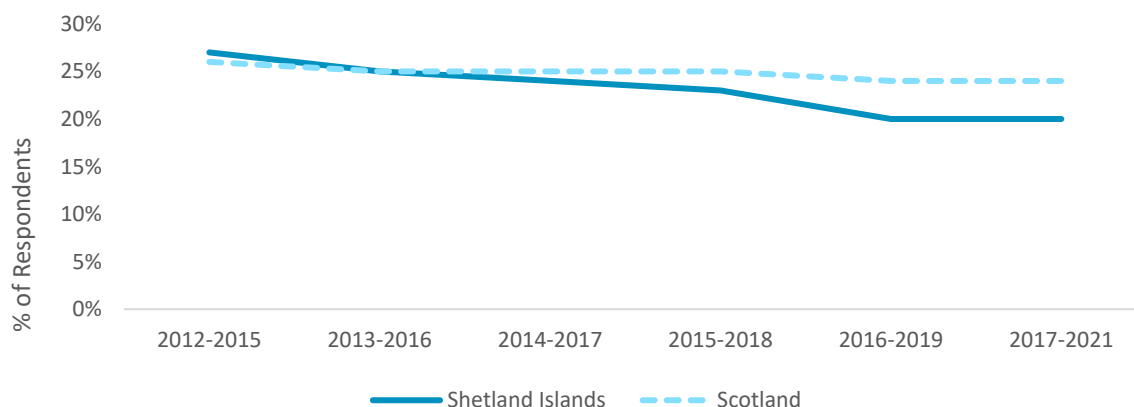


Figure 46 Hazardous Drinking Levels

Respondents to the Shetland Population Health Survey were asked how often they had had 6 or more units on a single occasion in the previous year. The majority (41.3%) had reported that they had never had 6 or more units on a single occasion, over a quarter reported that it had occurred less than monthly, 13.1% monthly, 15.3% weekly and 2.4% daily.

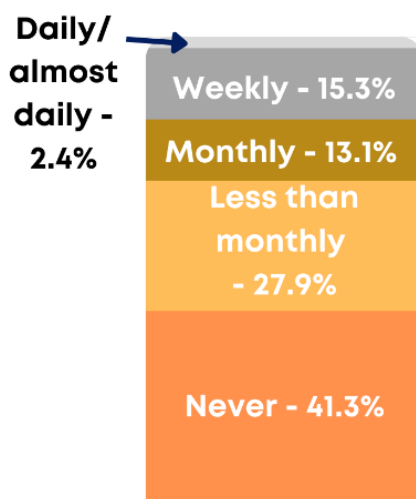


Figure 47 Alcohol Consumption: 2020-2021

## Alcohol Related Hospital Admissions

Alcohol misuse results in both short- and long-term health problems, both of which can result in hospital admission. The figures below present the number of hospital stays and patient admissions as a result of conditions known to be a direct consequence of alcohol consumption. Having declined from a high of 9.6 per 1,000 in 2011/12, hospital stays as a direct consequence of alcohol consumption in Shetland have remained broadly stable, except for 2019/20 which witnessed a 1.3% decline on the previous year. This reduction may, in part, be attributed to the national lockdowns implemented in spring 2020 because of the COVID-19 pandemic.

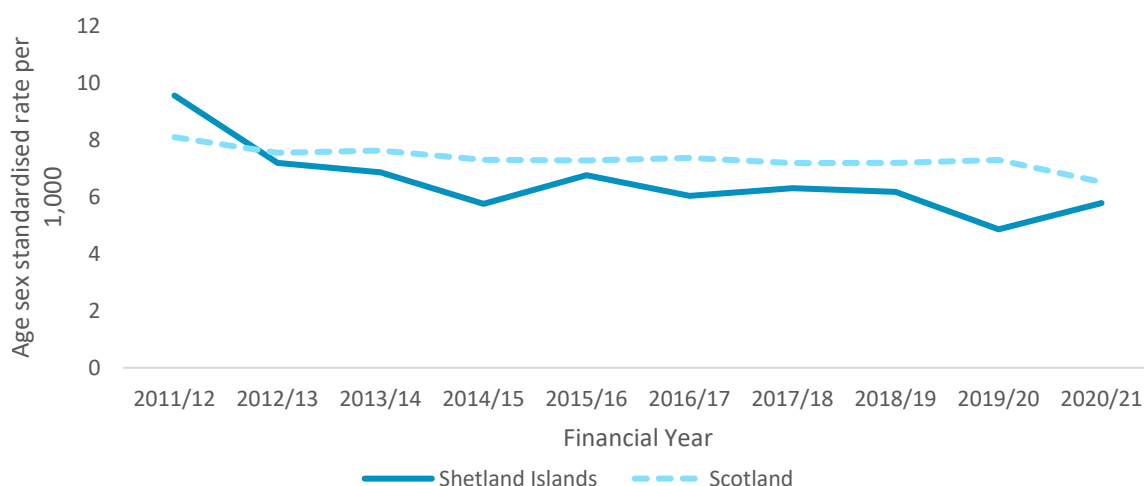


Figure 48 Alcohol Related Hospital Admissions

The rate of patient admissions as a consequence of alcohol consumption similarly fell from a high of 6.4 per 1,000 in 2011/12. Rates in Shetland have since remained broadly stable (except for 2019/20) and comparable with Scottish rates. In 2020/21, there were 4.3 patients per 1,000 admitted to hospital due to alcohol related conditions in Shetland compared to 4.2 per 1,000 across Scotland.

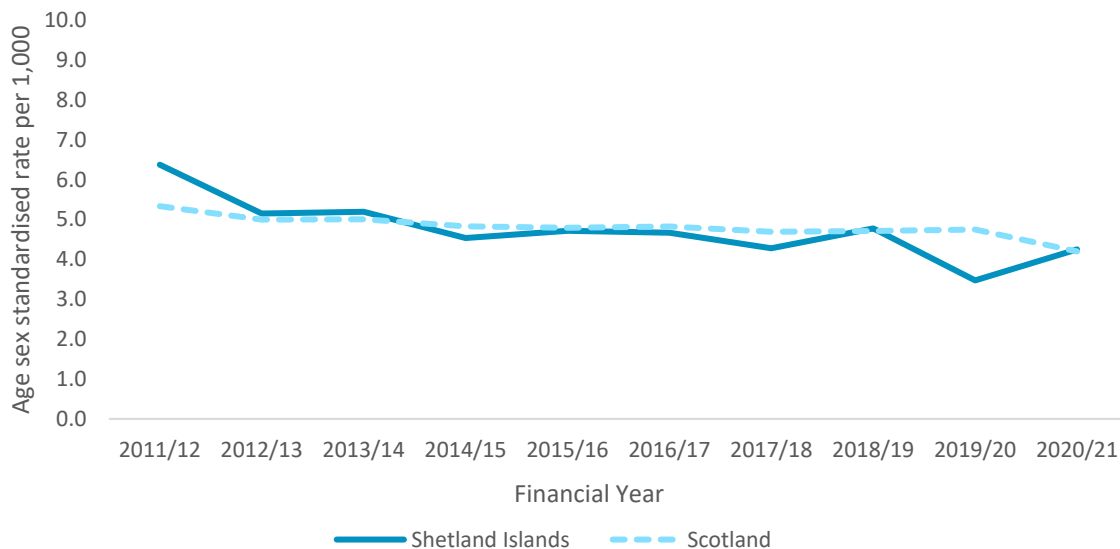


Figure 49 Alcohol Related Hospital Patients

### Alcohol Admissions by SIMD

The figures presented highlight the rate of alcohol related hospital admissions by relative deprivation group between 2002/03 and 2020/21. Though there is notable annual variation in alcohol related hospital admissions by SIMD quintile, the average rate amongst people living in the most deprived areas of Shetland was 10.1 per 1,000 for the time period presented. That compares to an average of 4.7 per 1,000 living in the least deprived quintile.

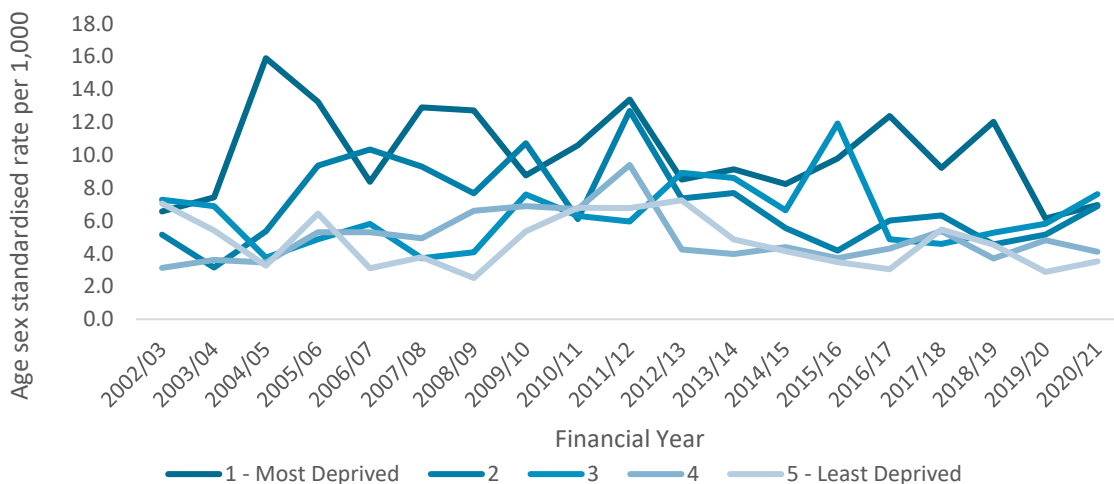


Figure 50 Alcohol Related Hospital Admissions by SIMD

### Alcohol and Drug Treatment Waiting Times

The Scottish Government set the target that 90% of referrals to alcohol and drugs services should be seen within three weeks. Waiting times reflect how well services can respond to demand, particularly those that require prompt intervention. The chart below highlights the percentage of people receiving a first appointment for alcohol and drug treatment within three weeks of referral in Shetland, compared to the Scottish average. Since 2017/18, the proportion of people seen within three weeks has been on or above the 90% target set by the Scottish Government and has largely been in line with the national average. The number of new people completing a wait for treatment in the most recent financial year was 63. Interestingly, the level



of completed waits in 2020/21 was higher than for each of the preceding years, suggesting that people were still able to access services throughout the pandemic.

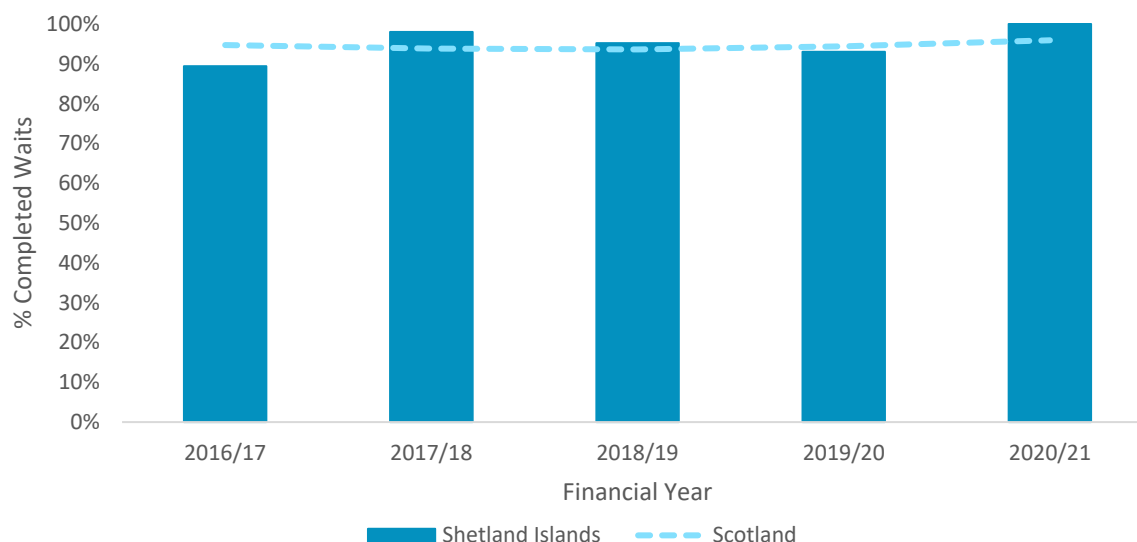


Figure 51 3-Week Alcohol and Drug Treatment

## Alcohol Brief Interventions

The Scottish Government set out their strategic approach to alcohol misuse in 2009 which included the delivery of Alcohol Brief Intervention (ABI) targets. ABI is an intervention for people drinking to hazardous and harmful levels and aims to help people moderate their drinking. It is a preventative approach to reduce the risk of adverse alcohol related outcomes conducted in priority settings such as primary care, A&E and antenatal settings, as well as wider areas including: pharmacy, social work, police or education. In 2019/20, there were 80 ABIs carried out across Shetland. The majority (76.3%) of these interventions were conducted in primary care, 13.8% in wider settings and the remaining portion in A&E (10.0%). There were no ABIs delivered in antenatal settings. The number of ABIs carried out in Shetland has been in decline since 2014/15, when a high of 438 were delivered.

Table 22 Percentage of Alcohol Brief Interventions Delivered by Setting

% delivered within NHS Board				
NHS Board	Primary Care	A&E	Antenatal	Wider Settings*
NHS Shetland	76.3%	10.0%	0.0%	13.8%
NHS Scotland	52.68%	12.37%	2.18%	32.77%

## Alcohol Related Deaths

Between the period 2000-2004 and 2004-2008 alcohol specific deaths almost doubled to a high of 27. Since this high, alcohol specific deaths in Shetland generally declined, reaching a low of 9 for the rolling five-year period between 2012-2016. There have been slight increases recorded during the time periods since, though in the most recent five-year period (2016-2020) alcohol specific death rates remained significantly lower in Shetland (1.0 per 10,000) than across Scotland (2.1 per 10,000).

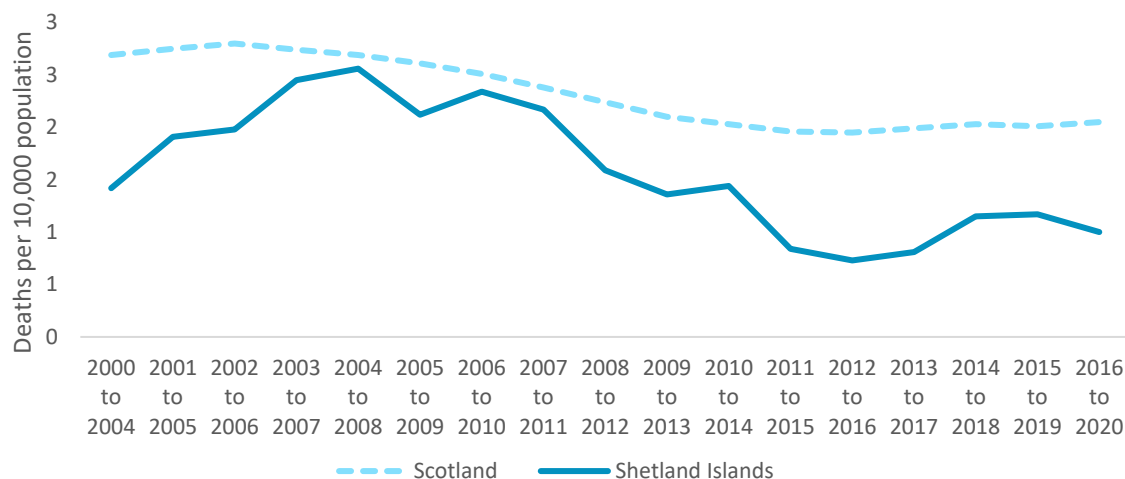


Figure 52 Alcohol Specific Deaths (5-year average)

### 4.3. Drugs

#### Illicit Drug Use

The harmful use of illicit drugs and particularly opiates, benzodiazepines and psychostimulants, causes significant problems within Scotland, 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.

Within the Population Health Survey, drug use in the past year was reported by 6.6% respondents across all age bands except those aged 75+ years, with the highest proportion being seen among those aged 18-24 years, closely followed by those aged 30-34 years and 35-39 years.

Reported drug use was slightly higher among men/boys, with it being approximately 1.5% higher than what was reported among women/girls.

#### Estimated Drug Use Prevalence

In 2015/16, there were an estimated 170 people in Shetland using drugs problematically. This equates to 1.1% of the Shetland population aged 15-64yrs old. Although lower than the estimated Scottish rate (1.6%), problematic drug use in Shetland is estimated to be more than five times higher than in Orkney (0.2%) and almost four times higher than in Na h-Eileanan Siar (0.3%).

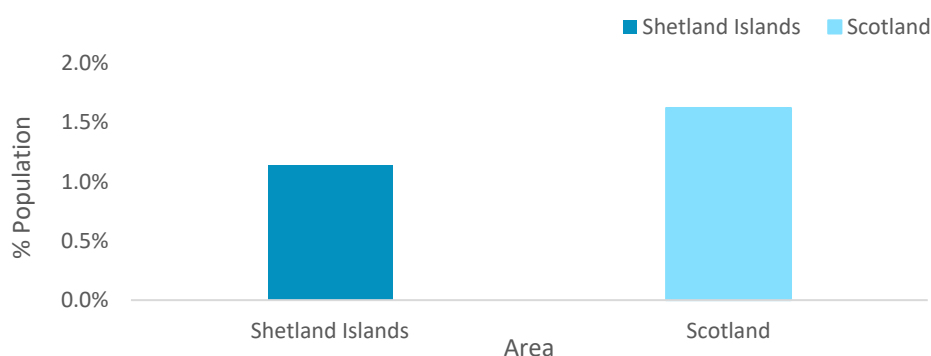


Figure 53 Estimated Prevalence of Problematic Drug Use

Of those who reported that they had used drugs in the past year, the majority reported that they had used cannabis, cocaine or prescription only painkillers that were not prescribed for them.

The most reported drug used across all localities was cannabis (an equal proportion in Shetland South also reported using cocaine). While cocaine use was only reported in Lerwick North, North and East Isles and Shetland South. Respondents from Central Shetland, Lerwick South, North Mainland and Shetland South reported using prescription only painkillers that were not prescribed for them. No respondents from East and West Mainland reported the use of cocaine or prescription only painkillers that were not prescribed for them.

Due to the small number of individuals reporting that they currently use drugs, broader age bands have been used for this analysis.

The mostly commonly reported drug used across all age bands was cannabis and while prescription only painkillers that were not prescribed for them was also reported across all age bands the proportions were lowest among those aged 18-39 year and highest among those aged 65+ years. Cocaine use was not reported in 65+ year age band but was among those aged 18-39 years and 40-64 years.

There was not much between the proportions of men/boys and women/girls reporting cannabis use, however there was a difference in the patterns of other drug use. Cocaine use was only reported among men/boys and the use of prescription only painkillers that were not prescribed for them was higher among women/girls.

## Frequency of Drug Use

A high of 178 drug related crimes were recorded in Shetland during 2015/16. This was the only year in the time period presented in which rates of drug related crime in Shetland (76.7 per 10,000) rose above levels across Scotland (66.0 per 10,000). There has been no noticeable declining trend in drug related crime in Shetland, with an average of 47.2 drug related crimes recorded per 10,000 population over the time period. This compares to a Scottish average of 67.6 per 10,000 for the same period.

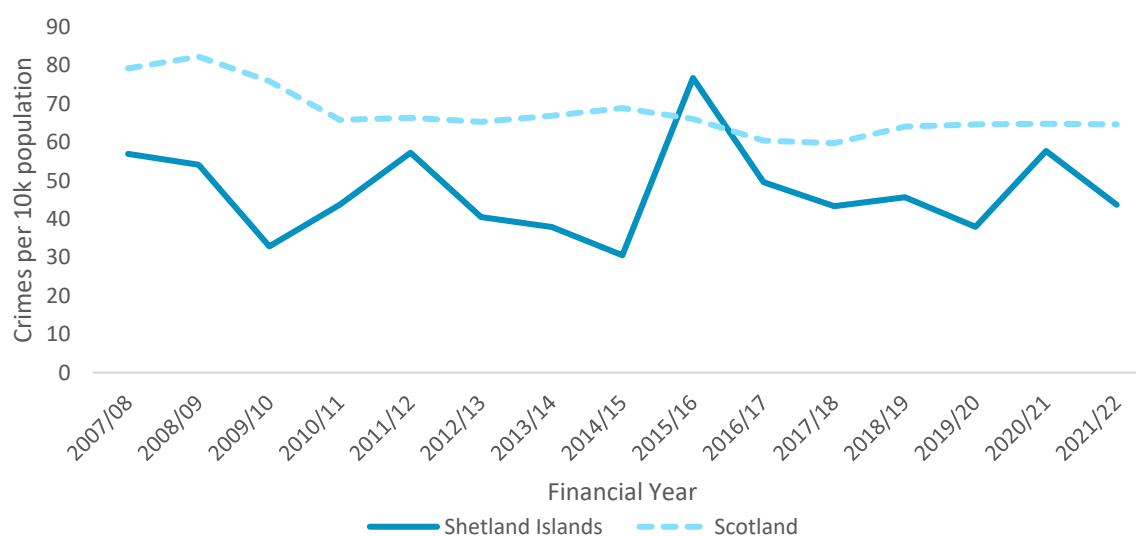


Figure 54 Recorded Drug Related Crime

## Drug Related Hospital Admissions

The figures provided highlight the number of drug related hospital stays and the number of patients admitted in the ten-year period between 2011/12 and 2020/21. Hospital admission

figures in Shetland for drug related diagnoses remain low relative to Scottish rates, however, over the period presented rates have shown an increasing trend. In 2020/21, the rate of hospital stays in Shetland for drug related diagnoses was 16.5 stays per 10,000 population.

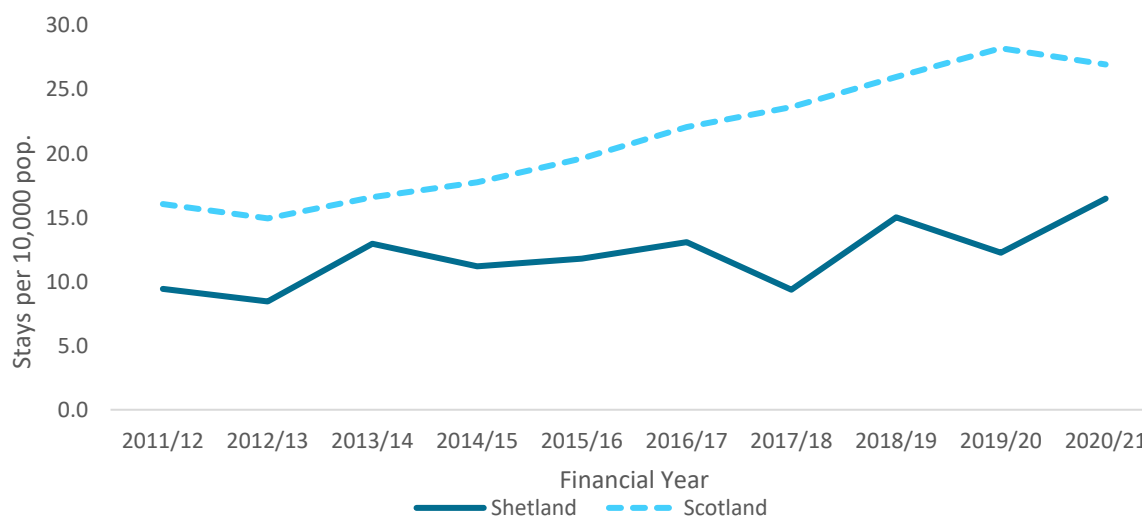


Figure 55 Drug Related Hospital Stays

## Drug Related Deaths

The number of drug related deaths in Shetland is characterised by fairly low figures and have therefore been presented in terms of aggregated five year periods. Since the first aggregated period (2000-2004), drug related deaths steadily increased in Shetland, reaching 11 in the period 2010-2014. There had then been a period of decline, however in the most recent aggregated period (2017-2021) drug related deaths in Shetland reached a high of 12, double the amount record for 2015-2019. Age-standardised drug related death rates show during 2017-2021 the rate in Shetland was half of Scotland's at 10.4 per 100,000, compared to 22.9 per 100,000 across Scotland.



Figure 56 Drug Related Deaths

There again seems to be an apparent link between people living in the most relatively deprived areas in Shetland and drug related deaths. Though there is notable annual variation, the average drug related death rate amongst people living in the most deprived areas of Shetland was 12.2 per 100,000 for the time period presented. That compares to an average of 5.0 per 100,000 living in the least deprived quintile.

Table 23 Drug Related Deaths: Relative SIMD

SIMD Quintile	2006 to 2010	2007 to 2011	2008 to 2012	2009 to 2013	2010 to 2014	2011 to 2015	2012 to 2016	2013 to 2017	2014 to 2018	2015 to 2019
1 - Most Deprived	8.8	13.5	9	8.9	18.2	18.6	9.7	14	14	7.4
2	10.3	4.8	4.7	4.5	4.4	0	0	3.7	3.5	3.5
3	3.7	7.9	12	12.1	12.1	7.9	8.7	4.6	4.6	4.6
4	0	0	4.2	4.3	8.8	13.1	13.5	9.4	9.9	3.9
5 - Least Deprived	8.6	9	5.1	0	4.3	4.3	4.4	4.6	4.7	4.6

#### 4.4. Probable Suicide

Probable suicide was at its highest level in Shetland at the beginning of the past decade, during the period 2012-16 at 16 deaths. This was at a comparable level with the Scottish rate of suicide at 1.4 deaths per 10,000 population. There was a period of decline to the lowest point in the past decade during 2014-18 when 7 suicides were recorded. The level of suicide increased each period following 2014-18 to 12 deaths in the most recent reported five-year period 2017-21. The level of suicide remained below the Scottish population rate, in the most recent year, the Shetland level of suicide was a third lower than Scotland.

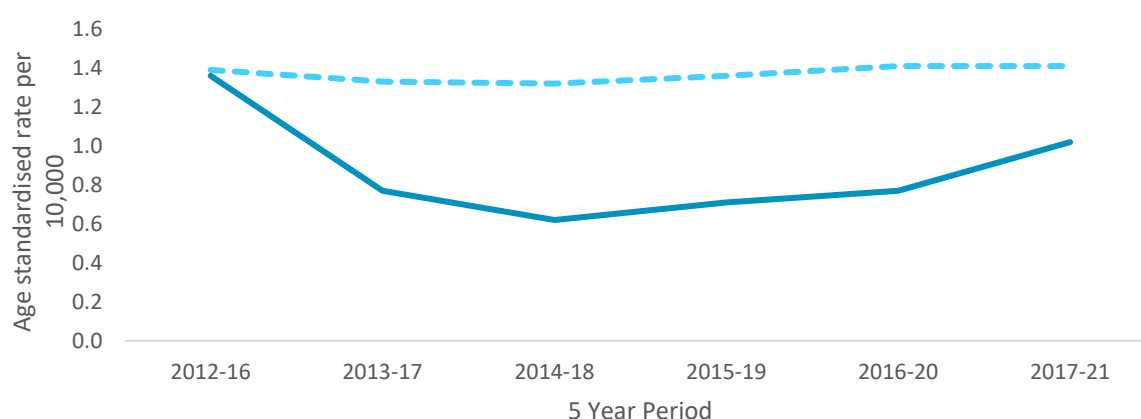


Figure 57 Probable Suicide - 5-year Average

#### 4.5. 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<sup>36</sup> 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. Most respondents (34.5%) to the Population Health Survey reported that they were physically active for a total of 30 minutes or more on 7 days of the past week. Less than 10% reported that they had not been physically active on any day in the previous week.



Figure 58 Number of Days Meeting Physical Activity Guidelines

The majority of respondents across all but two age bands reported that they were physically active on 7 days of the past week – this ranged from 20% of 40–44-year-olds to 53.7% of 65–69-year-olds. The majority of 18–24-year-olds were physically active on 5 or 6 days in the past week and the majority of 35–39-year-olds were physically active on 3 days in the past week. Those in the younger age bands reported being physically active on fewer days in the previous week compared to those in the older age bands.

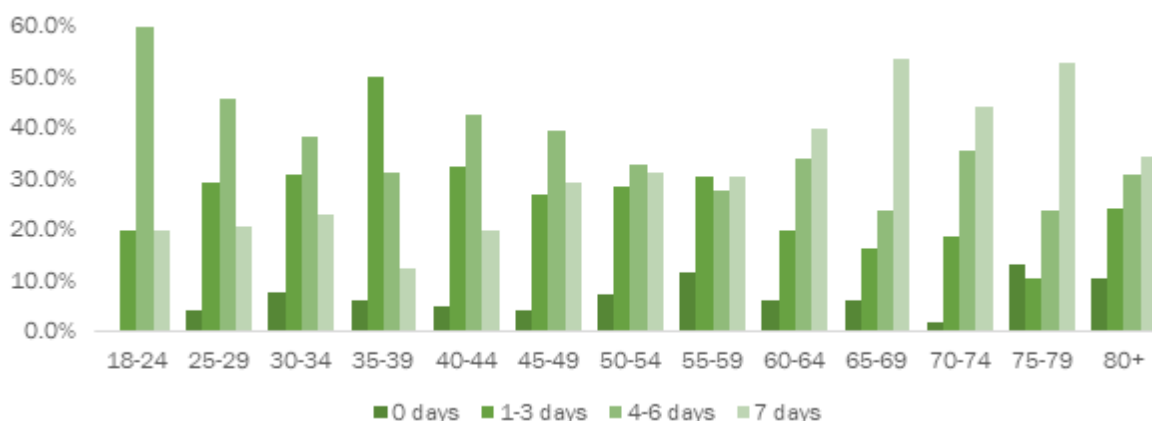


Figure 59 Number of Days Physically Active by Age Band

Over two thirds (65%) of Shetland adults surveyed by the Scottish Health Survey, between 2017 and 2021 said that they met the moderate to vigorous physical activity guidelines detailed below. Levels of activity in Shetland have fallen below the Scottish average in the past three periods of reporting. In Shetland, 65% of males and 64% of females reported that they met the moderate to vigorous physical activity recommendations. A small portion (10%) of the population additionally reported 'some' moderate to vigorous activity. Slightly more than a quarter (25%) of adults surveyed reported low to very low physical activity levels.

Figures regarding children's physical activity levels are unavailable at a local level but national results from 2021 indicated 71% of children (aged 5 – 15) met the guidelines for children of an average of 60 minutes of moderate to vigorous physical activity per week.

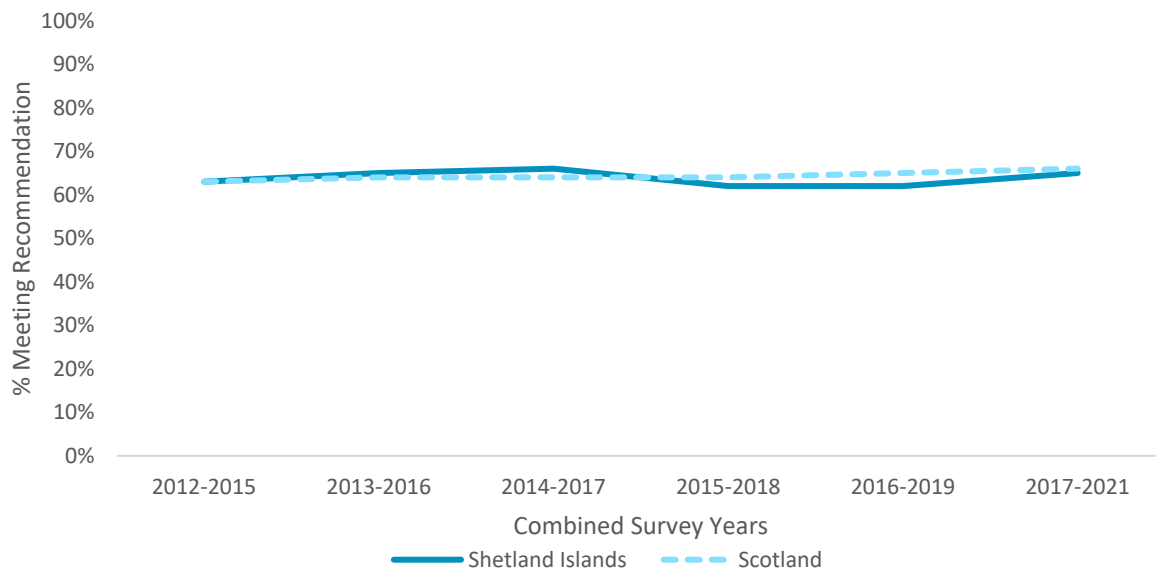


Figure 60 Summary of Physical Activity Levels

#### 4.6. Active Travel

Most individuals reported using a car for travel to work/school/college and for their leisure activities. Over a third of individuals reported that travel to work/school/college was not applicable to them. Many of the reasons for this was because either they did not work or they were retired.

Almost a quarter of individuals reported that they walk when going to take part in some type of leisure activities. Over 45% of individuals in all localities reported that they use a car for travel to work/school/college, with 6% using buses.

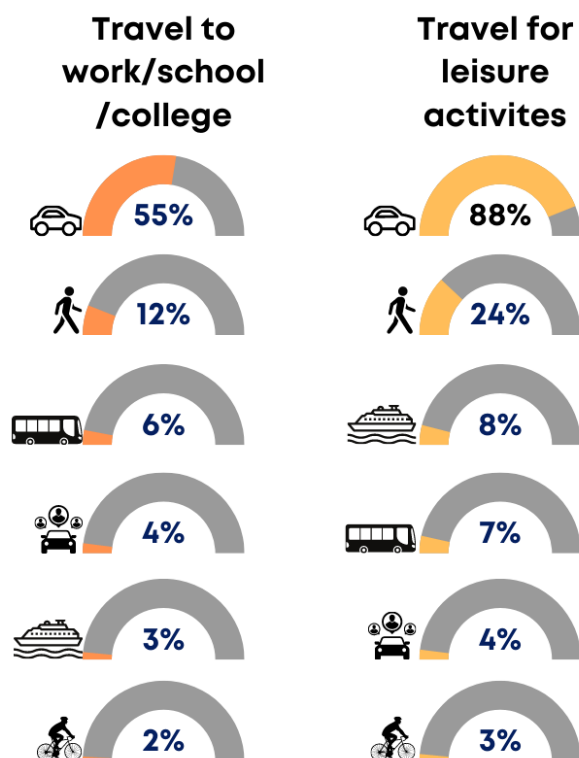


Figure 61 Mode of Transport

#### 4.7. Diet and Obesity

During the period 2016 - 2019, 15% of adults surveyed within the Scottish Health Survey in Shetland stated they ate 5 portions or more of fruit and vegetables per day. Within the Population Health Survey, most respondents (24.8%) reported that they usually eat 3 portions of fruit and vegetables in a day. Over 10% reported that they only eat 1 portion of fruit or vegetables in a day and similar proportion reportedly eat 6 or more portions of fruit or vegetables in a day.

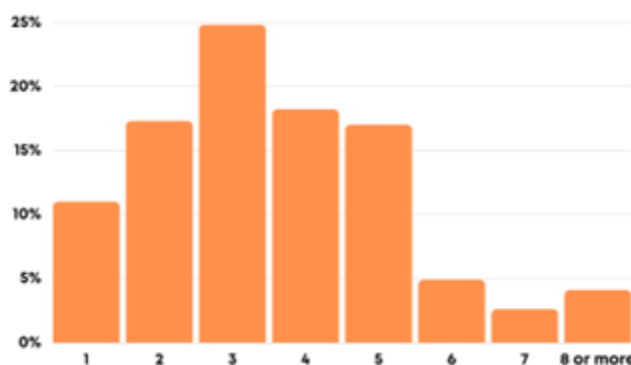


Figure 62 Portions of Fruit and Vegetables in a Day

Findings for children are not available at a local level from the Scottish Health Survey, but national results found only 14% of children met the daily recommendations of 5 portions of fruit or vegetables a day, and that girls were significantly (16%) more likely to meet recommendations than boys (12%).

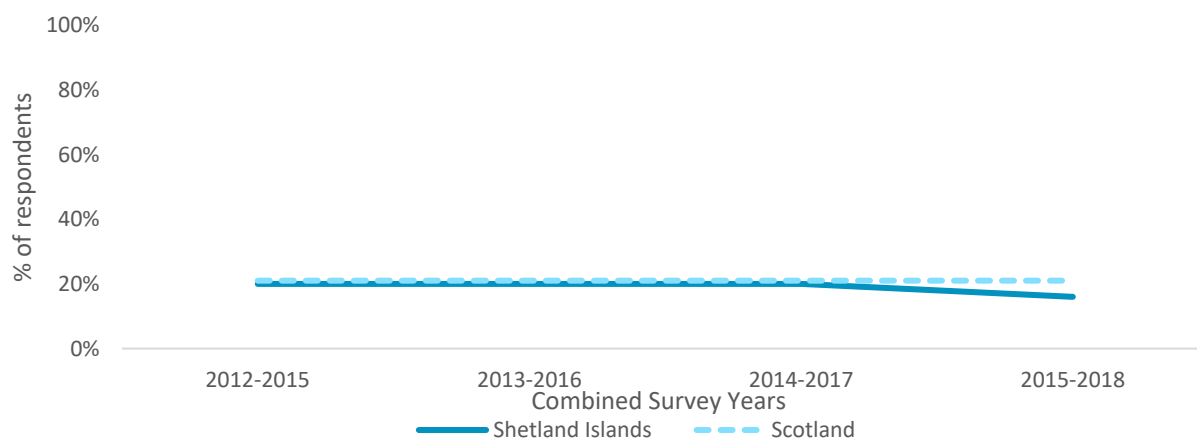


Figure 63 Fruit and Vegetable Consumption (5 portions or more)



## Food Poverty

Since 2017/18, an average of 1,124 food parcels were distributed annually on Shetland. Approximately one in five distributed parcels were given to children. These statistics do not take into consideration food banks operating outside the Trussel Trust's network and consequently may be an undercount.

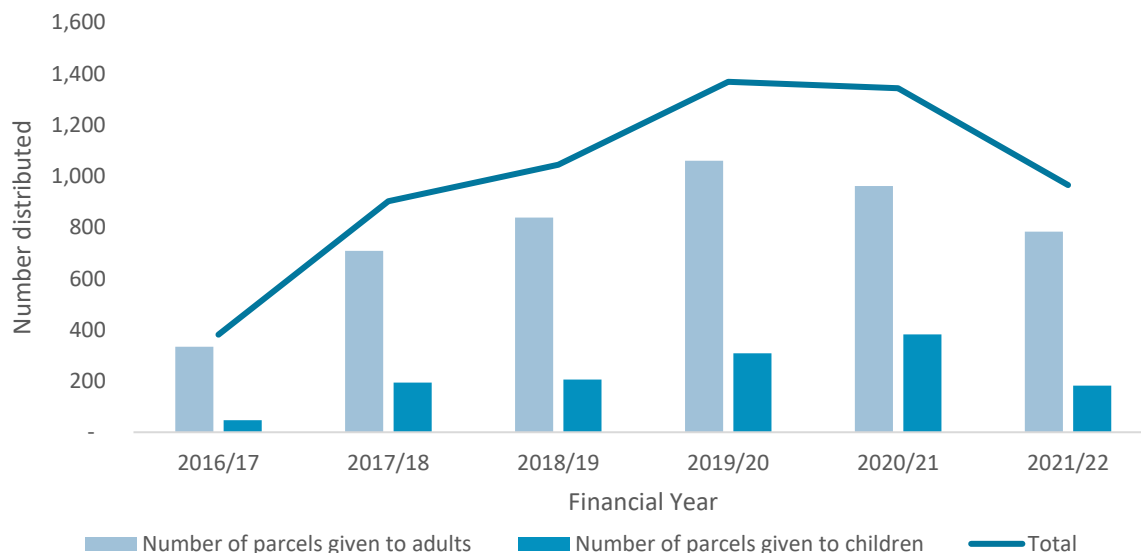


Figure 64 Food Parcels

Within the Population Health Survey, respondents were asked a number of questions relating to food insecurity, with 7.7% reporting that they had experienced food insecurity at some point. It is important to note that data was collected prior to the cost of living crisis and this must be considered when interpreting these results.

Just under 5% of respondents reported that in the previous year they had been worried about running out of food due to lack of money; had eaten less than they should have due to lack of money and had been unable to eat healthy/nutritious food due to lack of money.

Slightly fewer respondents had reported that their household had run out of food due to lack of money (2.4%) and that they were hungry but did not eat because of a lack of money (2.7%). When asked if they have accessed a local food bank in the last year, 1% reported that they had.

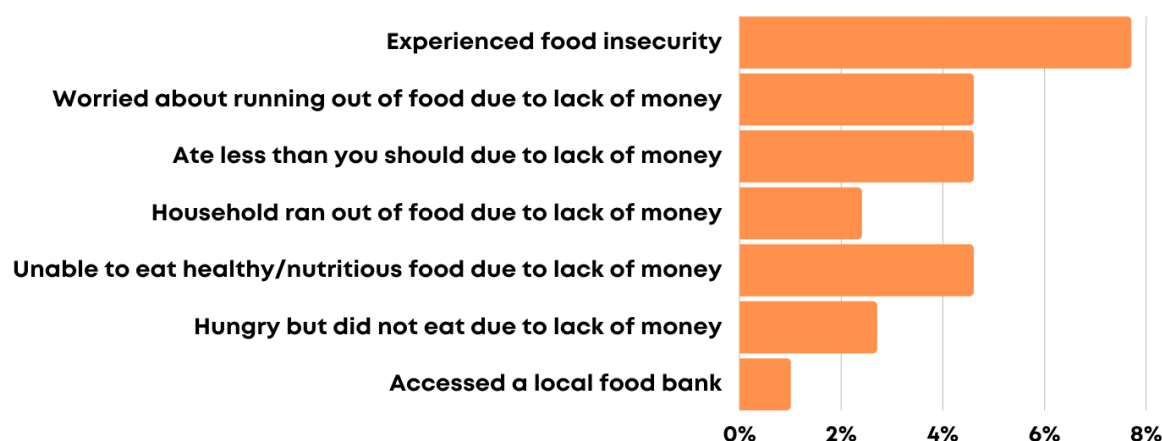


Figure 65 Food Insecurity

The levels of food insecurity varied across localities with North Mainland having the highest across all questions relating to food insecurity, while Shetland South had the lowest reported levels of food insecurity.

**Obesity**

It is challenging to accurately measure levels of obesity in Shetland as we do not have access to data from all GP practices, and Body Mass Index, the main measurement of obesity, is not recorded for a large proportion of patients. The data below is from patients who are currently registered with GP practices in Shetland (excluding Levenwick and Hillswick), and for patients who are over the age of 18 who have had their BMI recorded between 1st April 2022 and 31st March 2023.

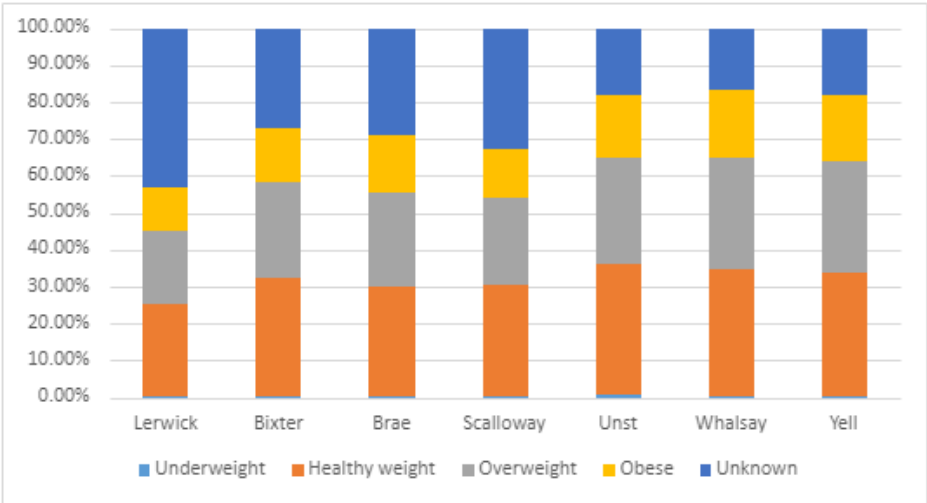


Figure 66 BMI by Practice

## 5. Social Care Needs and Services

### 5.1. Direct Payments

Direct payments are a cash alternative to receiving care services from the local authority to enable the service user to arrange their own care services<sup>37</sup>. The number of direct payments increased each year between 2017/18 and 2020/21, representing a 175% increase. In 2020/21 there were 110 Direct Payments which works out as 4.8 direct payments per 1,000 population. This is 2.8 times higher than the direct payment rate across Scotland.

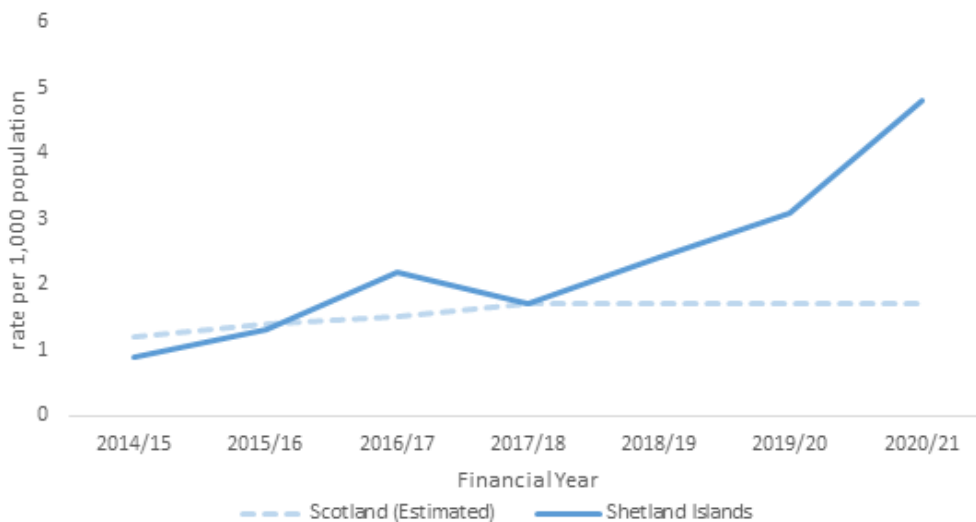


Figure 67 Direct Payments

### 5.2. Home Care Places

The level of registered care home places for people aged 65+ in Shetland declined each year since 2013. This represents a decline of over a quarter (28%) since 2013. This has followed a broadly similar trajectory compared to care home places for older people across Scotland. However, the Scottish rate of registered care home places for older people is reported to be marginally higher than Shetland. Between 2016 - 2021 the Scottish rate was on average 9% higher than Shetland.

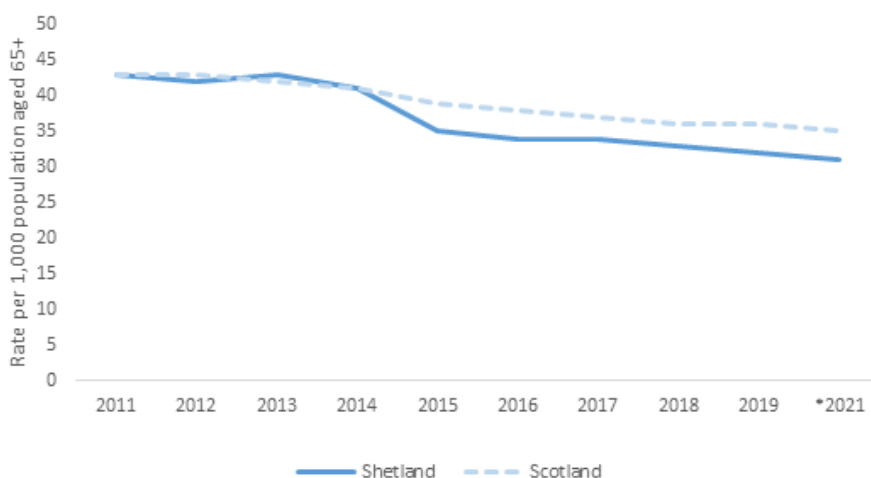


Figure 68 Rate of Registered Places in Care Homes for Older People

### 5.3. Long Stay Admissions

The level of new long stay care home admissions in Shetland has remained consistent since 2010/11. In recent years, 2017/18 saw the highest level of new long stay admissions at 64 however, this fell to 49 in 2018/19. This is an example of the typical variation associated with Long Stay Care home admissions. 2020/21 witnessed the lowest level of new long stay admissions with 39 new admissions recorded.

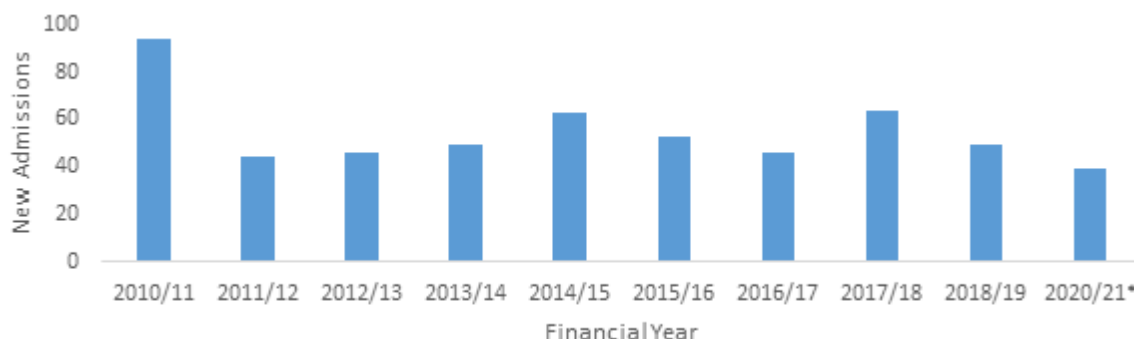


Figure 69 Number of New Long Stay Care Home Admissions

### 5.4. Long Stay Residents

Recent years have witnessed marginally lower levels of long stay residents during the census date each year. The average number of residents between 2017 and 2021 was 90 which indicates a 14% decline overall. 2021 levels of overall Long Stay residents remained on par with the average for 2017-2021 at 91.

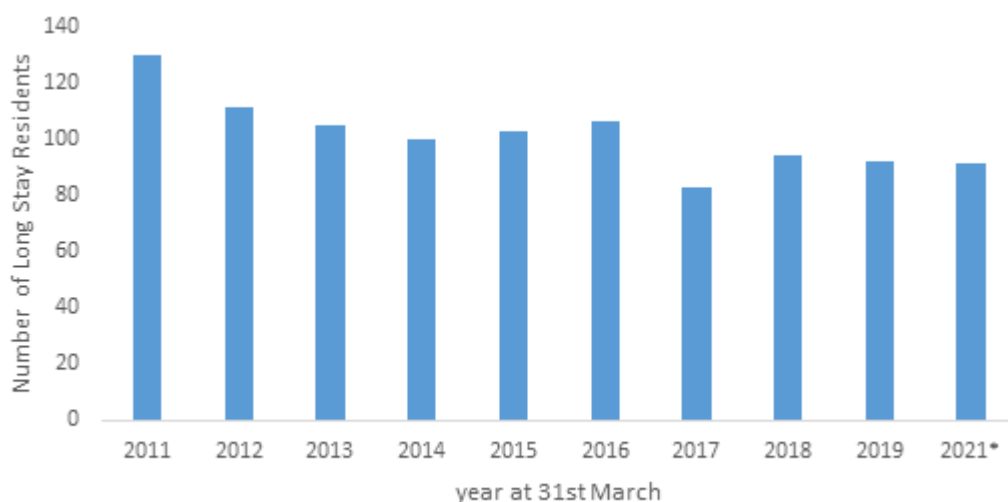


Figure 70 Number of Long Stay Care Home Residents

### 5.5. Care Home Occupancy

Recent years have witnessed the lowest occupancy rate estimates since 2011. Levels in 2021 and 2019 were 71% and 78% respectively. This follows a year-on-year decline since 2017 representing an overall 27% decline in Occupancy levels. Scottish rates have remained more stable at on average 86%.

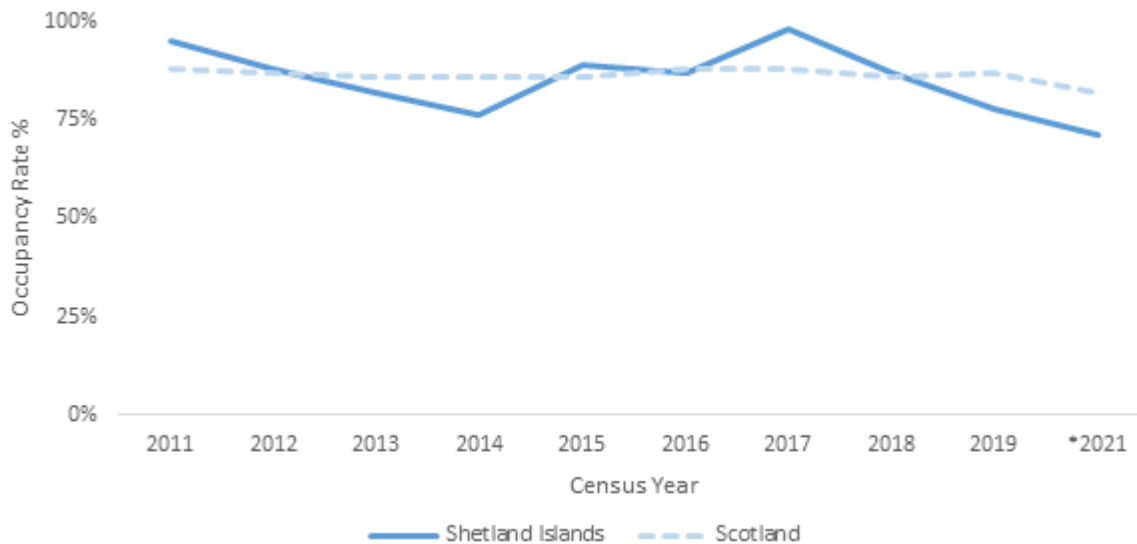


Figure 71 Estimated Care Home Occupancy Rate

## 5.6. Care Home Admission Age

The median age of Care Home admissions remained consistent in Shetland during the period reported above. The average age of admissions was 83 which was slightly higher than the Scottish level of 81. 2021 saw an above average median age of admission in Shetland of 85 years old.

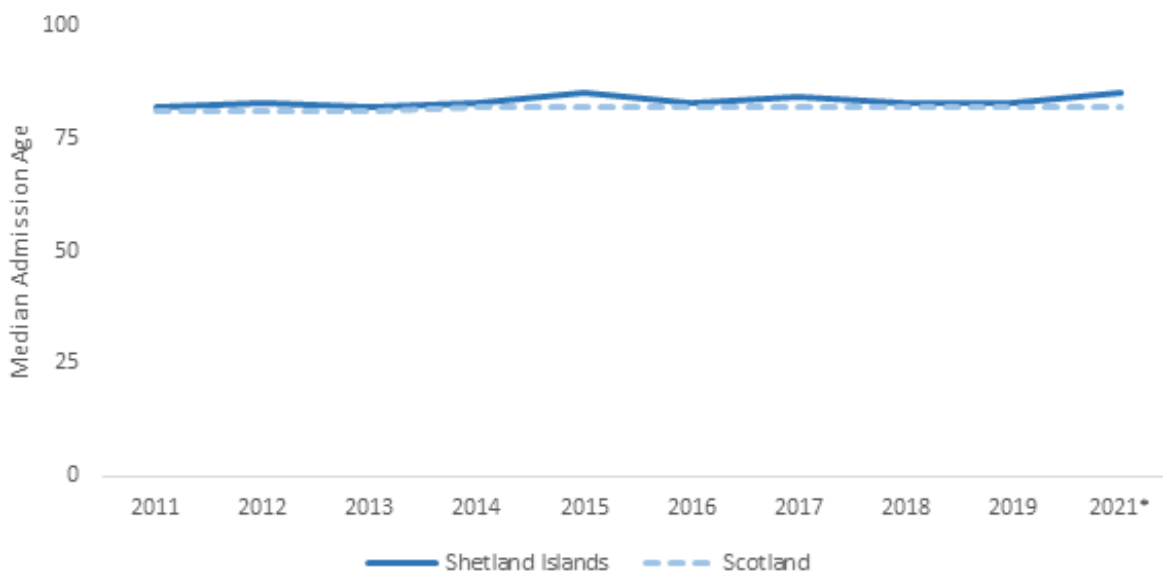


Figure 72 Care Home Median Admission Age

Similarly, the age of discharge has remained consistent in Shetland during the reported period above at 87. The average number of years spent as a long-term care home resident has reduced in recent years, from highs of 5 years in 2016 and 2017 to 3 years from 2018 onwards.

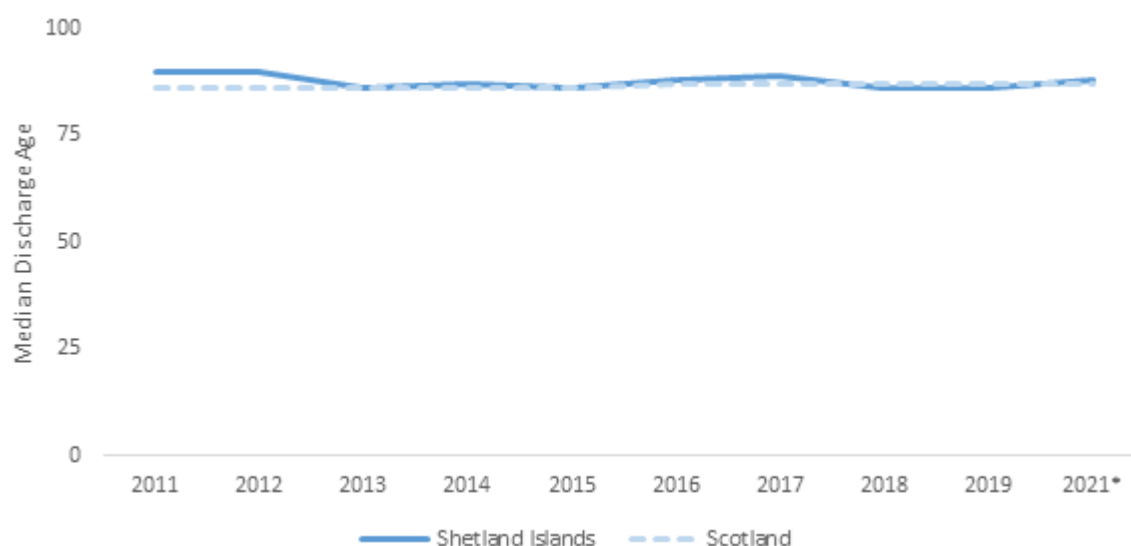


Figure 73 Care Home Median Discharge Age

## 5.7. Resident Health Needs

Over half of Long Stay residents (54%) had a medical diagnosis of dementia on 31st March 2021. This is the same proportion as across Scotland. Over a third (39%) had a physical disability or Chronic illness and 46% required Nursing Care.

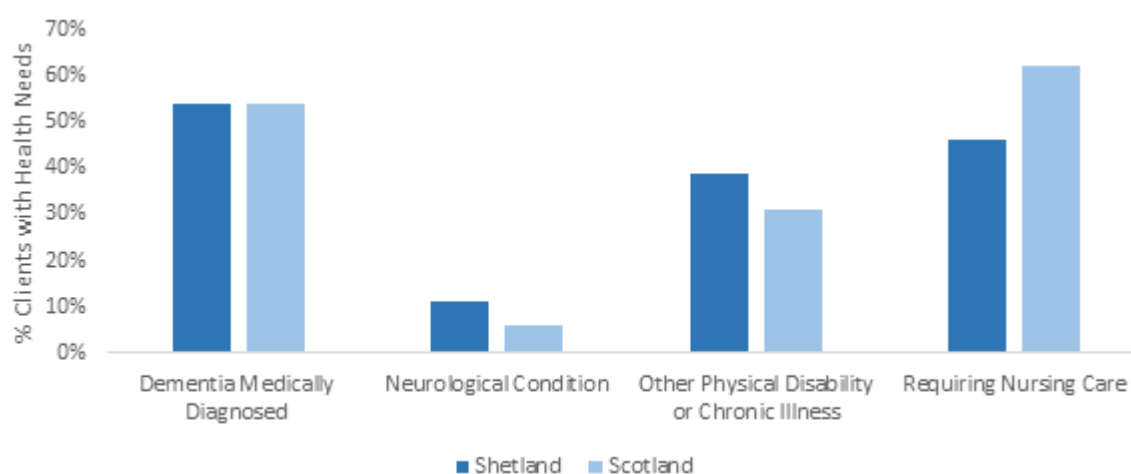


Figure 74 Care Home Client Health Needs

Table 24 Estimated Percentage of Long Stay Residents in Care Homes for Adults

Local Authority	Health Characteristics			
	Dementia Medically Diagnosed	Neurological Condition	Other Physical Disability or Chronic Illness	Requiring Nursing Care
Shetland	54%	11%	39%	46%
Scotland	54%	6%	31%	62%

## 5.8. Short Stay and Respite

Data collected from Care Homes as part of the annual care home census indicate there were on average 1065 short stay and Respite admissions between 2014/15 and 2018/19. This reduced significantly during 2020/21 to 460.

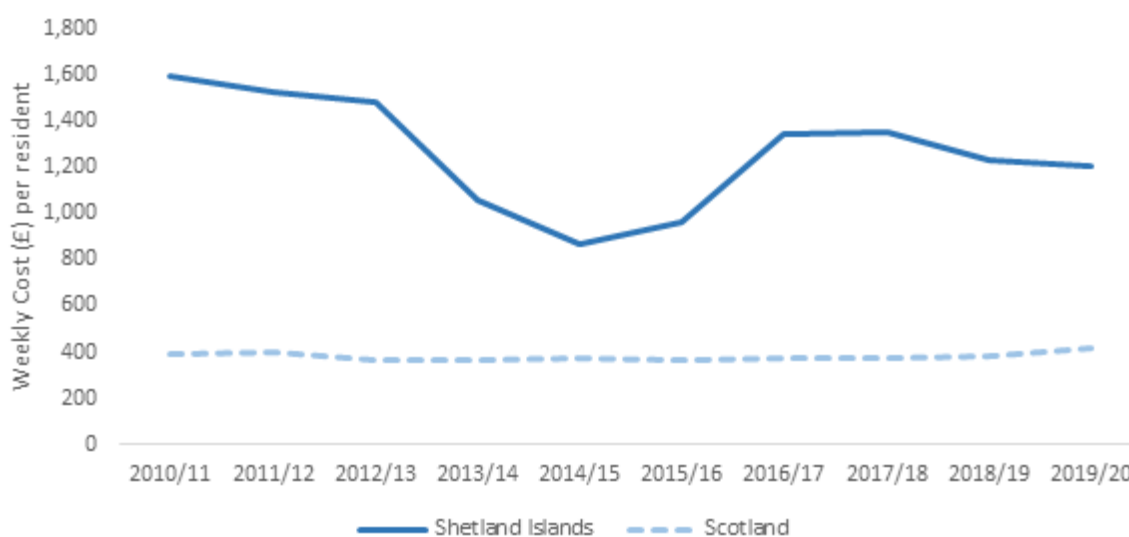
Data collected as part of the SOURCE social care submissions indicates that the quarterly average during 2019/20 was 101 clients receiving respite or short stay support. This declined significantly in 2020/21 to a quarterly average of 46.

*Table 25 Number of People: Short Stay/Respite*

Financial Year	Q1	Q2	Q3	Q4	Average
2017/18				30	30
2018/19	85	75	85	75	80
2019/20	95	100	105	105	101
2020/21	35	50	45	55	46

## 5.9. Residential Cost per Week

The cost of Residential costs per week per resident for people age 65+ in Shetland was on average £1,217 per week between 2015/16 - 2019/20. This is over 3 times higher than the Scottish average of £383 per week for the same period. Costs in Shetland have generally been increasing since 2014/15 however, stagnated over the past three years.



*Figure 75 Residential Care Home Costs per Resident Aged 65+*

## 5.10. Home Care Clients

The number of clients receiving home care declined each year in Shetland between 2011 and 2017. Overall, this represented a 40% decline in home care clients.

The number of home care clients from 2017 onwards indicates higher levels of home care provision. The average number of home care clients per quarter in 2019/20 was 415, declining to an average of 392 in 2020/21. Levels of home care remained below average in 2020/21 picking up in the last quarter to 410 clients.

### 5.11. Intensive Home Care Needs

The percentage of adults with intensive care needs receiving care at home has remained broadly consistent between 2016-2022, at between 70-80%.

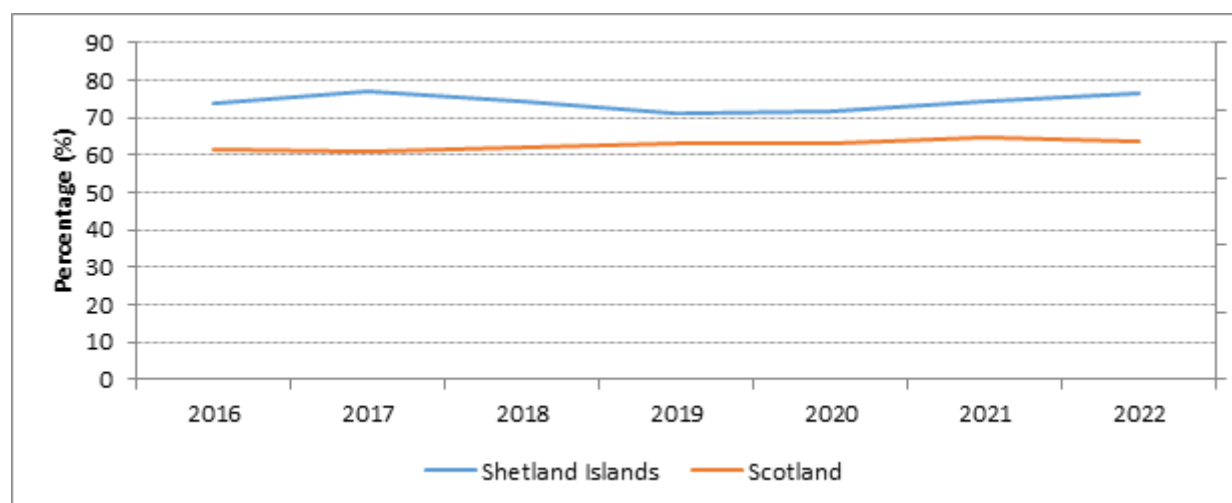


Figure 76 Percentage of Adults with Intensive Care Needs Receiving Care at Home

### 5.12. Home Care Costs per Hour

Shetland reported a higher hourly cost for Home Care each year between 2010/11 to 2019/20. The average hourly rate in the five years between 2015/16 and 2019/20 was £37 compared to £24 across Scotland. The Shetland 5-year average also represents a 23% increase on the previous 5-year average between 2010/11 - 2014/15.

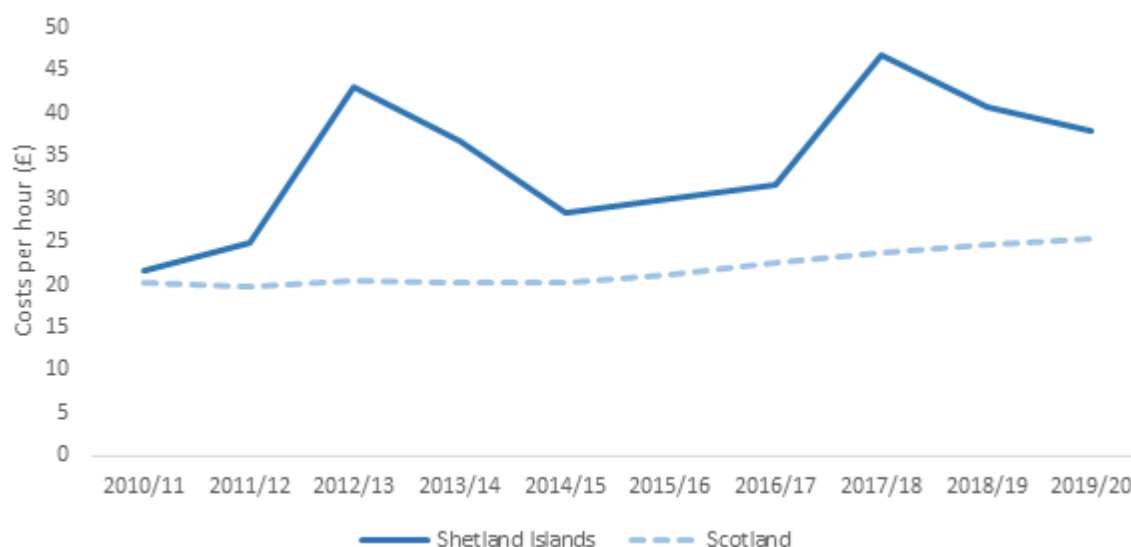


Figure 77 Residential Costs per Hour (Aged 65+)

### 5.13. Alarms and Telecare

The number of clients receiving Community Alarms and Telecare increased marginally between 2017/18 and 2020/21. There were 675 clients with a community alarm or telecare package in 2020/21.



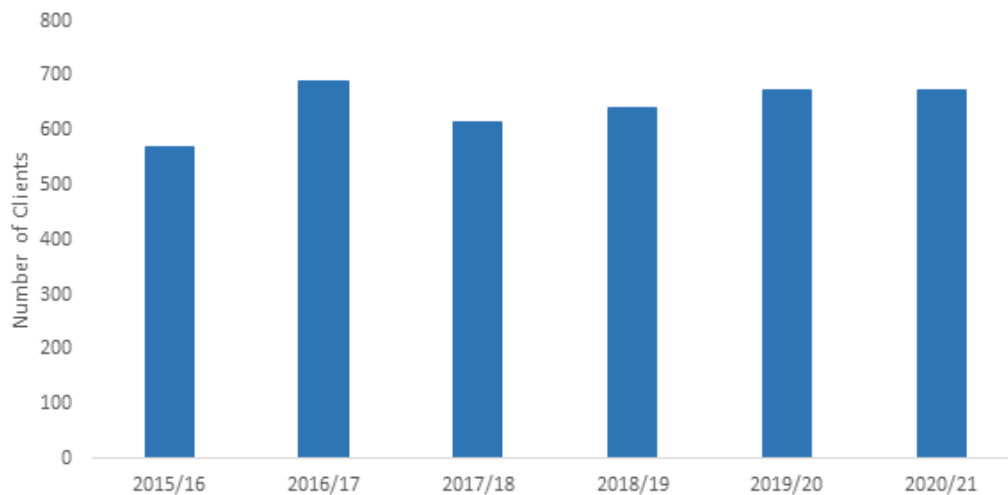


Figure 78 Community Alarms and Telecare

### 5.14. Hours of Care

17.3% of respondents to the Health and Care experience survey 2021/22 spent some time each week caring for someone. This was marginally lower than the Scottish level of 18.9% of respondents. The largest cohort is linked to those who care up to 4 hours per week at 7.5%. Following this, 3.9% of respondents stated the spend 50 hours or more caring for someone.

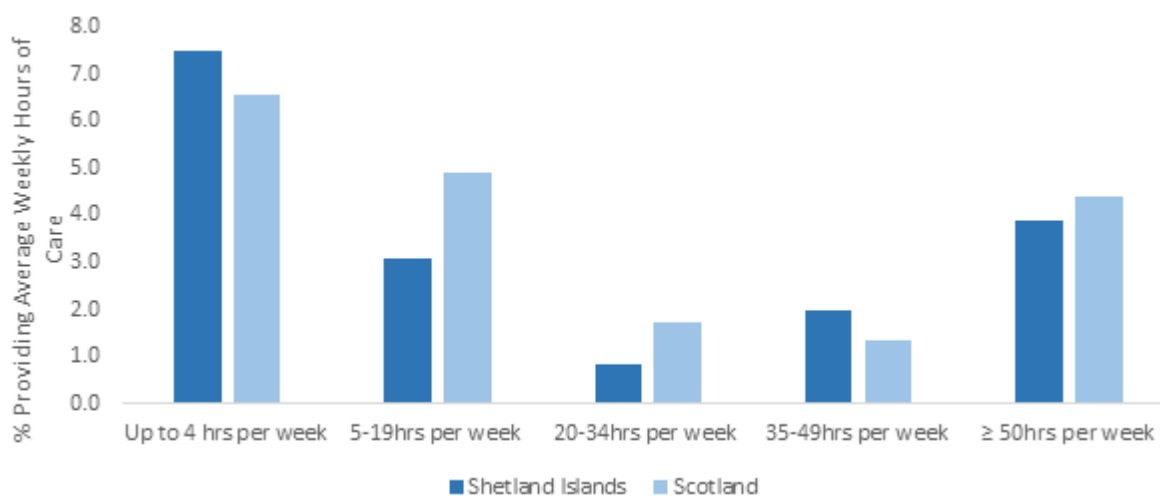


Figure 79 Percentage of Respondents with Carer Status

### 5.15. Criminal Justice Social Work Reports

There is a degree of variation each year in the number of CJSW reports submitted in Shetland. However, there has been a general declining trend since a period high in 2011/12 of 169 reports submitted to lows in later years such as 2018/19 of 62. This trend continued into 2019/20 and 2020/21 and recent years low numbers are likely due to the impact of the pandemic.

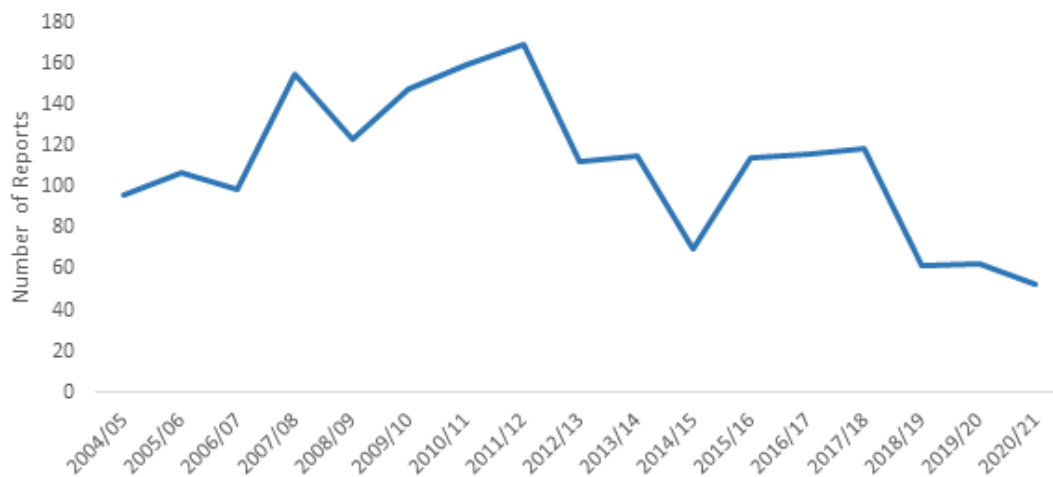


Figure 80 Criminal Justice Social Work Reports

Despite the variation, levels in Shetland follow broadly similar trajectories as the compared with Scotland. In 2018/19 there were 62 reports per 10,000 population submitted with 71 per 10,000 across Scotland.

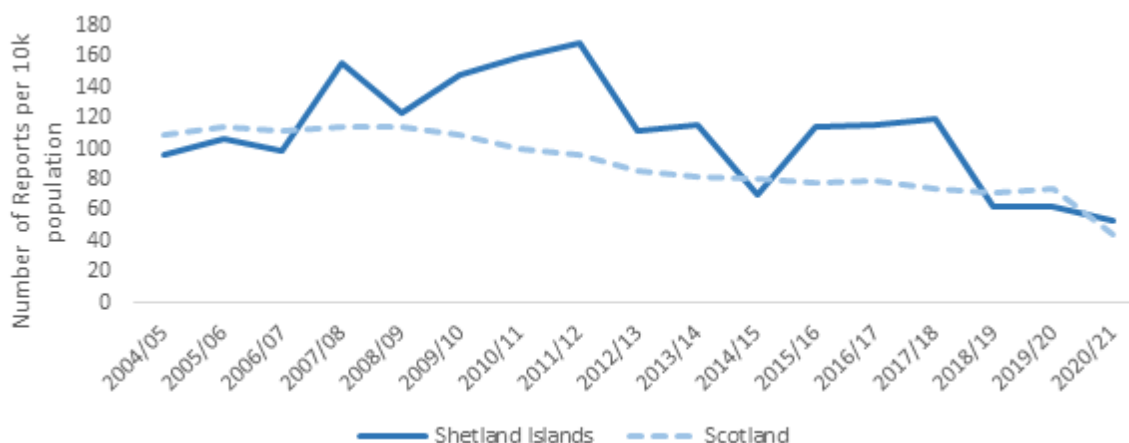


Figure 81 Rate of Criminal Justice Social Work Reports

## 5.16. Community Payback Orders

The level of CPOs and the level of individuals receiving CPOs in Shetland was consistently lower than Scotland since 2011/21. The level in Shetland has been following a declining trajectory since 2015/16 from a high of 36.0 per 10,000 population to a low of 19 per 10,000 population in 2020/21.

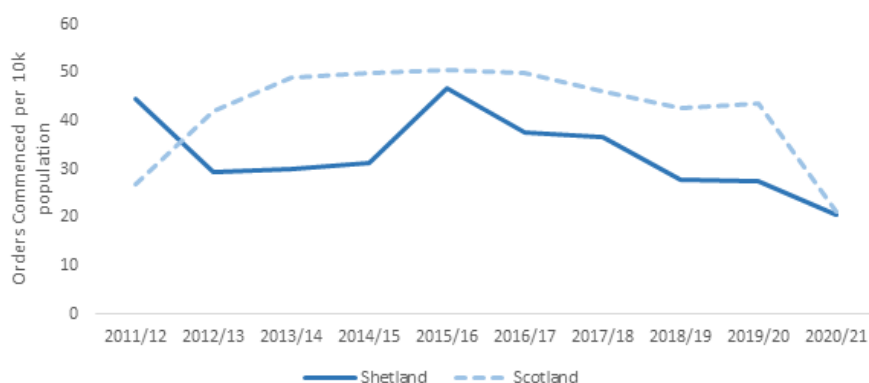


Figure 82 Community Payback Orders per 10,000 Population

Given the number of individuals receiving CPOs is smaller than the number of CPOs imposed, there is a small cohort of individuals who receive one or more CPOs each year.

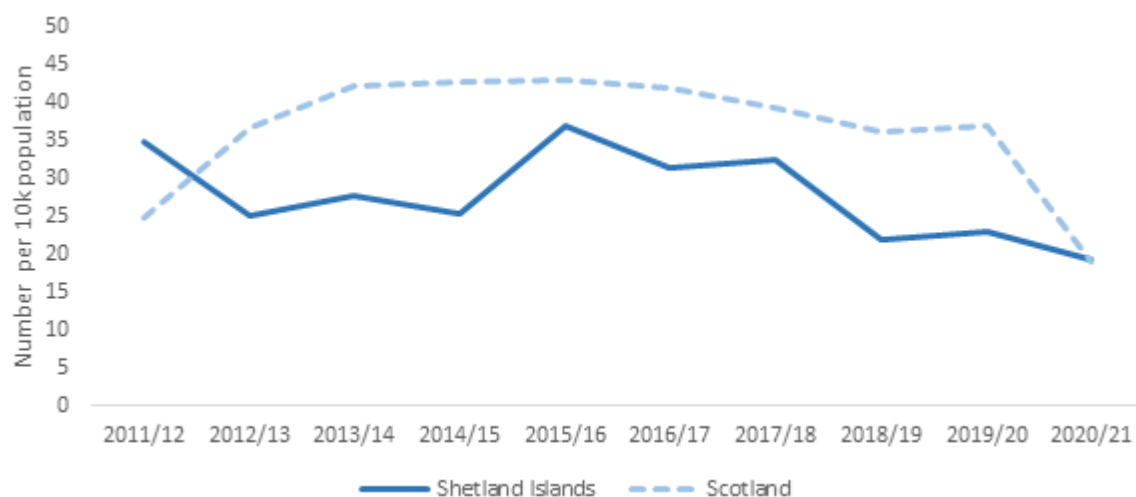


Figure 83 Community Payback Orders - Unique Individuals per 10,000 Population

## 6. Mental Wellbeing

### 6.1. Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) Score

Average WEMWBS scores have remained stable in the reporting period available since 2012; on average Shetland respondents scored 50.8 out of a potential total of 70 since 2012. The latest period indicates the highest score on record of 51.1, however this is marginal. In comparison to Scotland, Shetland consistently reported a higher average WEMWBS score suggesting wellbeing is, ever so slightly, better locally than it is nationally.

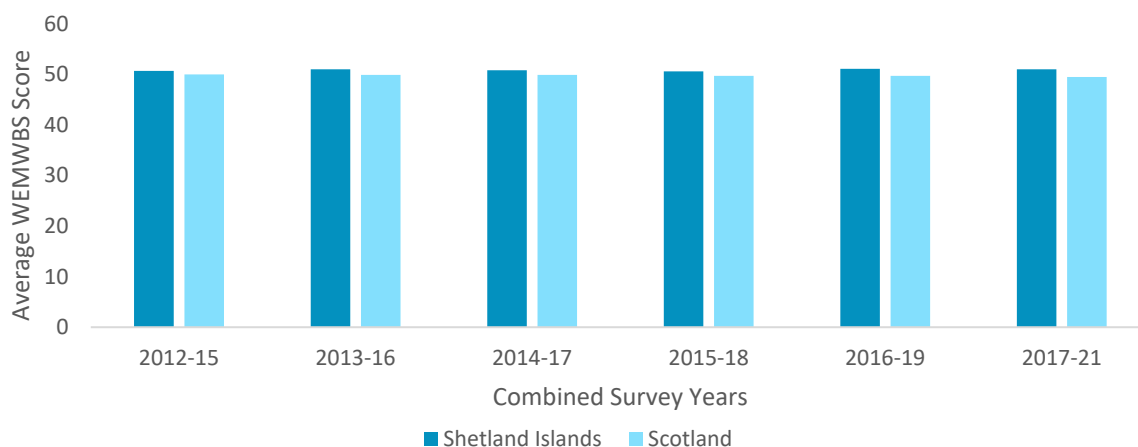


Figure 84 Warwick-Edinburgh Mental Wellbeing Scale Scores

### 6.2. Mental Ill Health Prevalence

There were 192 people with a Dementia diagnosis during 2021/22 in Shetland. This level increased each year between 2017/2018 and 2020/21 representing a 23% increase. The Dementia prevalence rate was higher in Shetland across the whole reporting period, in 2021-22 it was 29% higher.

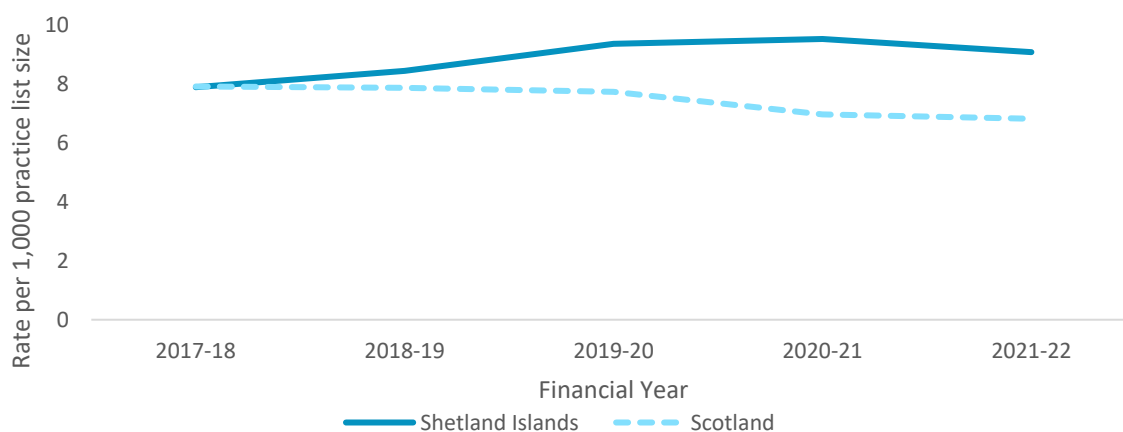
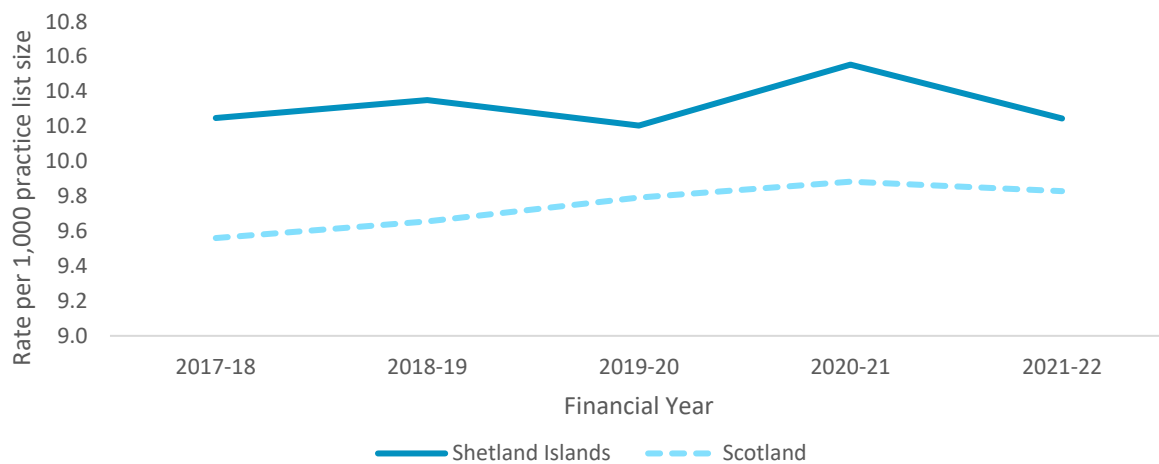


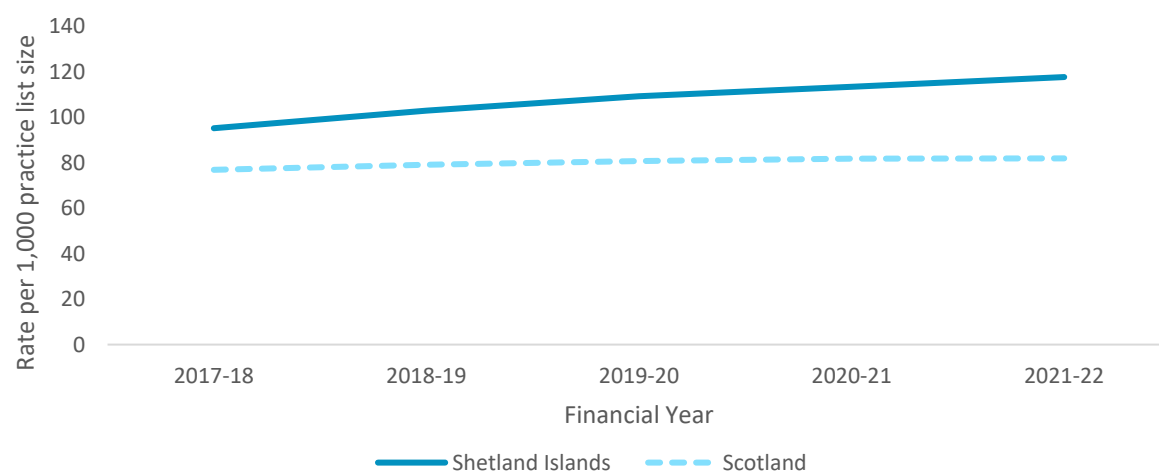
Figure 85 Dementia Prevalence Rate

Prevalence levels of SEMI (Severe & Enduring Mental Health (Bi-Polar, Psychosis, Schizophrenia)) have remained broadly stable throughout the reported period above. 2021/22 reported 217 patients with a severe and enduring mental health diagnosis. As with other mental health conditions commented on above, the prevalence rate was higher than Scotland's reported rate for the whole period, in 2021/22 it was 10% higher.



*Figure 86 Rate of Severe and Enduring Mental Health*

There was an increase each year in the number of people diagnosed with depression across primary care, despite the impact of access to services associated with the pandemic. 2020/21 recorded the greatest prevalence of depression diagnosis in Shetland Islands primary care with 2,494 diagnosed patients. Overall, this represented a 27% increase since 2018/17. The Shetland depression prevalence was 36% higher than the Scottish rate in 2021/22.



*Figure 87 Depression Prevalence Rate*

### 6.3. Mental Health Drug Prescribing

Anti-depressant prescribing increased year on year since 2010/11, representing a 99% increase by 2019/20 to 161.9 DDDs per 1,000 population per day. This was 14% lower compared with the Scottish rate of 187.4 DDDs per 1,000 population per day.

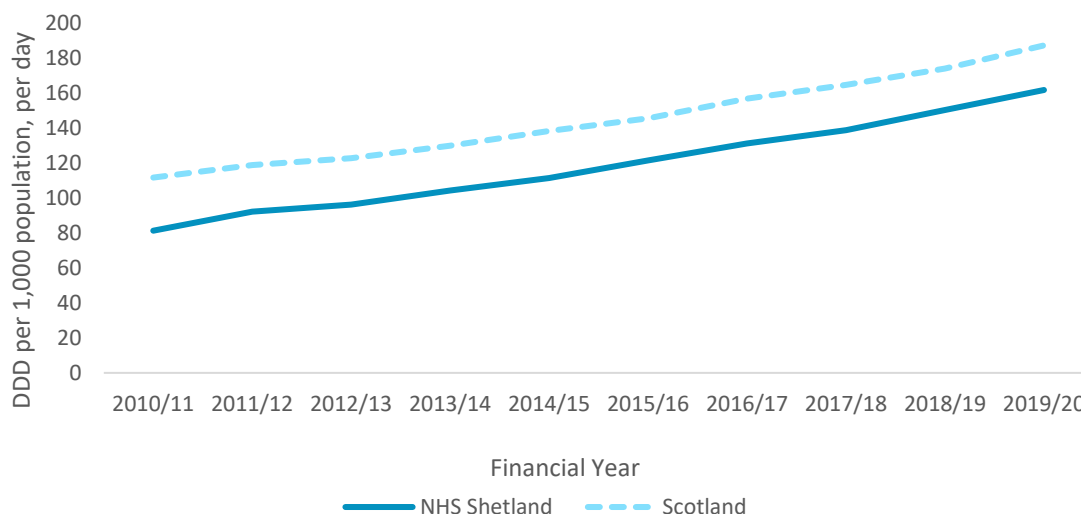


Figure 88 Anti-Depressant Prescribing Rate

Drugs used in the treatment of Psychosis increased between 2015/16 and 2019/20. In 2019/20 there were 10 DDDs per 1,000 population per day in Shetland compared with 11.8 across Scotland.

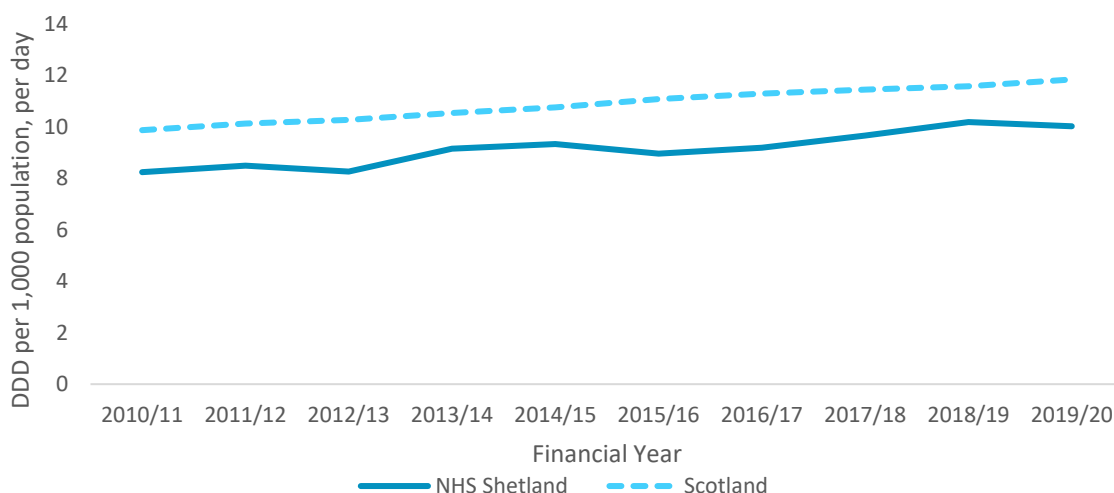


Figure 89 Anti-Psychotics Prescribing Rate

The use of Hypnotics followed a broadly increasing upward trend since 2012/13 representing a 31% increase by 2019/20 at 17.7 DDDs per 1,000 population per day. This again was lower than the level reported for Scotland by 39%.

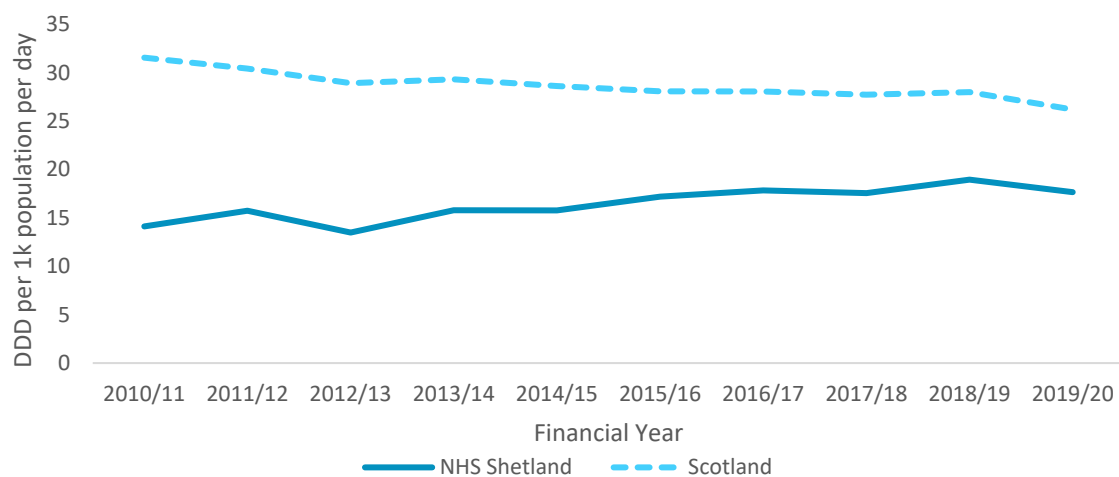


Figure 90 Hypnotics Prescribing Rate

Similarly, the level of prescribing for the treatment of Dementia has generally followed a broadly upward trend during the decade 2010/11 - 2019/20. In 2019/20 there were 21.9 DDDs per 1,000 population per day in Shetland which was 18% higher than the Scottish level of 18.2 DDDs.

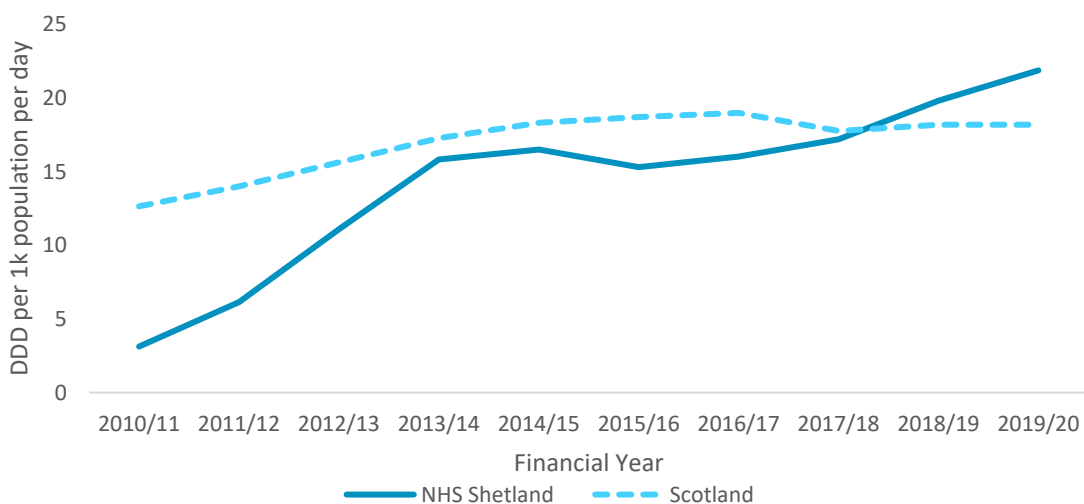


Figure 91 Dementia Prescribing Rate

## 6.4. Mental Health Prescribing by SIMD

The level of prescribing associated with drugs prescribed for the treatment of Anxiety, depression or psychosis is marginally higher for patients living in the most deprived areas in Shetland.

During 2019/20, 19% of patients who lived in the most deprived areas in Shetland were prescribed drugs for these conditions. The proportion decreases moving through the deprivation quintiles culminating in 15.7% recorded in Quintile 5 (the least deprived).

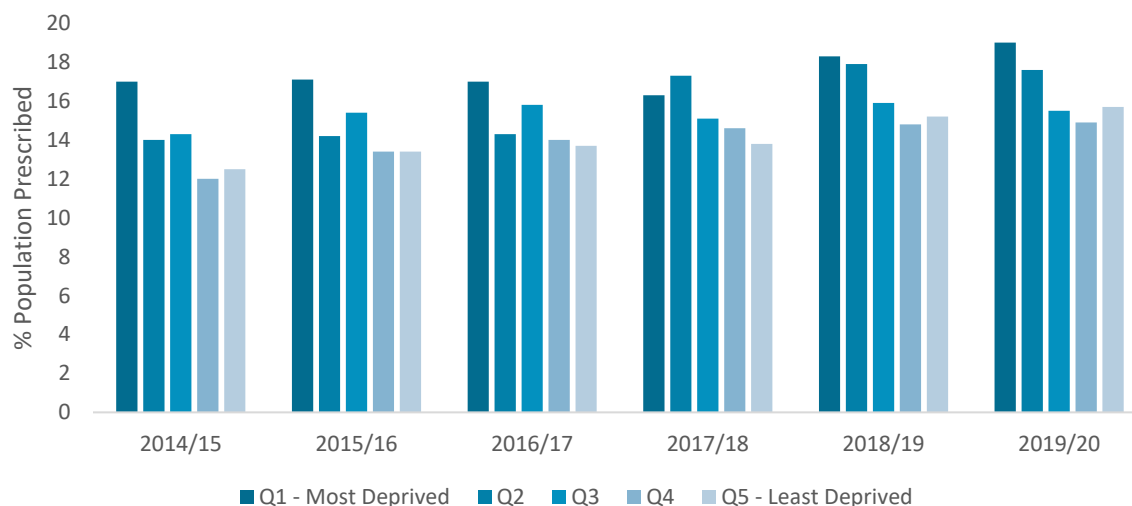


Figure 92 Prescribed Drugs by Relative SIMD

## 6.5. Mental Health Disability Adjusted Life Years

Anxiety and Depression were reportedly the most burdensome mental health conditions on the Shetland Islands population. This is represented in a Disability Adjusted Life Year (DALY) rate of 1,060 and 722 DALYs respectively. Both rates were slightly lower than the Scottish level of DALY for Anxiety and Depression (16% lower than Scotland for both).

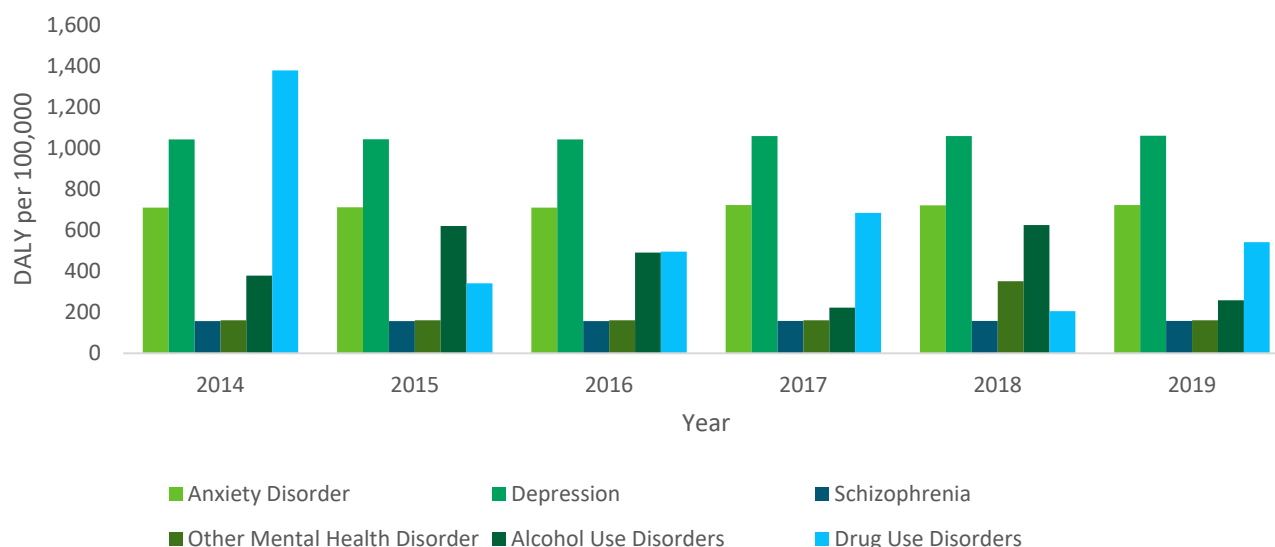


Figure 93 Age Standardised Rate of DALYs

## 6.6. Psychological Therapy Referrals

Psychological therapies are evidence-based interventions targeting a patient's understanding of the world in order to help overcome distress by changing their thinking, behaviour and



relationships. Interventions tend to be facilitated as a series of one-to-one sessions where patients are given space to work through the challenges they face. The main referrals tend to come from primary care, but referrals can be made from a host of different settings.

The figure above shows the level of demand being placed on psychological services in Shetland between 2014 and 2021. In the five years between 2014 - 2018, referrals increased by 212% to a high of 516. There had been a decline in referrals in the two years since 2018, however, since the understandably low figures in 2020, referrals climbed to 340 in 2021.

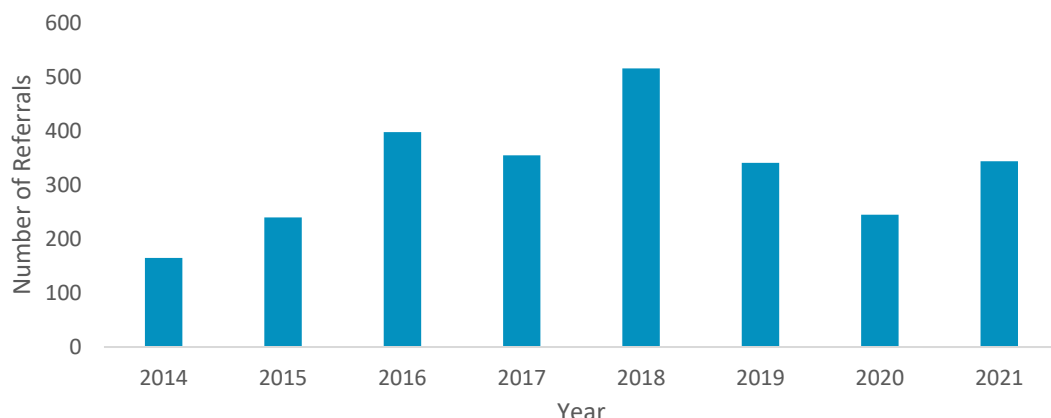


Figure 94 Psychological Therapy Referrals

## 6.7. Psychiatry Outpatient Appointments

The rate and number of new outpatient attendances in General Psychiatry showed a decline nationally. However, there was an unusual trend in Shetland with a steep increase in 2015/16 and then declining through until 2020/21 (however, it should be noted that the 2020/21 figures are provisional). This is likely to be due to the fact that previous figures provided may have included an element of estimation for any incomplete or outstanding data submissions. Previously, ISD(S)1 was used to provide the Outpatients information; however, this information is now sourced from SMR00 (except return outpatients). This is due to data quality concerns around historic return outpatients in SMR00 for these time periods. Furthermore, in 2017, the speciality groupings were updated in order to better align with clinical practice. This led to changes in the figures for some groupings compared to previous published figures.

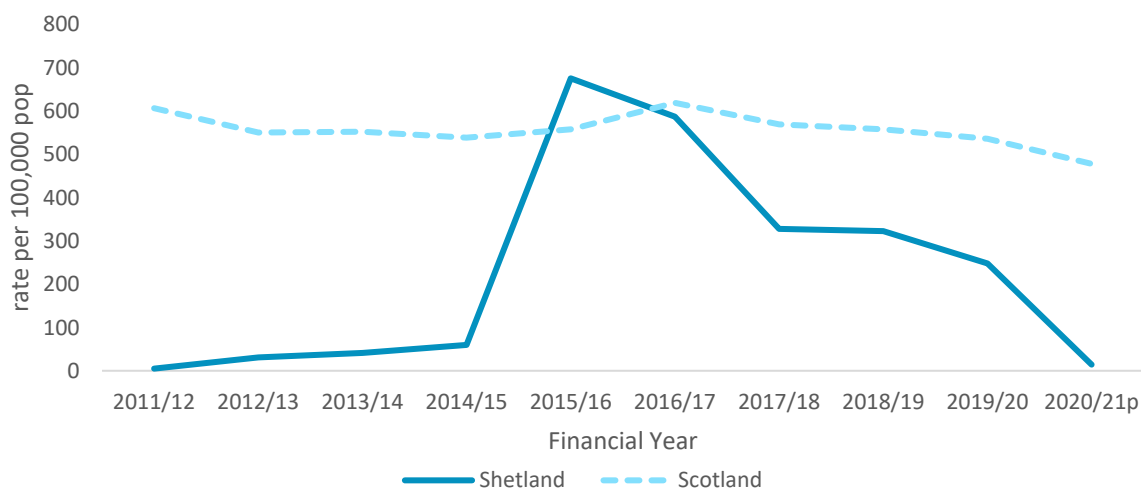


Figure 95 General Psychiatry New Attendances

## 6.8. Mental Health Inpatient Activity

Over the past 10 years, Shetland residents treated in Shetland have only been discharged from non-psychiatric specialties. This has accounted for the majority of discharges. The number of Shetland residents treated in NHS Grampian for psychiatric and non-psychiatric specialties were much smaller, and only in recent years have some Shetland residents been treated in a non-psychiatric specialty in the NHS Grampian area.

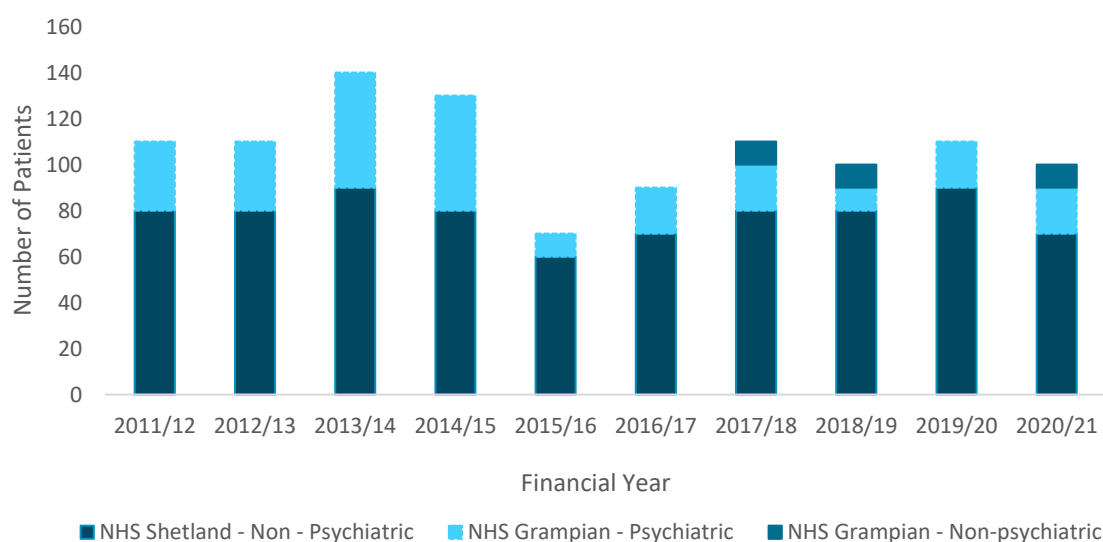


Figure 96 Mental Health Discharges

The main diagnosis grouping for admissions was Mental & behavioural disorder due to psychoactive substance use, counting for 160 admissions over the past 5 years. This was followed by organic, including symptomatic, mental disorders which accounted for 70 admissions over the same period.

Table 26 Mental and Behavioural Related Hospital Admissions by Diagnosis

	Financial Year				
	2016/17	2017/18	2018/19	2019/20	2020/2021
Mental & behavioural disorder due to psychoactive substance use	40	30	30	30	30
Mood (affective) disorders	10	10	20	10	0
Neurotic, stress related & somatoform disorders	0	10	10	10	10
Organic, including symptomatic, mental disorders	10	10	20	20	10
Other selected diagnoses principally affecting children & young people	0	0	0	10	0
Schizophrenia, schizotypal and delusional disorders	10	10	0	0	10

## 6.9. Mental Health Inpatient Activity by Relative SIMD

The Shetland Psychiatric Hospitalisations chart indicates that psychiatric patient hospitalisations by SIMD are becoming less equal. The most deprived areas rate of patients has declined slightly, however Q2 and Q4 have risen.

In 2018/19 - 2020/21, in Shetland, the most deprived areas had 41% more patients than the overall average, across Scotland the comparative figure was 77%.

Psychiatric patient hospitalisations would be 45% lower if the levels of the least deprived area were experienced across the whole population of Shetland. In Scotland, were similar outcomes achieved, there would be an overall reduction of 50%.

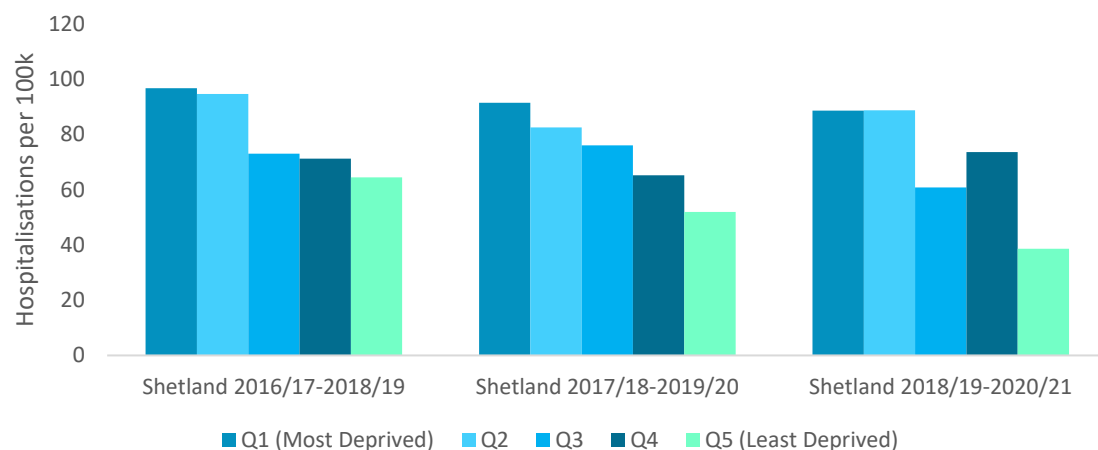


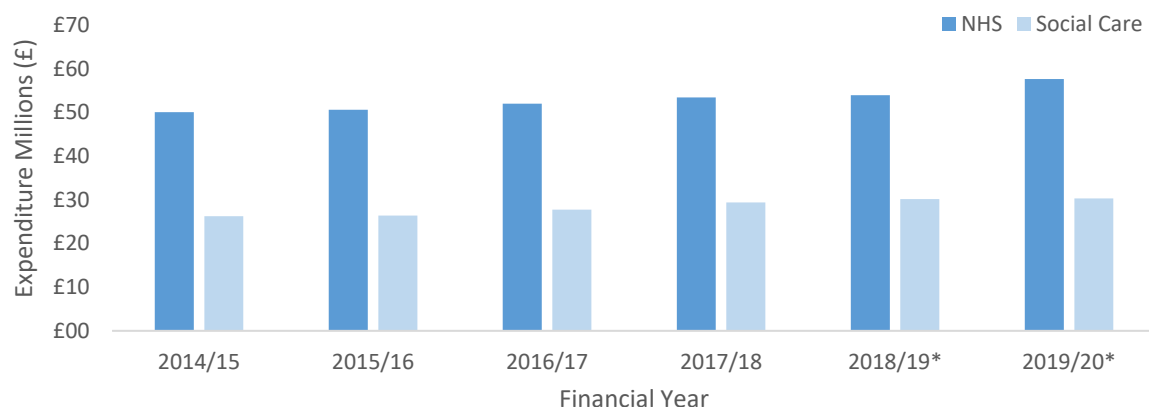
Figure 97 Psychiatric Hospitalisation by Relative SIMD

## 7. Expenditure and Workforce

### 7.1. Health and Social Care Expenditure

The source for the NHS expenditure is the published Scottish Health Service Costs (referred to as the Cost Book). This currently reports on around 95% of the NHS net operating costs, including expenditure on the provision of hospital and primary care within the 14 territorial NHS Boards, the State Hospital, and the Golden Jubilee National Hospital. These costs are allocated to age groups and partnerships based on level of service usage.

The social care expenditure figures are drawn from the Local Financial Return for Social Care (LFR 03), published by the Scottish Government. This reports on the expenditure relating to each Local Authority and is collected on an annual basis. Net revenue expenditure reflects expenditure once service income has been deducted. Following the implementation of Health and Social Care Integration from April 2016, an increasing proportion of social care expenditure is funded as income from Health Boards via Integration Joint Boards; this change in funding is reflected in the social care net expenditure presented in this release.



\* Figures from 2018/19 onwards sourced directly from NHS Cost Book and Local Finance Return 03 - Social work and indicative only, Integrated Resource Framework publication hasn't been updated since 2017/18. Cost Book Figures in cash terms, not adjusted for inflation.

Figure 98 NHS and Social Care Expenditure for Shetland (Millions £)

Table 27 Expenditure by Sector for NHS Shetland (£)

Local Authority	Financial Year			
	2014/15	2015/16	2016/17	2017/18
Non-Elective Inpatients <sup>1</sup>	£11,608,395	£10,514,785	£10,711,066	£10,007,850
Elective Inpatients <sup>1</sup>	£5,443,247	£4,857,678	£4,437,609	£4,188,790
Other Inpatients	£31,834	£19,832	£21,519	£32,611
Day Case	£2,146,611	£2,798,340	£3,061,060	£3,369,808
Other Hospital	£9,170,264	£9,558,023	£10,280,911	£10,877,917
<b>Total NHS Hospital</b>	<b>£28,400,351</b>	<b>£27,748,658</b>	<b>£28,512,164</b>	<b>£28,476,976</b>
Community Based NHS	£9,300,458	£10,052,161	£10,234,130	£10,805,731
GP Prescribing	£3,978,098	£4,385,855	£4,424,242	£4,563,617
Other Family Health Services Excl. Prescribing	£8,348,646	£8,409,321	£8,826,135	£9,559,845
<b>Total NHS Community</b>	<b>£21,627,202</b>	<b>£22,847,337</b>	<b>£23,484,507</b>	<b>£24,929,193</b>
Care Homes	£6,593,000	£6,272,000	£7,962,000	£9,150,000
Other Accommodation Based Social Care <sup>1</sup>	£4,971,000	£5,009,000	£4,081,000	£3,468,000
Home Care	£3,936,000	£3,955,000	£3,977,000	£4,356,000
Other Community Based Social Care	£10,743,000	£11,155,000	£11,711,000	£12,404,000
<b>Total Social Care</b>	<b>£26,243,000</b>	<b>£26,391,000</b>	<b>£27,731,000</b>	<b>£29,378,000</b>
<b>Total Expenditure</b>	<b>£76,270,553</b>	<b>£76,986,996</b>	<b>£79,727,671</b>	<b>£82,784,170</b>

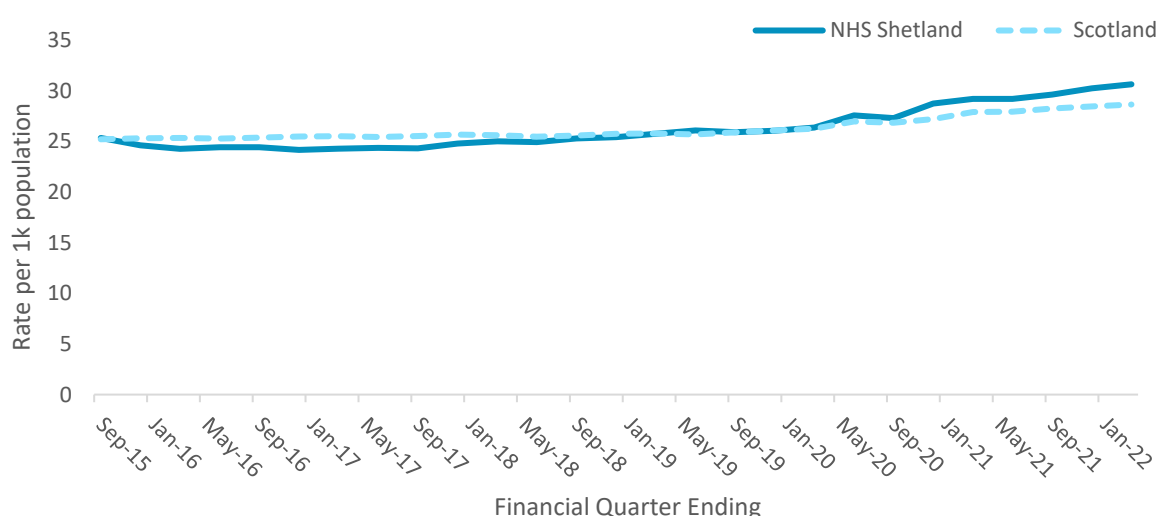
When spending totals for 2014/15 and 2017/18 are compared, only three spending areas<sup>1</sup> have reduced during the period analysed. Combined reductions for these three areas amounted to just over £4.35M. This contrasts with spending overall, which grew from just over £76.25M in 2014/15 to over £82.75M in 2017/18 - a difference of over £6.5M, and an increase of 8.5%. The greatest proportional increases in spending during the period analysed occurred in Day Case (57%) and Care Homes (39%). The NHS spend proportions, between hospital and community is listed in Table 28.

*Table 28 Proportion of NHS Spend between Hospital and Community*

	NHS Hospital	NHS Community
<b>2014/15</b>	56.8%	43.2%
<b>2015/16</b>	54.8%	45.2%
<b>2016/17</b>	54.8%	45.2%
<b>2017/18</b>	53.3%	46.7%

## 7.2. NHS Workforce

Since the end of financial year 2015/16, NHS Shetland has gone from a workforce WTE of 24.3 per 1,000 population to a rate of 30.6 at the end of 2021/22. During the same timeframe, Scotland has gone from an additional one 25.3 WTE per 1,000 population to 28.6 per 1,000 population at the end of 2021/22, showing the increase in WTE has been greater in Shetland than the Scottish average.



*Figure 99 NHS Workforce by WTE per 1,000 Population*

## 7.3. NHS Workforce Turnover

NHS Shetland has a consistently higher rate of workforce turnover than is experienced across Scotland as a whole. The gap between local and national turnover rates has narrowed in recent years. The most recent release by NHS Education for Scotland (NES) provides a quarterly update, as at 31 March 2022. This includes the number of staff directly employed by NHS Scotland and the number of vacant posts there were for nursing and midwifery staff, allied health professions, and medical and dental consultants. When describing the size of a particular staff group, figures are presented either as headcount (actual number of staff) or WTE which adjusts the headcount to take account of part time working. For turnover, this is the working

time equivalent of those who leave the organisation, as a percentage of the WTE of the entire organisation.

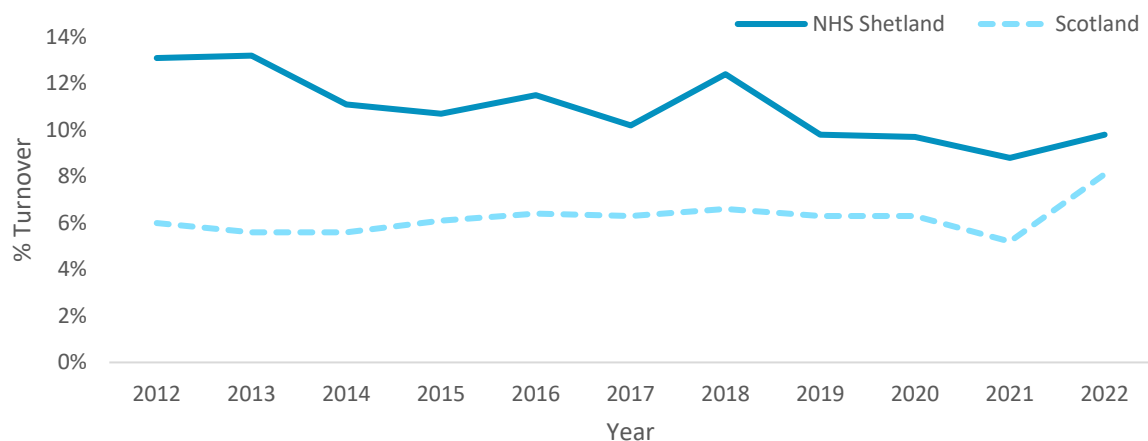


Figure 100 Workforce WTE Turnover

#### 7.4. GP Workforce

The Shetland Islands recorded a GP workforce of 1 GP per 1,000 of the population. Nationally, the rate is just below 1 GP per 1,000 of the population.

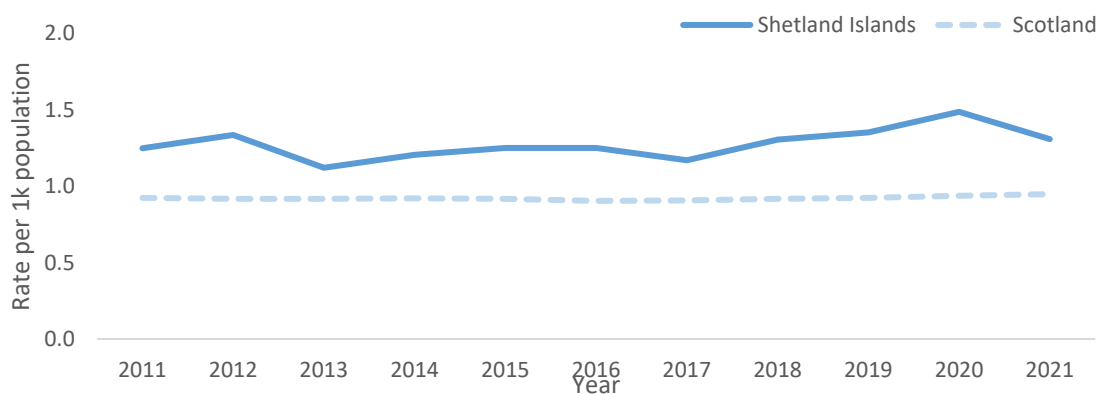


Figure 101 Workforce Headcount per 1,000 Population

## 7.5. Social Care Workforce

In common with the other island local authorities, social services on Shetland are mainly provided by the public sector. Throughout the rest of Scotland, social care services are mostly provided by the private sector, hence the apparent discrepancy in headcount rates when Shetland and Scotland are compared.

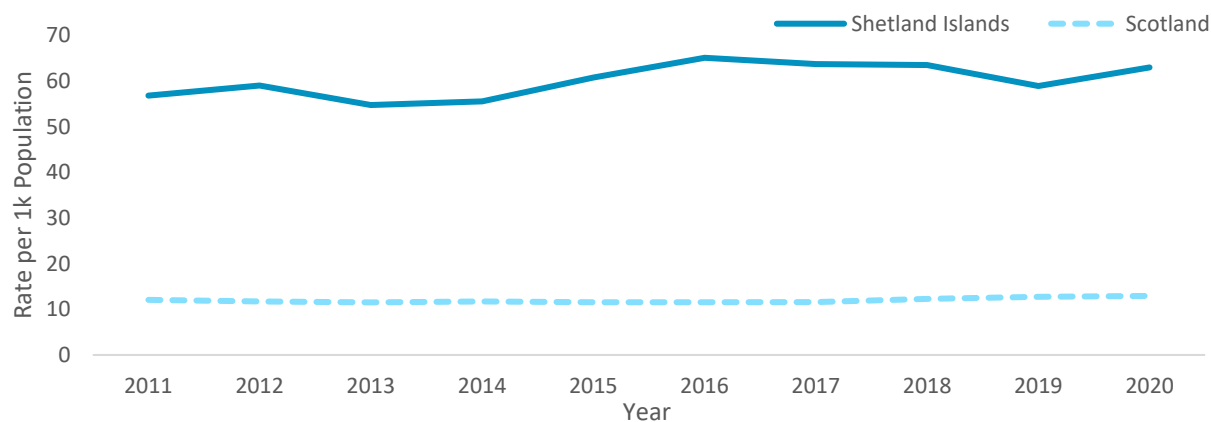


Figure 102 Social Care Workforce Headcount per 1,000 Population

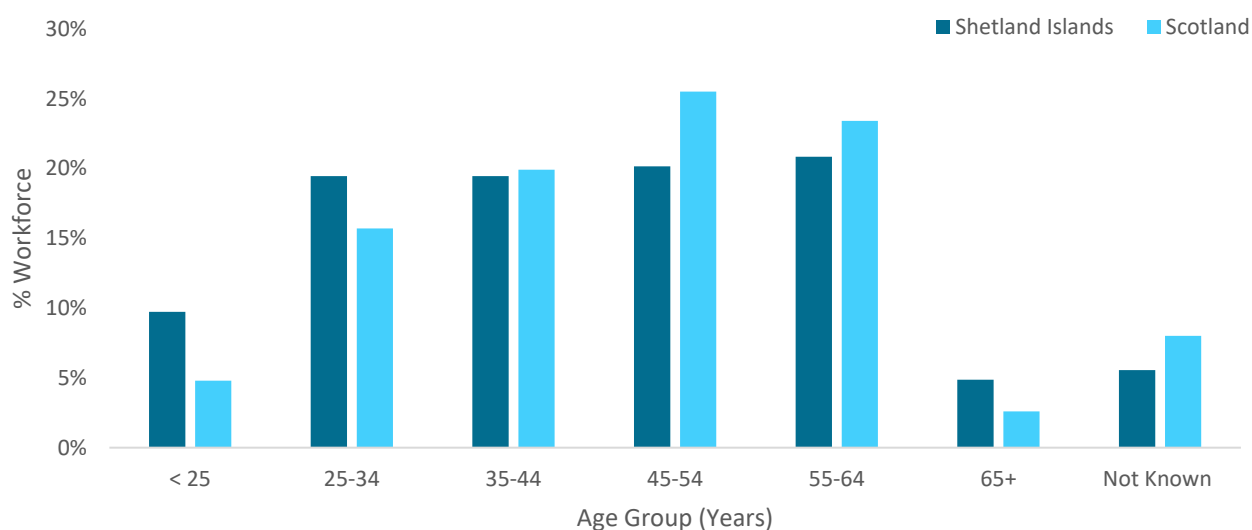


Figure 103 Social Care Workforce Age Profile (2020)



## 8. Public Services and Population Health

### 8.1. Christie Commission

When it was published in 2011, the Christie Commission<sup>38</sup> told us we should be thinking systematically about changing the way that we work.

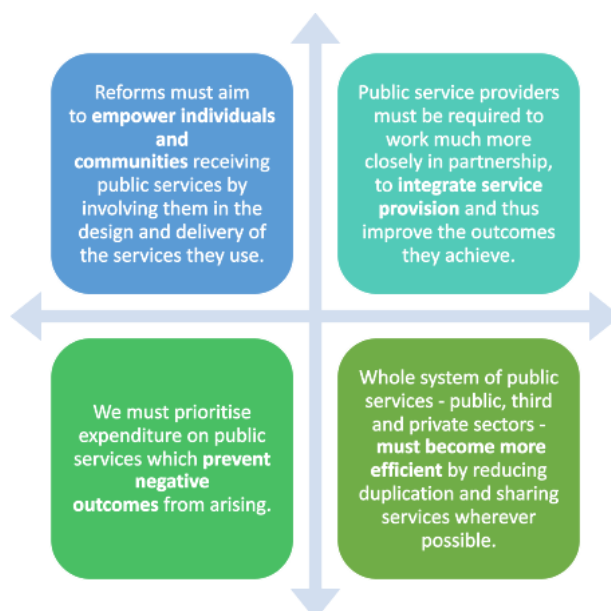


Figure 104 Christie Commission Key Elements of Reform

### 8.2. Using our Community Planning Colleagues and Structures

The illustration below is an attempt to explain the level of impact and influence that different elements have on a person's health<sup>39</sup>. This encourages us to think more widely about improving population health and wellbeing, beyond the health and social care services we deliver.



Figure 105 Public Health Scotland Influences on Health

To influence these factors requires coordinated of action beyond the health and social care system – this coordination of action fits within the remit of our community planning colleagues. 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 as the outcomes are intertwined. For 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.

NHS Shetland and Shetland HSCP are key partners in the Shetland Partnership and are critical in using this role to exercise the potential of collaborative action.

### **8.3. Tackling Health Inequalities**

The scale of health inequalities in Scotland is not inevitable. The Covid-19 pandemic demonstrated that agility in policy delivery and local practice is possible when there is a clear shared priority, and the need to act at pace presents an opportunity for change and renewal. 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 by maximising use of existing powers, the human and economic cost of inaction is simply too high<sup>40</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<sup>41</sup>. 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 and concluded<sup>42</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:
  - a. Give every child the best start in life
  - b. Enable all children young people and adults to maximise their capabilities and have control over their lives
  - c. Create fair employment and good work for all
  - d. Ensure healthy standard of living for all
  - e. Create and develop healthy and sustainable places and communities
  - f. 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 Ageing**

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<sup>43</sup> 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. 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 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

## 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>44</sup>.

The Institute for Public Policy Research (IPPR), in their report 'Healthy Places, Prosperous Lives'<sup>45</sup> gives practical examples of transformative place-level interventions, including the Wigan Deal, which managed to transform outcomes for people within their community as well as saving money<sup>46</sup>.

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 106 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<sup>46</sup>; 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, 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.

## 8.7. Different Ways of Working – The Liberated Method

The people behind the ‘Liberated Method’<sup>47</sup> argue that public services should focus on efficacy rather than efficiency, and that by doing so achieved 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.

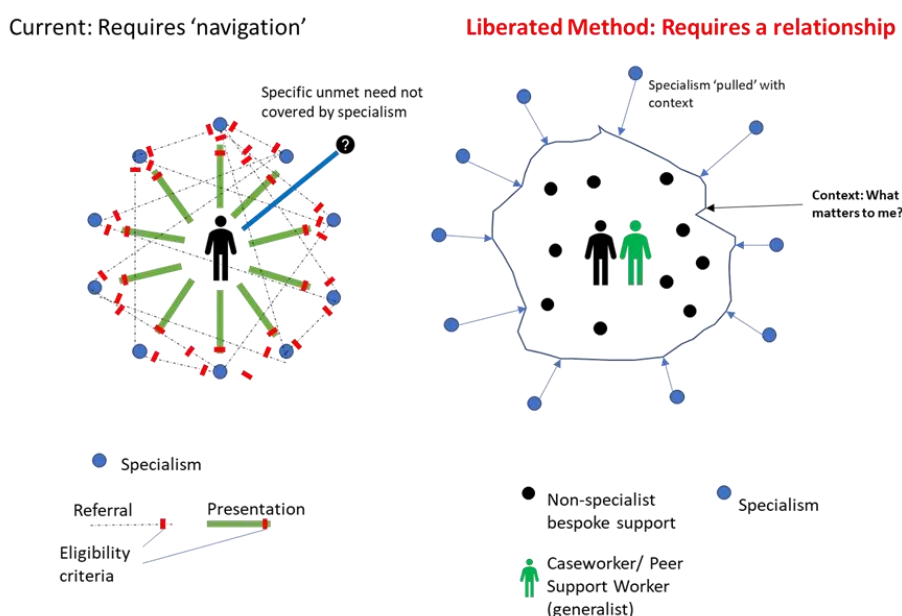


Figure 107 The Liberated Method

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 29 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<sup>48</sup> 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

## **9. Conclusion**

The challenges that Shetland faces are: 1. poverty and cost of living, 2. An ageing population, with more complex health issues, 3. Children who will become adults with poorer health status than recent generations, 4. Ongoing recruitment and retention challenges, 5. A growing burden of poor mental health, 6. buildings that are becoming less fit for purpose, and, 7. less money available.

This JSNA presents a comprehensive and evidence-based picture of Shetland's current and emerging health and social care needs, offering a clear call to action for sustained, collective effort. It highlights the importance of shifting towards preventative, person-centred, and community-led approaches while recognising the structural and resource challenges that persist. Addressing inequality, supporting healthy ageing, and investing in early intervention must be central to future strategies. By promoting collaboration across sectors, embracing innovation, and building on community strengths, Shetland can work towards a more equitable, sustainable, and resilient health and care system that meets the needs of all its residents - now and into the future.

## References

- <sup>1</sup> Stevens, A., Raftery, J., & Mant, J. (2004). An introduction to HCNA: The epidemiological approach to health care needs assessment. A., Stevens, J. Raftery, J. Mant & S. Simpson. *In Health Care Needs Assessment. The epidemiologically-based needs assessment reviews*, 1-17.
- <sup>2</sup> Stevens, A., & Gabbay, J. (1991). Needs assessment needs assessment.... *Health trends*, 23(1), 20-23.
- <sup>3</sup> Scottish Government. (2025). Strategic Commissioning Plans: guidance. Accessed: <https://www.gov.scot/publications/strategic-commissioning-plans-guidance/pages/3/>
- <sup>4</sup> Public Health Scotland. (2023). The right to health. Accessed: <https://publichealthscotland.scot/our-areas-of-work/equity-and-justice/the-right-to-health/overview/#:~:text=The%20right%20to%20health%20is,of%20physical%20and%20mental%20health.>
- <sup>5</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.
- <sup>6</sup> National Records of Scotland. Scotland's Population – The Registrar General's Annual Review of Demographic Trends. Accessed: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/stats-at-a-glance/registrar-generals-annual-review>
- <sup>7</sup> Walsh, D., Wyper, G, M, A., McCartney, G. (2022). Trends in healthy life expectancy in the age of austerity. *Journal of Epidemiological Community Health*. Accessed: <https://jech.bmj.com/content/jech/76/8/743.full.pdf>
- <sup>8</sup> National Records of Scotland. (2022). Healthy life expectancy 2019-2021. Accessed: <https://www.nrscotland.gov.uk/files/statistics/healthy-life-expectancy/19-21/healthy-life-expectancy-19-21-report.pdf>
- <sup>9</sup> Public Health Scotland. Scottish Public Health Observatory Profiles Tool. Accessed: [https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)
- <sup>10</sup> The Scottish Public Health Observatory. (2021). Housing: introduction. Accessed: <https://www.scotpho.org.uk/wider-determinants/housing/introduction/>
- <sup>11</sup> The Health Foundation. How does housing influence our health? Accessed: <https://www.health.org.uk/how-does-housing-influence-our-health>
- <sup>12</sup> Shetland Islands Council. (2022). Shetland Islands Housing Needs and Demand Assessment. Accessed: <https://www.shetland.gov.uk/downloads/file/6420/shetland-housing-needs-and-demand-assessment>



- 
- <sup>13</sup> Scottish Government. (2021). Scottish House Condition Survey: Local Authority Analysis 2017-2019. Accessed: <https://www.gov.scot/publications/scottish-house-condition-survey-local-authority-analysis-2017-2019/documents/>
- <sup>14</sup> Scottish Index of Multiple Deprivation. Accessed: <https://simd.scot/#/simd2020/BTTTTFTT/9/-4.0000/55.9000/>
- <sup>15</sup> Public Health Scotland. (2024). Scottish Index of Multiple Deprivation (SIMD). Accessed: <https://publichealthscotland.scot/services/geography-population-and-deprivation-support/deprivation/scottish-index-of-multiple-deprivation-simd/>
- <sup>16</sup> CACI. (2024). Current Copyright and Third-Party Notices. Accessed: <https://www.caci.co.uk/wp-content/uploads/2021/06/copyrightnotices.pdf.pdf>
- <sup>17</sup> Scottish Government. (2024). Household below average income (HBAI) statistics. Accessed: <https://www.gov.uk/government/collections/households-below-average-income-hbai--2>
- <sup>18</sup> National Records of Scotland. (2023). Population estimates time series data. Accessed: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/population-estimates-time-series-data>
- <sup>19</sup> Department for Work and Pensions. (2023). Children in low income families: local area statistics 2015-2022. Accessed: <https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fmedia%2F641c5cdb5155a200136ad550%2Fchildren-in-low-income-families-local-area-statistics-2014-to-2022.ods&wdOrigin=BROWSELINK>
- <sup>20</sup> The Health Foundation. Poverty and Health Infographic. Accessed: <https://www.health.org.uk/infographic/poverty-and-health#How%20Does%20Poverty%20Affect%20Health>
- <sup>21</sup> Public Health Scotland. (2021). Scottish Burden of Disease Study 2019: Summary of health loss in Shetland Islands. Accessed: <https://www.scotpho.org.uk/media/2079/2021-09-21-scottishburdenofdisease-shetland-islands.pdf>
- <sup>22</sup> Cancer Research UK. (2022). Can Cancer be prevented? Accessed: <https://www.cancerresearchuk.org/about-cancer/causes-of-cancer/can-cancer-be-prevented-0>
- <sup>23</sup> Scottish Commission for Learning Disabilities (SCLD). (2019). 2019 Report. Accessed: <https://www.sclld.org.uk/2019-report/>
- <sup>24</sup> Fraser of Allander Institute. (2023). New research on learning disabilities in Scotland. Accessed: [New research on learning disabilities in Scotland | FAI \(fraserofallander.org\)](https://www.fraserofallander.org/new-research-on-learning-disabilities-in-scotland/)
- <sup>25</sup> Jamieson, A.E. 2023 Understanding Inequalities in Cancer Screening in the Learning Disability and Autism Populations of the Northern Isles. Stirling University

- 
- <sup>26</sup> Scottish Autism. What is the Autism Spectrum. Accessed:  
<https://www.scottishautism.org/about-autism>
- <sup>27</sup> [Commercial determinants of health \(thelancet.com\)](https://www.thelancet.com)
- <sup>28</sup> [Microsoft Word - Affordability of the Eatwell Guide Final Web Version.docx \(foodfoundation.org.uk\)](https://www.foodfoundation.org.uk)
- <sup>29</sup> [The normalisation of food aid: what happened to feeding people well? | Emerald Insight](https://www.emeraldinsight.com)
- <sup>30</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. Accessed: <https://www.alcohol-focus-scotland.org.uk/media/310762/alcohol-outlet-availability-and-harm-in-scotland.pdf>
- <sup>31</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>32</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>33</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. Accessed: <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>34</sup> Scottish Public Health Observatory. Profiles tool. Accessed:  
[https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)
- <sup>35</sup> Cancer Research UK. Health Inequalities: Why do people smoke if they know it's bad for them? Accessed: Health inequalities: Why do people smoke if they know it's bad for them? - Cancer Research UK - Cancer News
- <sup>36</sup> UK Government. (2020). Physical Activity Guidelines: UK Chief Medical Officers Report. Accessed: <https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officers-report>
- <sup>37</sup> Citizens Advice. Direct Payments – what are they. Accessed:  
<https://www.citizensadvice.org.uk/wales/family/looking-after-people/direct-payments-w/direct-payments-what-are-they-w/>

- 
- <sup>38</sup> Campbell Christie. (2011). Commission on the Future Delivery of Public Services. Accessed: <https://www.gov.scot/publications/commission-future-delivery-public-services/>
- <sup>39</sup> Chief Medical Officer for Scotland. (2023). Realistic Medicine: Doing the Right Thing (Chapter 3: Health Inequalities: Turning the Tide). Accessed: <https://www.gov.scot/publications/realistic-medicine-doing-right-thing-cmo-annual-report-2022-2023/pages/4/>
- <sup>40</sup> Walsh, D. Wyper, G, M, A. McCartney, G. (2022). Trends in Healthy Life Expectancy in the Age of Austerity. Accessed: <https://jech.bmj.com/content/jech/76/8/743.full.pdf>
- <sup>41</sup> The Health Foundation. (2022). Health Inequalities in Scotland. Tackling the Social Determinants of Health Inequalities: A Review of Scottish Powers. Accessed: <https://www.health.org.uk/sites/default/files/2023-01/IPPR%20Scotland%20Report%20.pdf>
- <sup>42</sup> The Health Foundation. (2020). Health Equity in England: The Marmot Review 10 Years On. Accessed: <https://www.health.org.uk/reports-and-analysis/reports/health-equity-in-england-the-marmot-review-10-years-on-0#:~:text=This%20report%20has%20been%20produced,is%20nearly%20five%20years%20less>
- <sup>43</sup> Chief Medical Officer for England. (2023). Chief Medical Officer's Annual Report 2023: Health in an Ageing Society. Accessed: <https://www.gov.uk/government/publications/chief-medical-officers-annual-report-2023-health-in-an-ageing-society>
- <sup>44</sup> Improvement Service. (2024). Briefing: Place and Wellbeing Outcomes. Accessed: [https://www.improvementservice.org.uk/\\_data/assets/pdf\\_file/0020/30719/PWO-briefing-paper-v3-oct-2024.pdf](https://www.improvementservice.org.uk/_data/assets/pdf_file/0020/30719/PWO-briefing-paper-v3-oct-2024.pdf)
- <sup>45</sup> IPPR. (2024). Healthy Places, Prosperous Lives. Accessed: <https://www.ippr.org/articles/healthy-places-prosperous-lives>
- <sup>46</sup> The King's Fund. (2019). A Citizen-Led Approach to Health and Care: Lessons from the Wigan Deal. Accessed: [https://www.kingsfund.org.uk/insight-and-analysis/reports/wigan-deal?gad\\_source=1&gclid=EAlaIQobChMllazDgMTXjAMVPpRQBh1fAhZYEAAAYASAAEgJnFfD\\_BwE](https://www.kingsfund.org.uk/insight-and-analysis/reports/wigan-deal?gad_source=1&gclid=EAlaIQobChMllazDgMTXjAMVPpRQBh1fAhZYEAAAYASAAEgJnFfD_BwE)
- <sup>47</sup> Smith, M A. (2023). The Liberated Method: Rethinking Public Service. Accessed: [https://irp.cdn-website.com/ce4d5348/files/uploaded/Smith-%20M.A.%20\(2023\)%20The-Liberated-Method-Rethinking-Public-Service.pdf](https://irp.cdn-website.com/ce4d5348/files/uploaded/Smith-%20M.A.%20(2023)%20The-Liberated-Method-Rethinking-Public-Service.pdf)
- <sup>48</sup> The King's Fund. (2024). Making Care Closer to Home: Refocusing the System to Primary and Community Care. Accessed: <https://www.kingsfund.org.uk/insight-and-analysis/reports/making-care-closer-home-reality>