Health & Social Care Integration Planning Localities – Central Mainland –

Version 6.0

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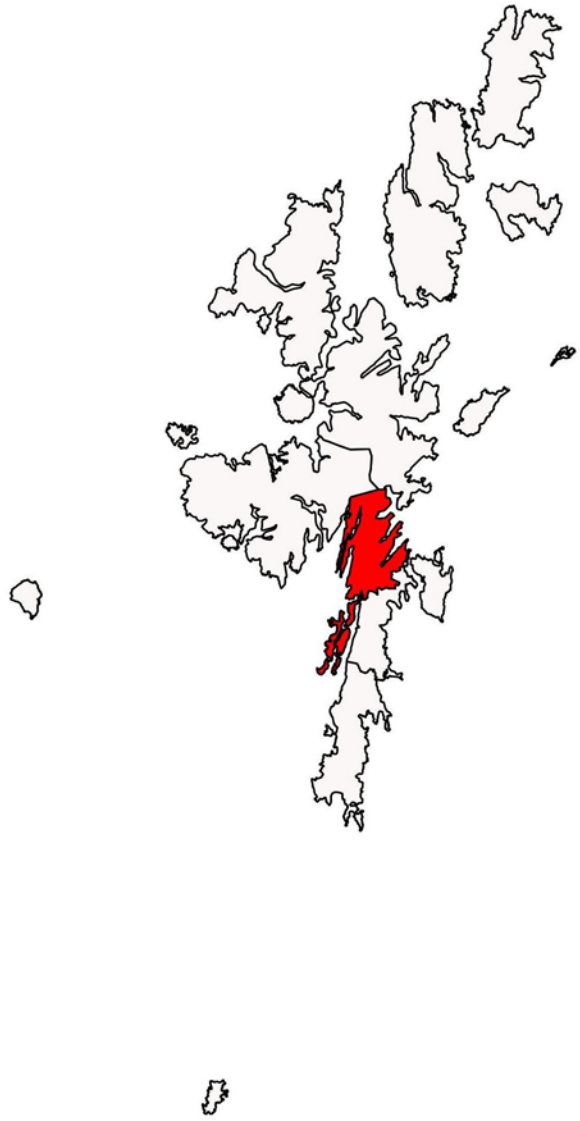
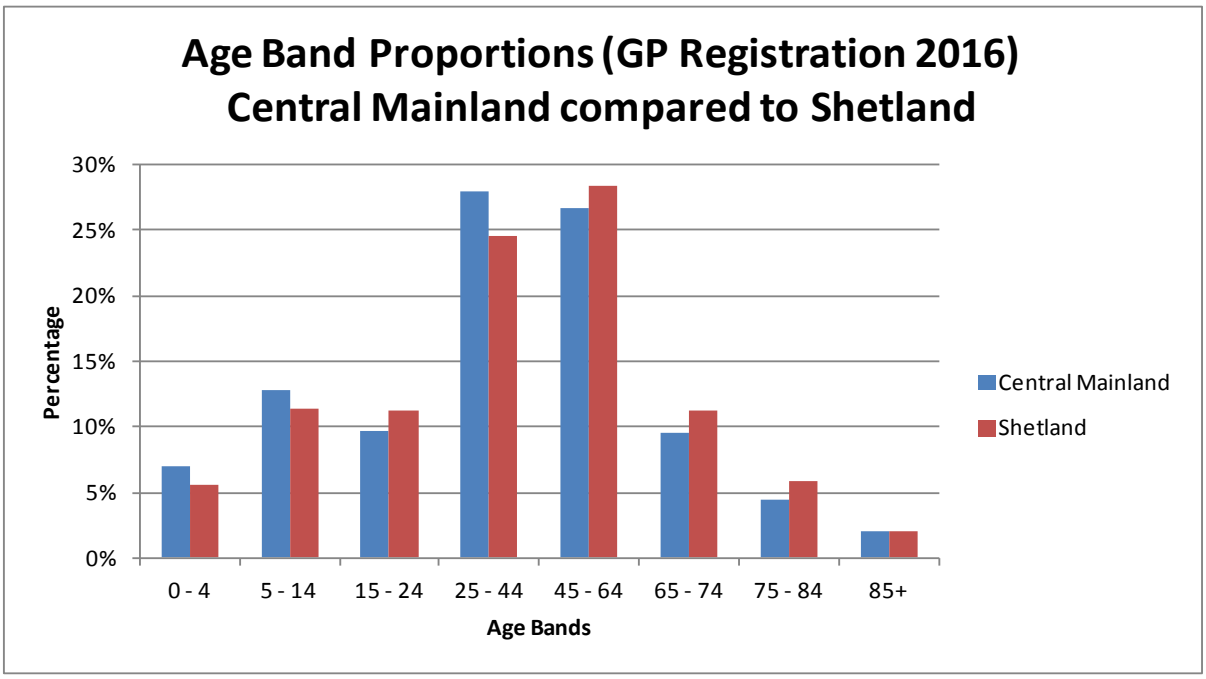
Introduction

This report presents a profile of data about health, care and wellbeing in the Central Mainland. It is produced from available data, and is designed to be used for work within Locality Planning. Data sources available at locality level are developing rapidly as the work on Health and Social Care Integration and on Community Planning at locality level develops, so the profile will be updated as new information becomes available. This version is mainly based on data held at GP practice level, so has a focus on the diseases commonly seen in primary care. Data will become available from the newly introduced Health and Social Care Dataset (which will include data such as hospital, community health and care service usage and cost, and analysis for a range of care groups such as dementia, substance misuse, last 6 months of life), and this will be added to the profile.



Map of Shetland with the Central Mainland locality highlighted.

Age Bands



Central Mainland Practices Patients Registrations

Age Group	0 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 - 74	75 - 84	85+	Total
Central Mainland	248	456	346	993	949	338	156	72	3558

Central mainland has an age distribution roughly similar to the whole of Shetland. The 15-24 and 65-74 age groups are very slightly smaller in central mainland, whereas the 25-44 age group is larger, but the differences are small.

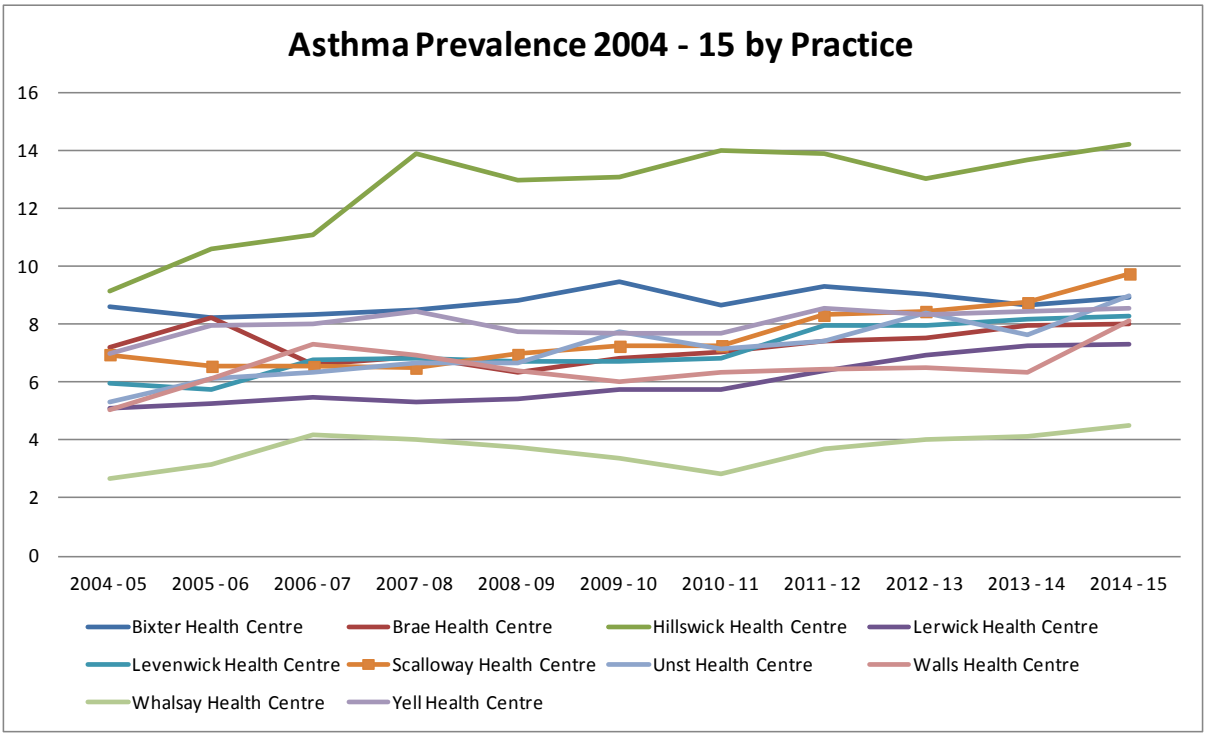
Shetland Practice's Patient Registrations

	0 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 - 74	75 - 84	85+	Total
Bixter	90	140	132	278	309	131	70	17	1167
Brae	146	252	318	627	751	273	96	29	2492
Hillswick	59	77	86	198	212	95	32	19	778
Lerwick	436	962	1078	2263	2495	944	538	178	8894
Levenwick	128	323	286	592	815	321	164	48	2677
Scalloway	248	456	346	993	949	338	156	72	3558
Unst	28	70	37	100	178	118	49	18	598
Walls	46	94	85	160	199	86	52	24	746
Whalsay	59	132	122	251	274	139	97	32	1106
Yell	43	116	93	192	347	149	94	26	1060
Total	1283	2622	2583	5654	6529	2594	1348	463	23076

This table shows all of the practice populations to show the spread of population in the different age groups across Shetland. The above data is from 1st July 2016.

QOF[1] – Asthma Prevalence

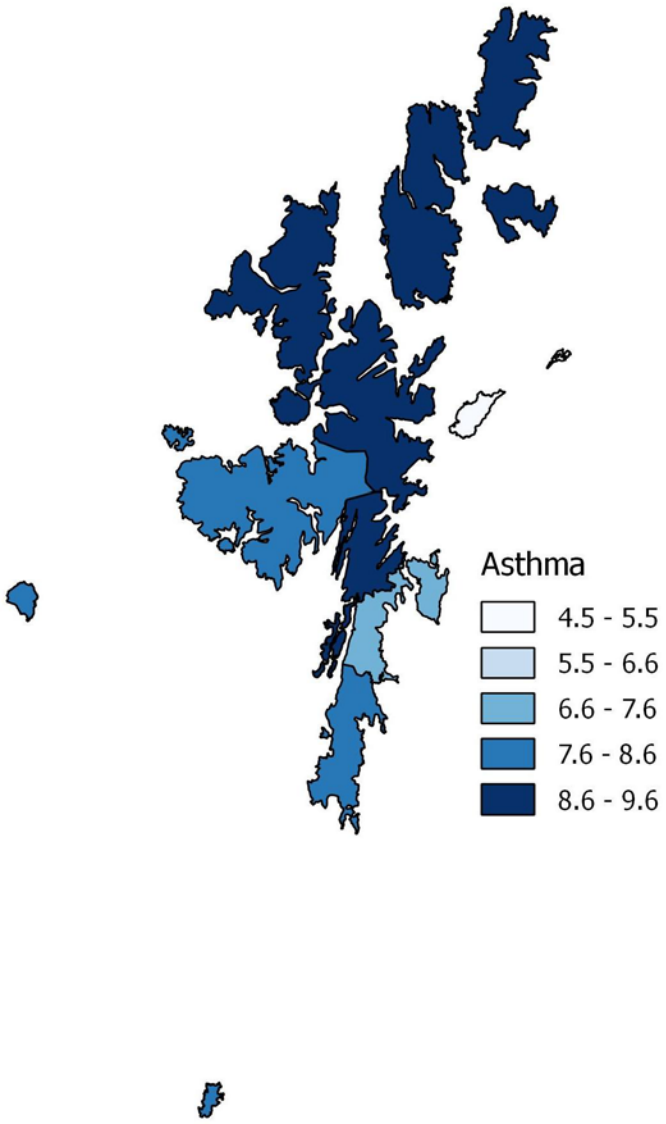
Asthma is a common respiratory disorder that can affect all age groups although childhood asthma may disappear through the teenage years, but could return later in life. The reasons for asthma are not known, but each person will have one or more triggers such as cigarette smoke, dust mites, exercise etc. These triggers will cause a constriction of the airways. Asthma is normally treated by two types of inhaler: preventers containing steroids, or relievers containing chemicals to open up the restricted airways. Once asthmatics learn what their triggers are they generally avoid them if possible.



In this graph each practice is represented by a different coloured line. The Scalloway practice has a slightly above average amount of asthma compared to other practices in Shetland.

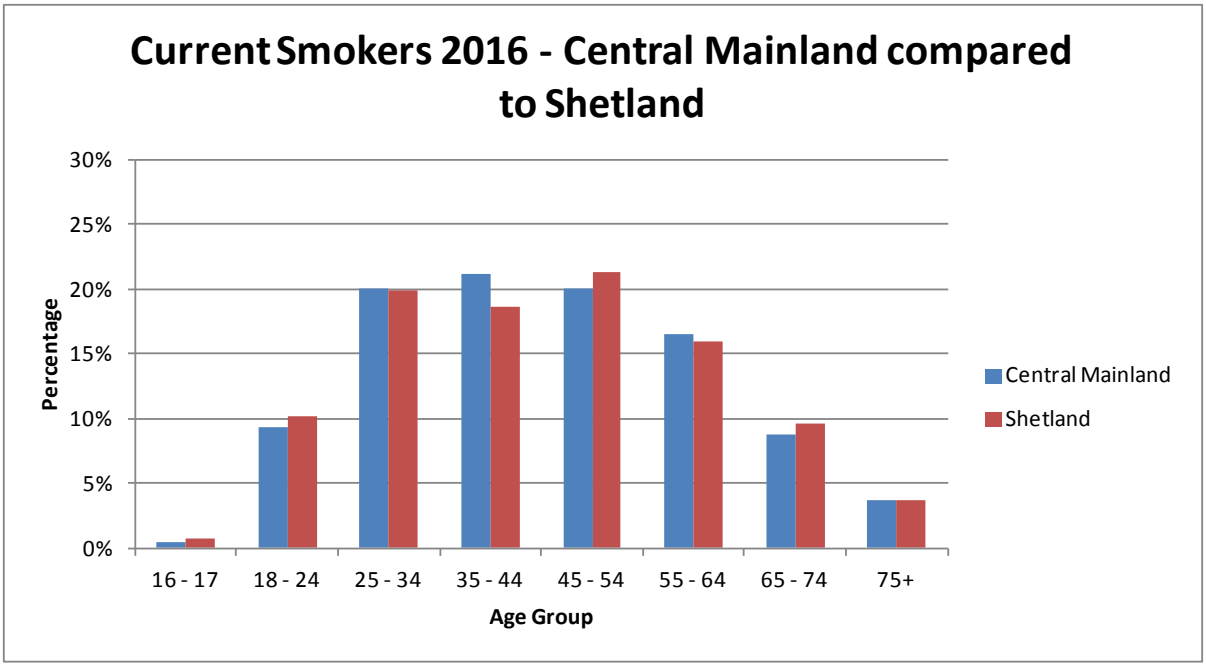
[1] QOF (Quality Outcomes Framework) is the system used in general practice to measure activity and fund GPs for a range of services that focus on prevention and early intervention to improve the health of patients.

We can also show data on a map showing the different rates across localities. The central mainland has a slightly above average rate to other areas in Shetland.



Rate per 100 patients

This map shows QOF 2014 – 15 data.



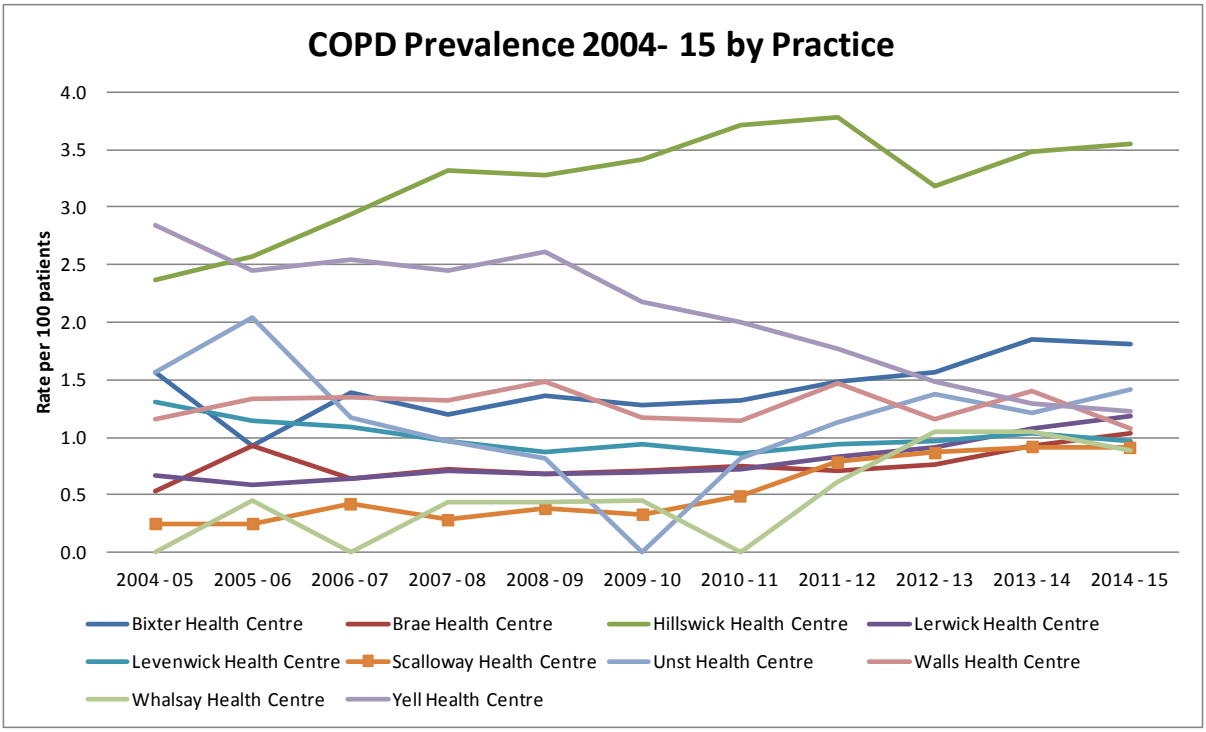
These figures are taken from GP records of the smoking status of patients. It shows smoking rates for the central mainland compared to the figures for Shetland as a whole. There are noticeably more smokers in the 35 - 44 age group. This sort of data may be used to target smoking cessation activities.

Smoking is a risk factor for a number of chronic conditions so the next few graphs show how common a number of these conditions are in the locality.

QOF – COPD Prevalence

Chronic obstructive pulmonary disorder (COPD) is one of the most common respiratory disorders in Scotland, usually affecting people over 35, and more commonly males than females as historically, smoking rates have been higher among the male population. That trend has started to reverse as more men quit smoking, whilst more women take up smoking and continue to smoke. COPD is usually caused by smoking, and the more and longer that you smoke, the more you are likely to contract the disease. It could also be caused by passive smoking, and occasionally by occupational risks. You can reduce COPD risk by giving up smoking, and you are 4 times more likely to give up smoking by using NHS Shetland smoking cessation services along with nicotine reduction therapy (NRT) medicines.

The damage that has been done by COPD can't be reversed, but an inhaler may be prescribed to reduce breathing difficulty. COPD is usually diagnosed in people in their fifties.

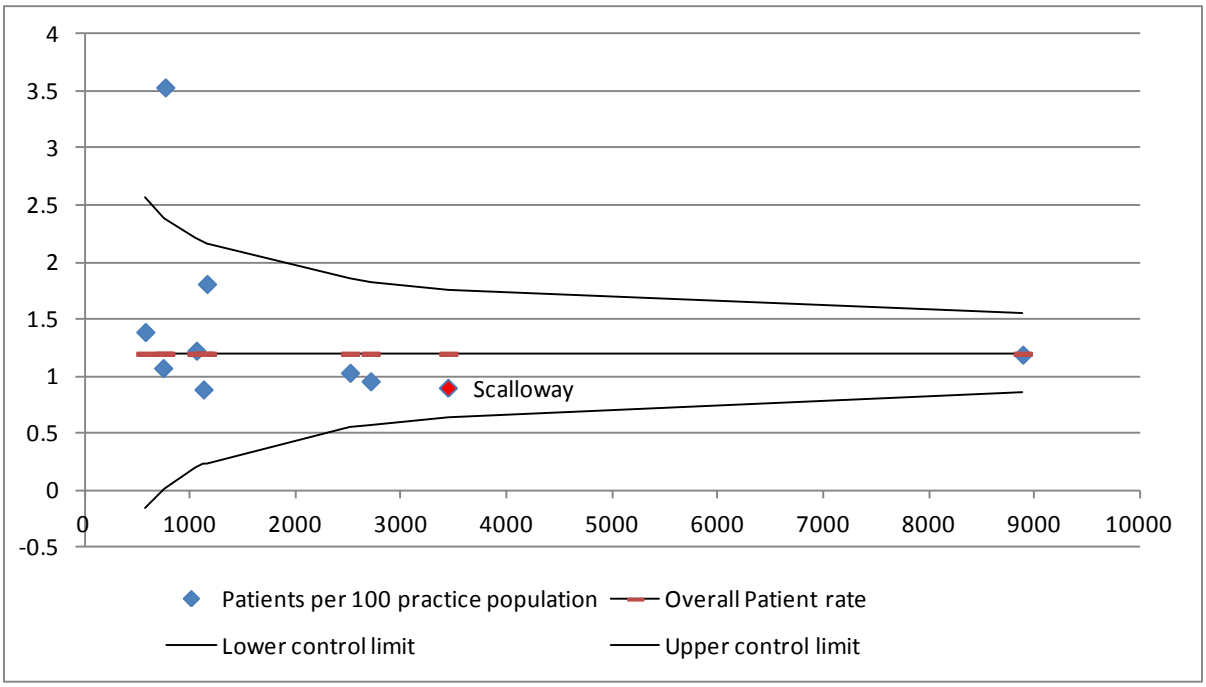


The graph shows that central mainland has one of the lower rates of COPD amongst localities in Shetland. We can also show the statistical significance of the differences amongst localities by plotting the data on a funnel chart.

COPD Funnel Plot

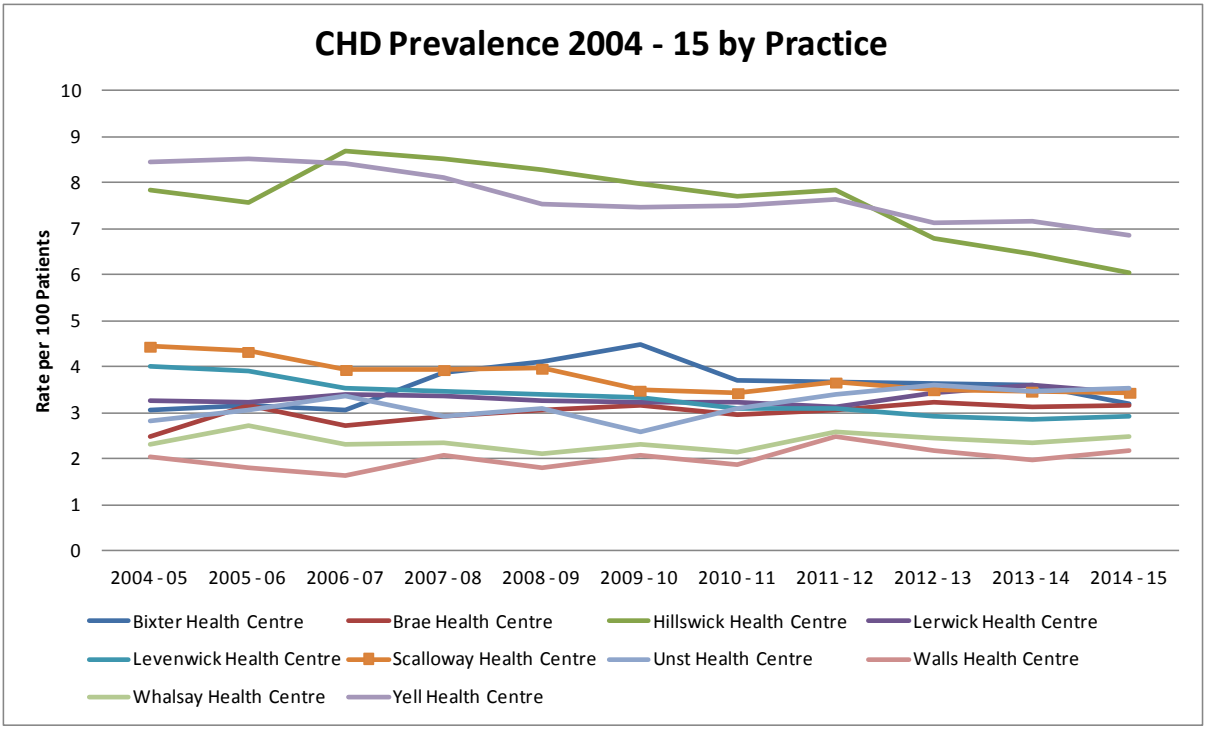
This funnel plots contains QOF data from 2014 – 15.

The upper and lower lines are the limits within which any variation is the 'normal' range, any data sitting outside these lines would be statistically high (above) or low (below the line). In this case it confirms that central mainland has a rate of chronic airways disease within the normal range, even though it is lower than a number of the other practices.

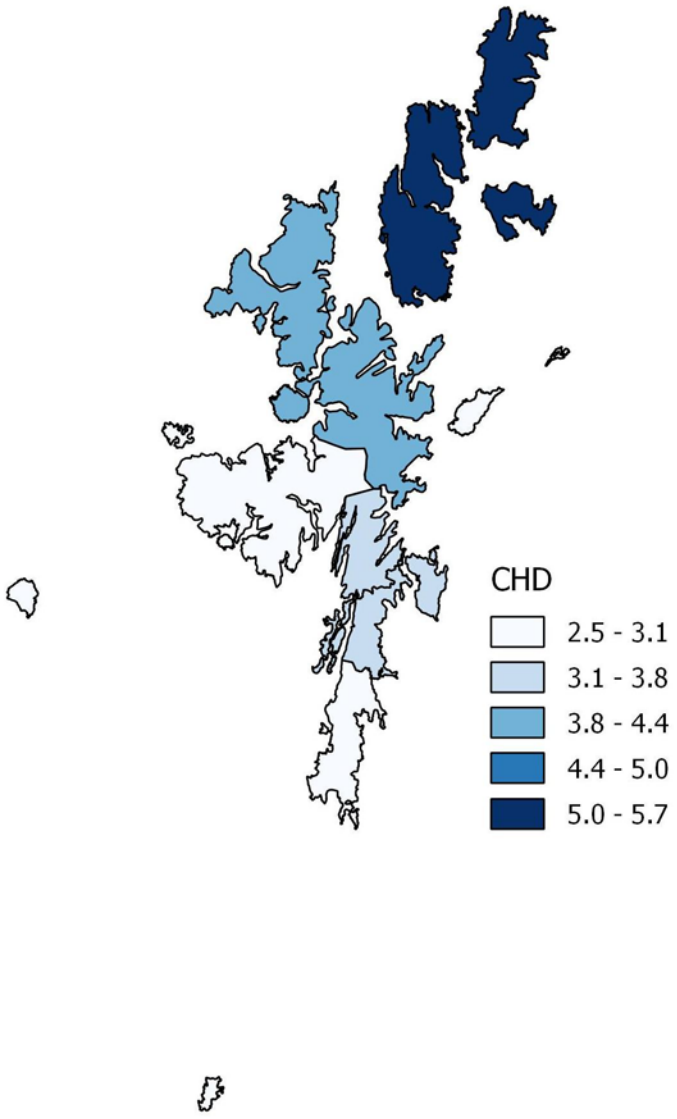


QOF – CHD Prevalence

Coronary heart disease (CHD) kills more people in Scotland than any other disease, generally affecting men more than women. The disease is caused by fatty deposits building up in the coronary arteries, usually from lifestyle choices such as smoking, lack of exercise and poor diet, though in some people there is a strong genetic component. CHD is a long term condition though may present as a very acute problem (e.g. heart attack or angina), and may be prevented or stopped from worsening by stopping smoking, taking more exercise, choosing a better diet, and treatment through surgery and medications. Symptoms are usually chest pain, heart attacks and heart failure. CHD is more common in the over 50s, although becoming more common in younger people due to increasing obesity.



Central mainland has average levels of CHD. The map shows the variation across different localities within Shetland.

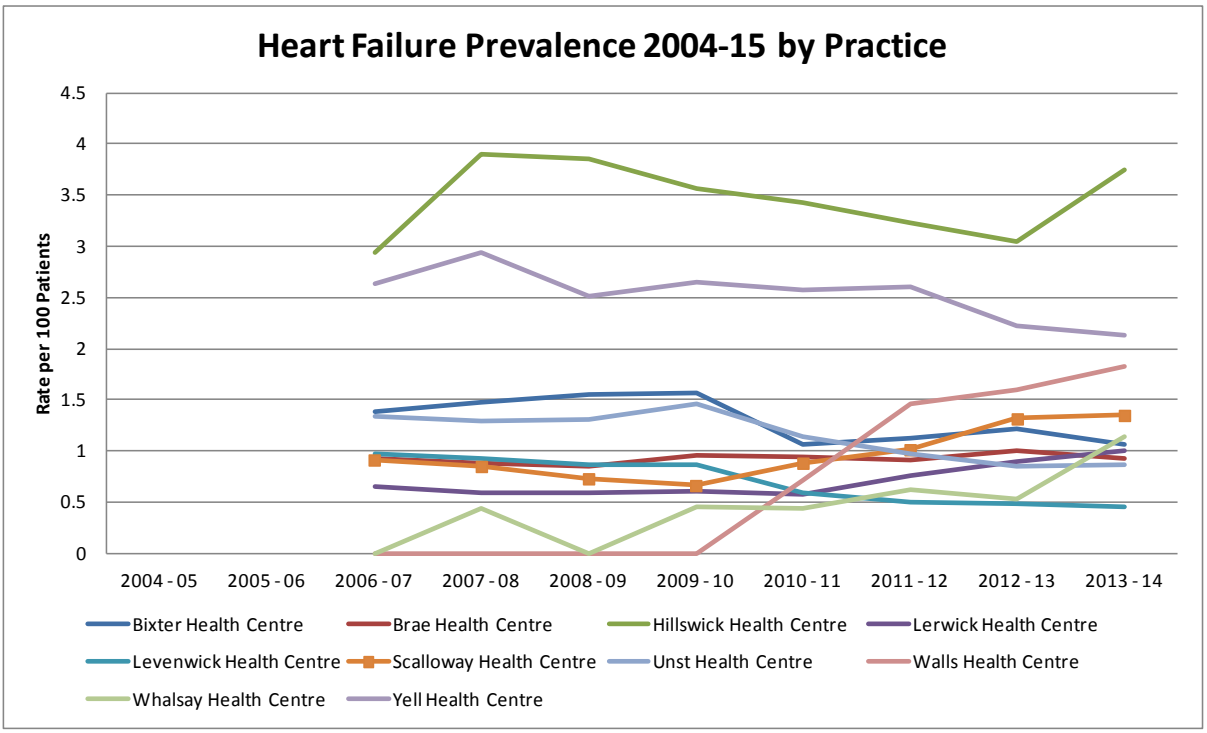


Rate per 100 patients

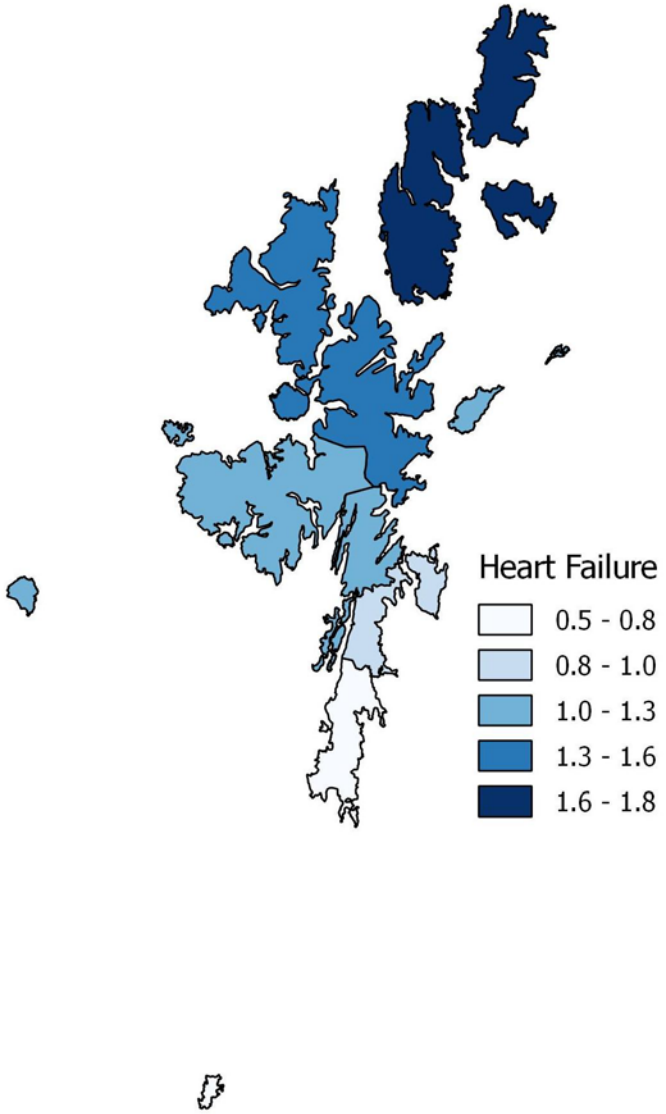
This map shows QOF 2014 – 15 data.

QOF – Heart Failure Prevalence

Heart failure is usually caused by a number of risks at the same time including any two or more of the following: high blood pressure, coronary heart disease, heart muscle weakness, heart rhythm disturbance or heart valve disease. Heart failure is a long term condition, but the situation may be improved by lifestyle changes, medications or surgery, such as heart valve replacement. To keep the heart healthy we should stop smoking, exercise regularly, eat healthily, limit alcohol intake, manage cholesterol levels and keep our blood pressure within healthy guidelines through exercise and diet.



Again, central mainland shows average levels of heart failure, lower than a number of areas in Shetland, but the differences are not significant statistically.

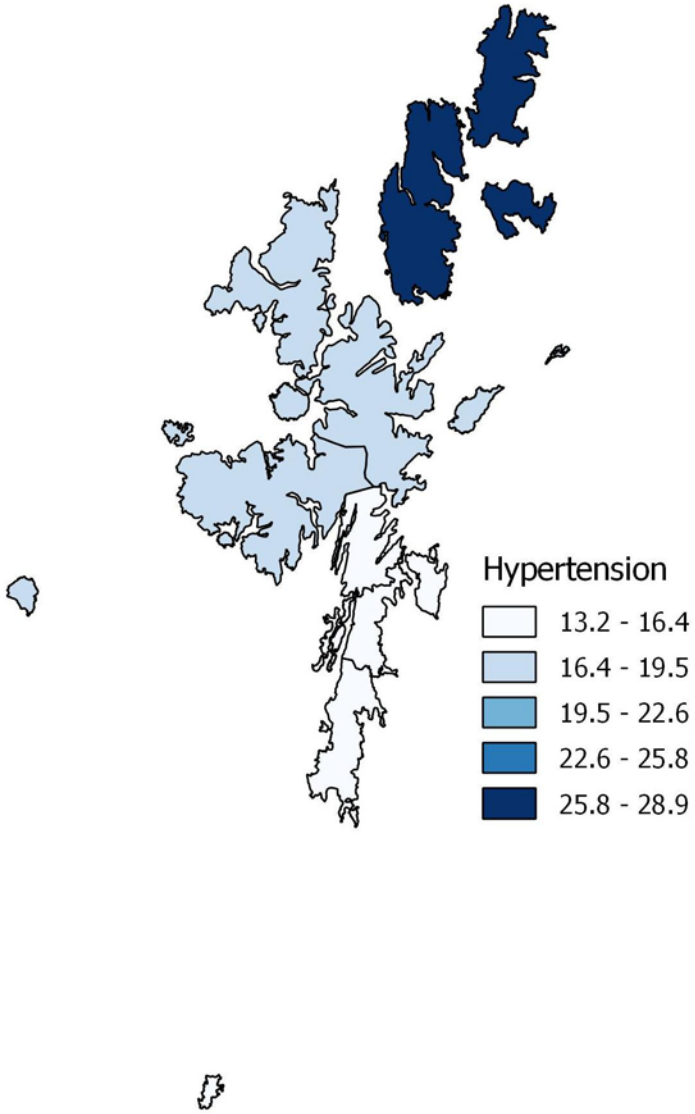


Rate per 100 patients

This map shows QOF 2014 – 15 data.

QOF – Hypertension Prevalence

Hypertension is also known as high blood pressure, which is measured as systolic – the blood pressure when the heart beats, and diastolic – the blood pressure when the heart rests. Generally blood pressure is said to be high if the reading is over 140/90. Hypertension has a higher prevalence as you get older and can be reduced by eating healthily, including eating less salt and drinking less coffee, exercising regularly, maintaining a healthy weight and limiting alcohol intake. As an African or Caribbean born person you are more like to have hypertension due to a genetic disposition.



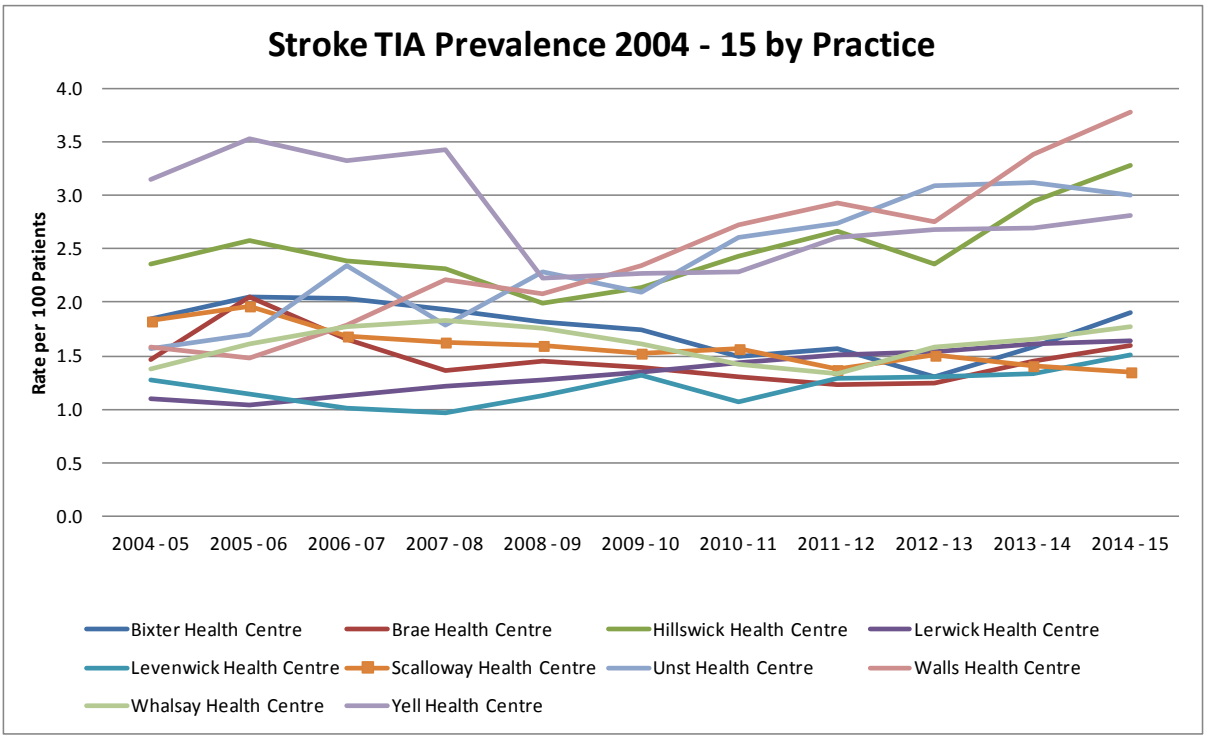
Rate per 100 patients

This map shows QOF 2014 – 15 data.

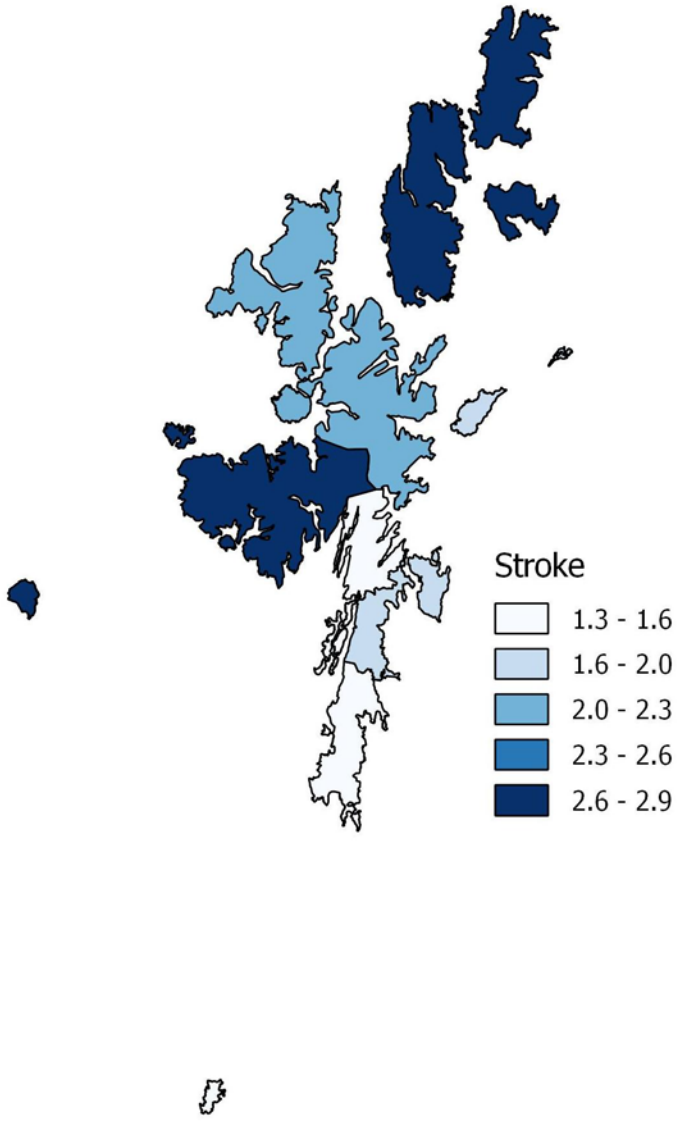
Central mainland has a fairly low level of hypertension compared to the rest of Shetland.

QOF - Stroke TIA Prevalence

Strokes and transient ischaemic attacks (TIAs) are caused by a blood clot or bleed from blood vessels in the brain that causes loss of brain function, often one-sided weakness or paralysis affecting the face, arm or leg. Strokes can be fatal, and urgent action can help people survive acutely. A TIA is when blood supply to the brain is reduced temporarily and can be a warning sign of underlying disease. They are more likely to occur with older age, and in people who have uncontrolled high blood pressure. Smoking, being overweight, lack of exercise and a poor diet and diabetes are also risk factors for stroke. Stroke is the third most common cause of death in the UK, after heart disease and cancers, and the major cause of long term disability, so a focus on prevention is really important.



There appear to be about average numbers of strokes / TIAs in central mainland - slightly lower than the Shetland average more recently, but not statistically significant. This fits with the picture of lower levels of hypertension which is a key risk factor for stroke.

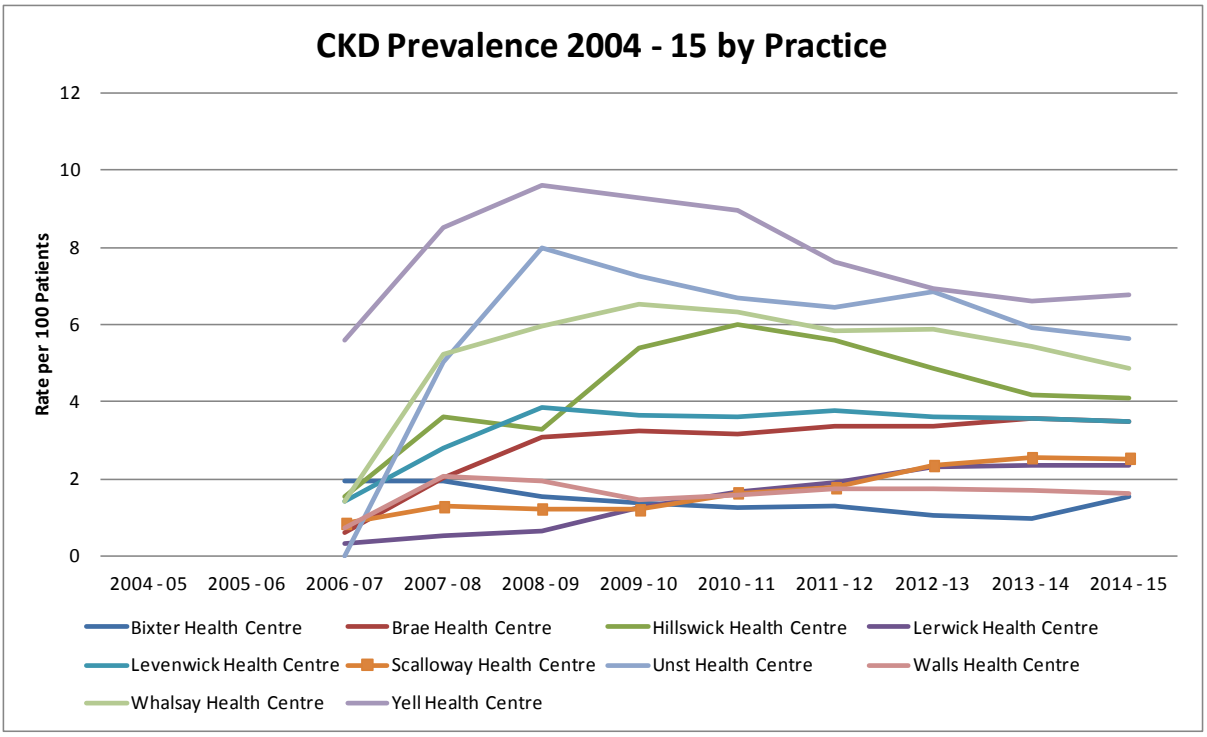


Rate per 100 patients

This map shows QOF 2014 – 15 data.

QOF – CKD Prevalence

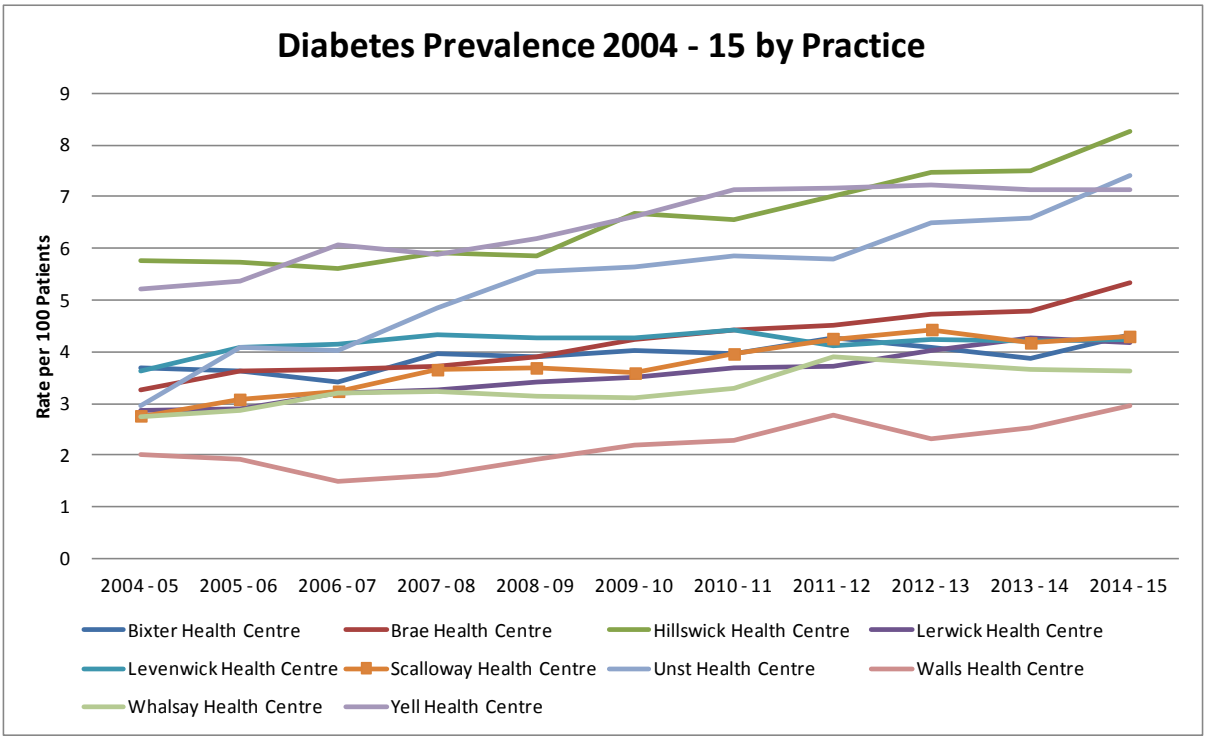
CKD stands for chronic kidney or renal disease and is another disease for which GPs keep a register of patients so they can make sure that long term treatment is provided or risk factors that might prevent deterioration are managed where possible.



Scalloway has slightly lower than average levels of chronic kidney disease compared to Shetland as a whole.

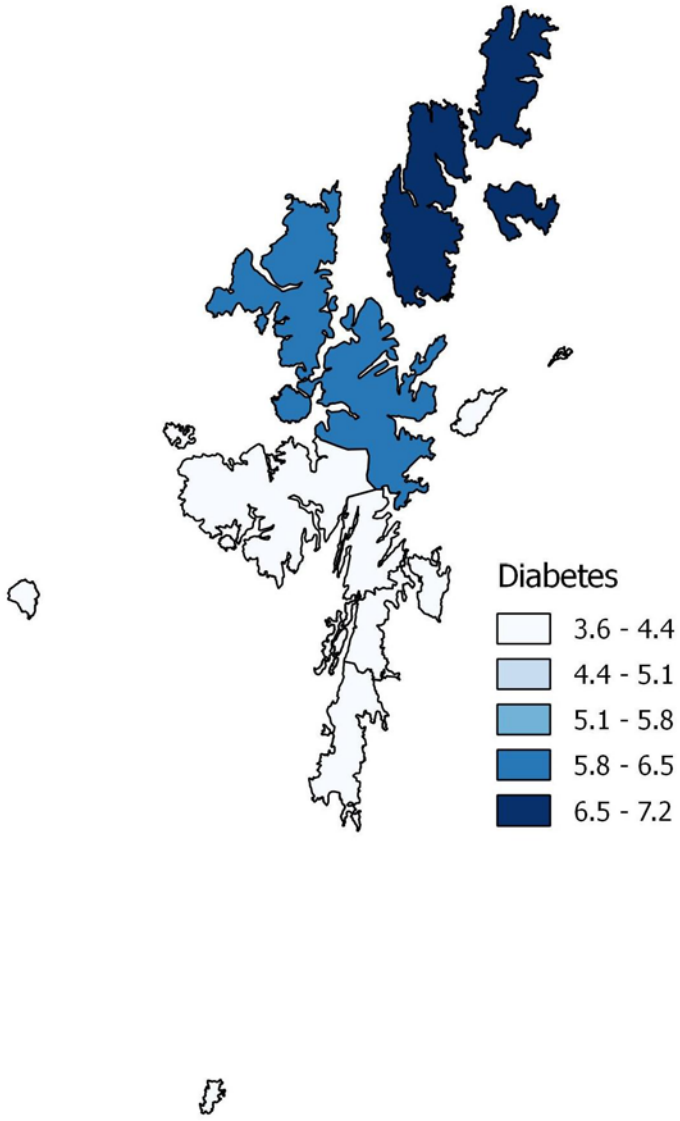
QOF – Diabetes Prevalence

There are two variations of diabetes: type 1 and type 2. Type 1 diabetes is caused by the immune system killing the cells that produce insulin. This is incurable and results in needing to take insulin injections for the rest of your life along with having a healthy diet and blood glucose monitoring. People with type 2 diabetes do not produce enough insulin, but can manage the disease by eating a healthy diet and monitoring their blood glucose levels. In their later years they may need to take medication. There are links between obesity and type 2 diabetes. The split of type 1 to type 2 is 10% to 90% respectively.



Central mainland also has below average rates of diabetes, though overall the numbers are increasing because of increases in risk factors especially obesity. In terms of numbers, there are currently 130 patients in the central mainland locality with type 2 diabetes. Potentially 78 of these cases could have been prevented.

The key risk factor for type 2 diabetes is weight and diet, so it is interesting to look at levels of obesity in the area as recorded in general practice.



Rate per 100 patients

This map shows QOF 2014 – 15 data.

QOF – Obesity Prevalence

Obesity is a term used to describe people who are extremely overweight with too high a proportion of body fat. Body mass index (BMI) is used as a formula to measure and classify people. It is not foolproof as it may consider those with very high muscular proportion as overweight or obese. Overweight people are classified as follows: -

Overweight – BMI = 25 – 29.9
Mildly obese – BMI = 30 – 34.9
Moderately obese – BMI = 35 – 39.9
Morbidly obese – BMI = 40+

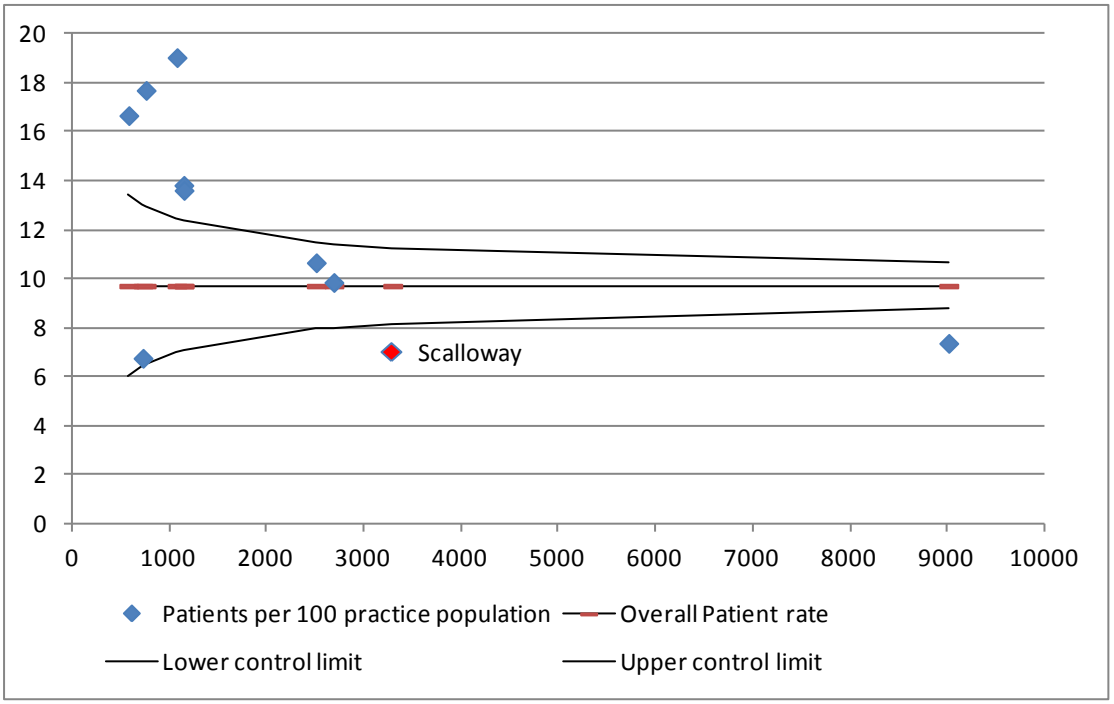
Obesity is caused by eating more calories than are used up through physical activity and exercise. To avoid or reduce obesity we need to eat a healthy balanced diet and exercise more. Weight will be lost when you are burning more calories than you are consuming. Obesity causes other risks to your health such as type 2 diabetes, and is a risk factor for coronary heart disease, breast cancer, bowel cancer and stroke.

Central mainland has fewer people identified as obese, than the average for Shetland, and this is a statistically significant lower level as shown on the funnel plot. This would fit with the picture of relatively lower levels of diabetes and other weight related problems such as hypertension.

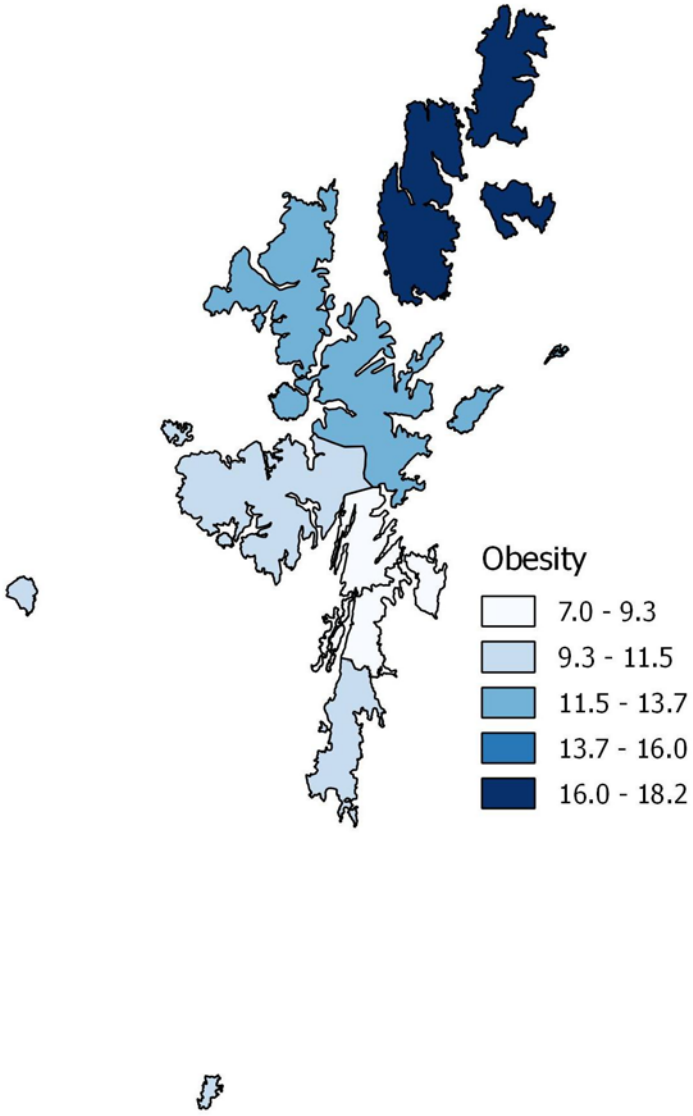
However, obesity is a preventable and treatable condition, and so it may be more important to think about the numbers of people who are obese and what can be done to prevent the problems it leads to, rather than comparing rates from one area to another.

Obesity was not measured in QOF 2014 – 15.

Obesity Prevalence Funnel Plot



This funnel plots contains QOF data from 2013 – 14. Obesity was not measured in QOF in 2014 – 15.



Rate per 100 patients

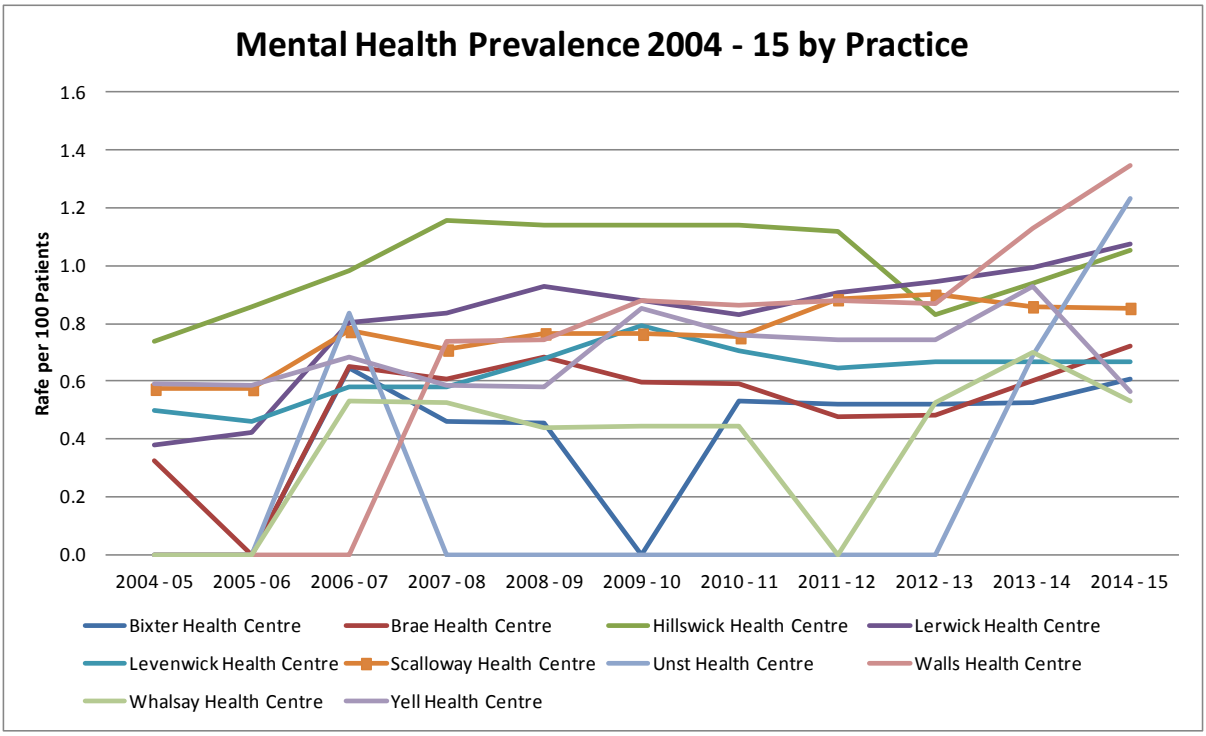
This map shows QOF 2013 – 14 data. Obesity was not recorded in QOF 2014 – 15.

QOF – Mental Health Prevalence

GPs record the number of people attending with a range of mental illness that includes depression, and the severe and enduring illnesses of schizophrenia, bipolar disorders (such as manic depression) and other psychoses. These severe illnesses usually need treatment with medication, though talking therapies (psychological treatments) are increasingly used effectively to help people with depression. The numbers of people living with these conditions as recorded by their GPs is shown on the following graphs.

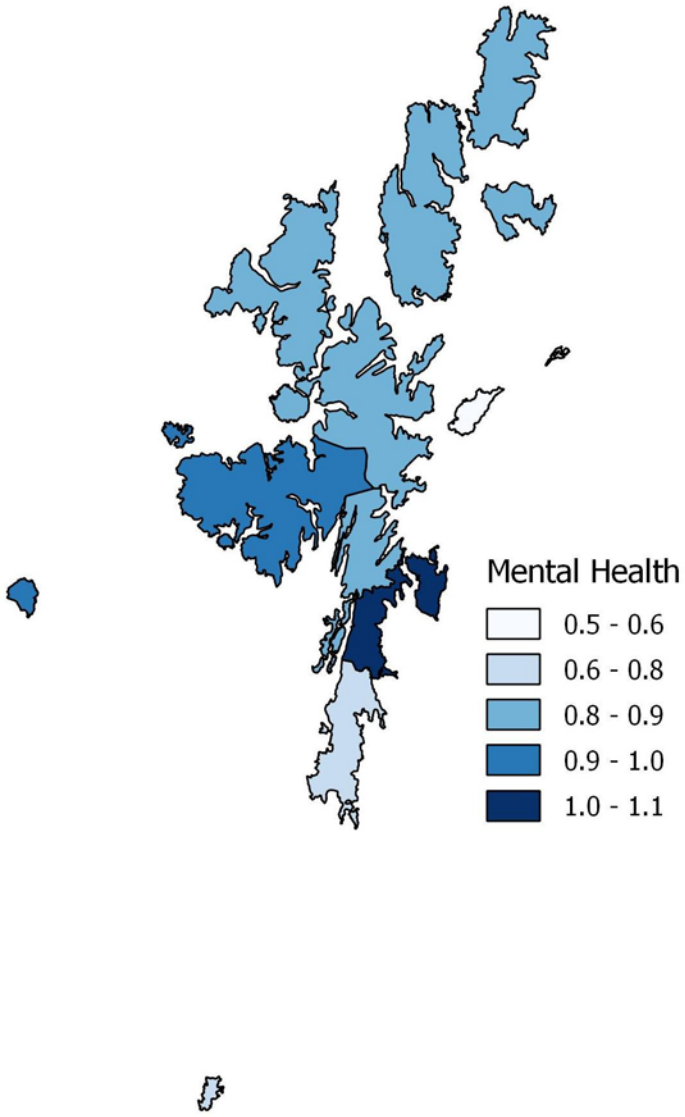
There are a range of other mental health problems such as anxiety and stress related problems that account for a lot of attendances in general practice. Increasingly we understand how to help people help themselves to deal with these problems, and how to prevent repeat episodes, and sometimes also use talking therapies such as CBT or medication.

The graph below shows the prevalence of the severe mental psychosis illnesses by practice.



Central mainland appears to have one of the higher levels of severe mental illness amongst practices, and it appears to be a rising trend.

Severe mental illness places a large burden on the quality of life of people who suffer with it, and on their families and carers.



Rate per 100 patients

This map shows QOF 2014 – 15 data.

Dementia

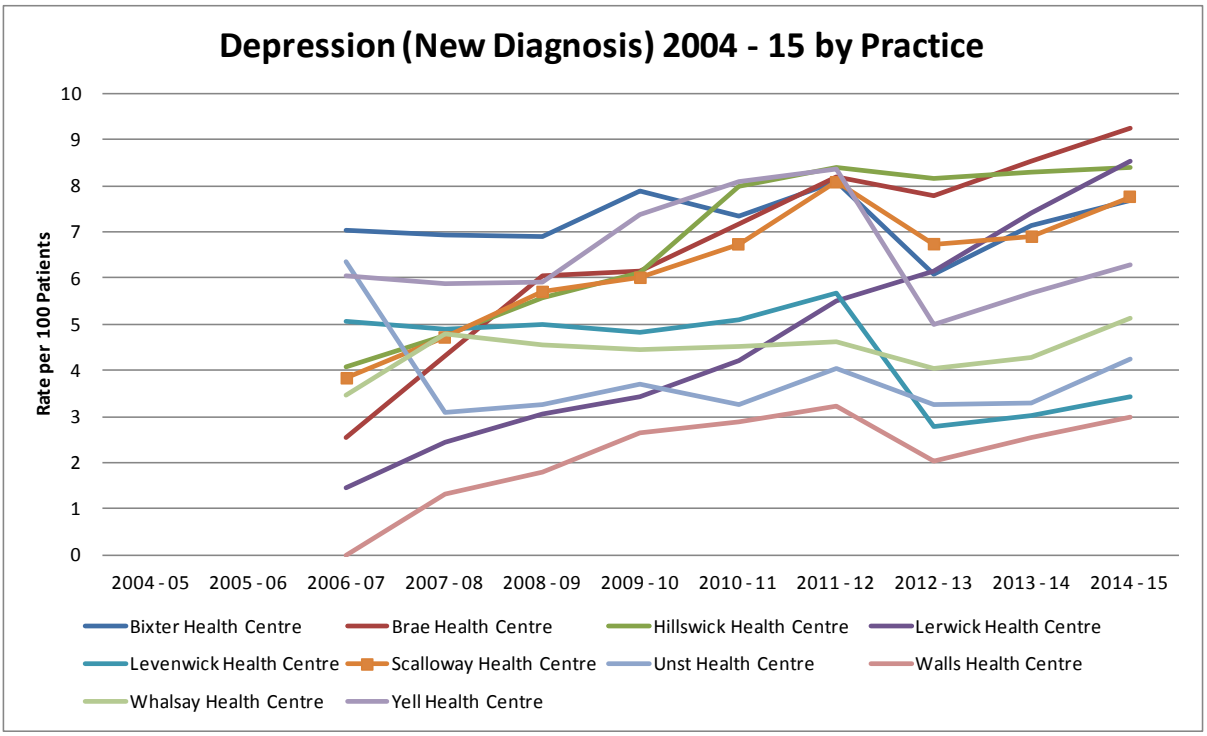
2016	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Central Mainland	20	20	20	20	20	20	23	24	22	22	20	22

The above table shows the number of patients diagnosed with dementia each month in 2016. The population in Central Mainland at the end of 2016 was 3,618.

QOF – Depression (New Diagnosis) Prevalence

We can also look at specific types of mental illness e.g. depression.

Depression is a mental illness where someone feels a persistent sadness / deep melancholy and inability to live a normal life over weeks and months. It affects people of all ages and both genders. The scale of illness is wide, from feeling perpetually unhappy to feeling suicidal. Treatments for depression include talking therapies and prescribed medicines, although exercise, reducing alcohol intake and eating more healthily can help a person to recover.

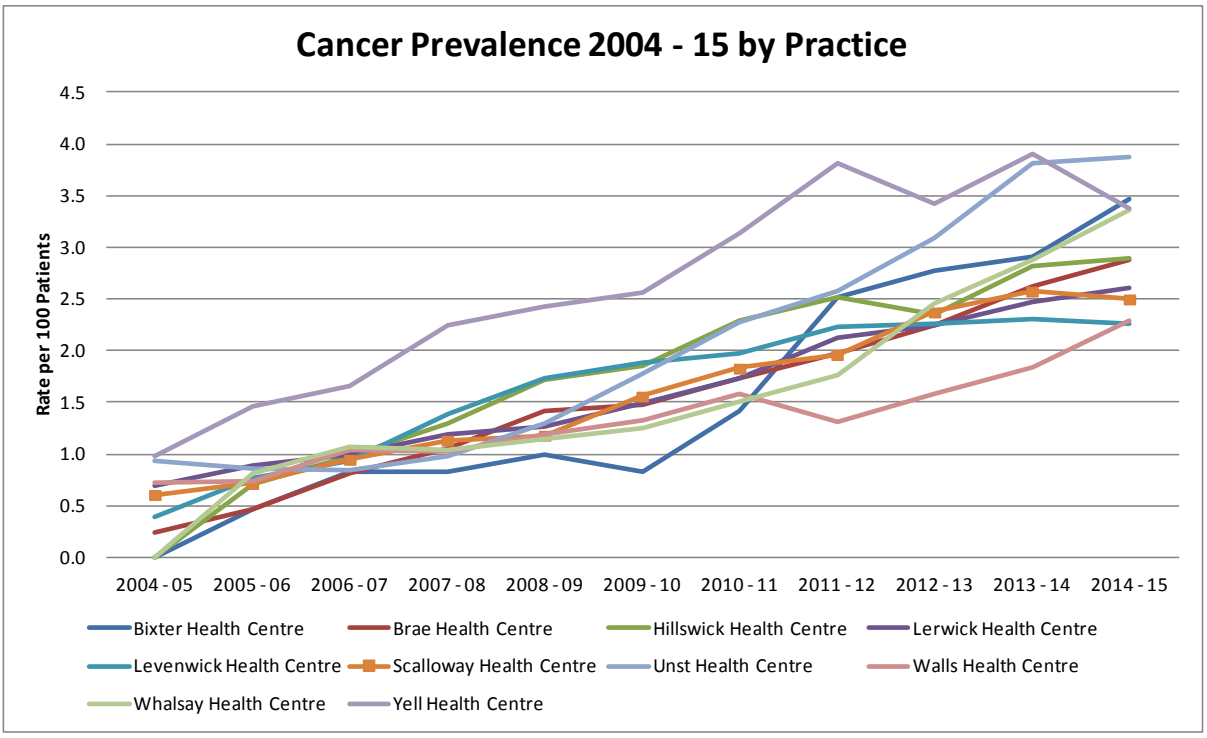


Central mainland appears to have one of the higher levels of depression as identified in general practice. Plotting the numbers of new diagnosis of depression over the last few years, we can see the rise in incidence across Shetland and particularly noticeable in central mainland (this is of new diagnosis as opposed to prevalence which is the number of people living with a condition). We don't know whether this is because of more people living with the condition, more people presenting to their GP for help, or more people diagnosed by the practice, but the general sense in Shetland is that it is an increasingly common problem.

QOF – Cancer Prevalence

Cancer is a condition where cancerous cells multiply in the body, invading and destroying healthy tissue and organs. This is a common condition that 1 in 3 people in Scotland will contract in their lifetime. Rates of most cancers continue to increase due to people living longer and having more available lifetime in which to contract this condition. The most common cancers are lung, breast and bowel cancers. Treatment of cancer is type dependant and includes chemotherapy, radiotherapy and surgery. Early detection through screening and new treatments have led to great improvements in survival for many types of cancers over the last 10 to 15 years. People can reduce their chances of developing cancer by taking regular exercise, eating healthily and not smoking.

It is more helpful to show cancer numbers as a rate rather than the actual number, since that takes account of the number of people living in a practice population. Because of the small numbers involved, numbers in any individual practice area will vary year on year, but when you plot them on a trend graph you can see the pattern of general increase over the years.



Central mainland has an average amount of cancers in its practice population.

With individual cancers the numbers are even smaller so vary a lot from year to year. The pattern of cancers occurring across Shetland is related to the size of the population living in different areas.

Prostate cancer rate by practice by year per 100 patients

Health Centre	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
BIXTER	0	0	0	0.9	2.6	0.9	2.6	0.0	1.7
BRAE	0	0.4	0.8	0	0.4	0.4	1.2	1.2	0.0
HILLSWICK	0	0	1.4	0	1.4	2.9	0	4.1	0.0
LERWICK	0.4	0.2	0.6	0.7	0.6	0.8	0.7	0.7	0.6
LEVENWICK	0	1.1	0.4	1.1	0.4	1.1	0	0.7	0.4
SCALLOWAY	0.9	1.2	0.6	1.2	1.6	1.2	0.3	1.2	0.0
UNST	0	0	0	0	0	3.4	0	0.0	0.0
WALLS	0	0	0	0	0	0	1.4	2.9	0.0
WHALSAY	0.9	0	0	0	0	0	0.9	0.0	4.4
YELL	0.9	0	0	0.9	1.8	1.8	0	3.7	0.0

Actual numbers of prostate cancer diagnosis by practice by year

Health Centre	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Total
BIXTER	0	0	0	1	3	1	3	0	2	10
BRAE	0	1	2	0	1	1	3	3	0	11
HILLSWICK	0	0	1	0	1	2	0	3	0	7
LERWICK	4	2	5	6	5	7	6	6	5	46
LEVENWICK	0	3	1	3	1	3	0	2	1	14
SCALLOWAY	3	4	2	4	5	4	1	4	0	27
UNST	0	0	0	0	0	2	0	0	0	2
WALLS	0	0	0	0	0	0	1	2	0	3
WHALSAY	1	0	0	0	0	0	1	0	5	7
YELL	1	0	0	1	2	2	0	4	0	10
SHETLAND	9	10	11	15	18	22	15	24	13	137

Rates of death from Cancer for Under 75s by Practice and Year per 100 Patients

	2011-12	2012-13	2013-14	2014-15
North Isles	0.12	0.48	0.24	0.18
North Mainland	0.40	0.34	0.12	0.06
West Mainland	0.11	0.33	0.21	0.21
Central Mainland	0.66	0.41	0.39	0.12
South Mainland	0.15	0.33	0.6	0.26
Lerwick & Bressay	0.56	0.3	0.34	0.17
Whalsay & Skerries	0	0.35	0.17	0

Numbers of deaths are even smaller so difficult to interpret, there is no significance in the year on year variation seen here because of the small numbers – so the differences will be one or two people per year.

Care Homes

In the central mainland area there is one care home, the Walter & Joan Gray, Main Street, Scalloway, ZE1 0XJ. This is owned by Crossreach and provides 16 beds and 10 day care places.

Hospital Admissions

Total Admissions

	Elective	Emergency	Total
Scalloway	94	70	164

The balance of planned (elective) admissions and emergency admissions is to be expected – more people have planned admissions for surgery than are admitted as emergencies. Emergency admissions are more common as people get older, and one of the challenges we have is whether we can prevent some hospital admissions particularly in older people and those with chronic conditions, by different care in the community closer to home or by prevention.

For most people a hospital stay is short, but for some people their stay ends up being prolonged, sometimes because of severe illness and the need for rehabilitation, or because of delays in getting the right care set up in their own home or a care setting. From central mainland the longest hospital stay is just over 3 months.

Maximum Length of Stay

	Elective	Emergency
Scalloway	56	110

We also know that, as people get older, they are more likely to be admitted to hospital more frequently, and we can see that about 25% of the admissions to hospital from the central mainland are people admitted more than once.

Patients with >1 Admission and Type of Admission (no of admissions)

	Elective	Emergency	Total
Scalloway	25	20	45

The number of admissions for individuals from a locality for individual conditions are small in any one year, which shows some of the difficulties of analysing data down to locality level – these numbers will vary from year to year without any significance just because the numbers are so small.

Condition and Type of Admission (no of admissions)

	Elective	Emergency	Total
Heart Attack	0	1	1
Stroke	0	2	2
CHD	2	4	6

As well as hospital admissions, we can analyse deaths from individual causes, but again the numbers are small at locality level (and even smaller at practice level).

However, some of them mean a lot in their own right, for instance looking at death from suicide, we know that since 2010 there have been 5 suicides or deaths of undetermined intent in central mainland locality. (Suicide is categorised together with deaths of undetermined intent because it is often difficult to determine the motivation of intentional suicide in a sudden death).

We can also look at premature deaths from causes that are potentially preventable, which links to the earlier data on how common these diseases are in the area, and the prevalence of risk factors, to give a sense of the number of early deaths that might be avoided.

Early Deaths (<75)

	2012 - 13	2013 - 14	2014 - 15	Total
Cancer	10	5	5	20
CVD	0	1	4	5
CHD	2	1	3	6
Respiratory	0	0	1	1

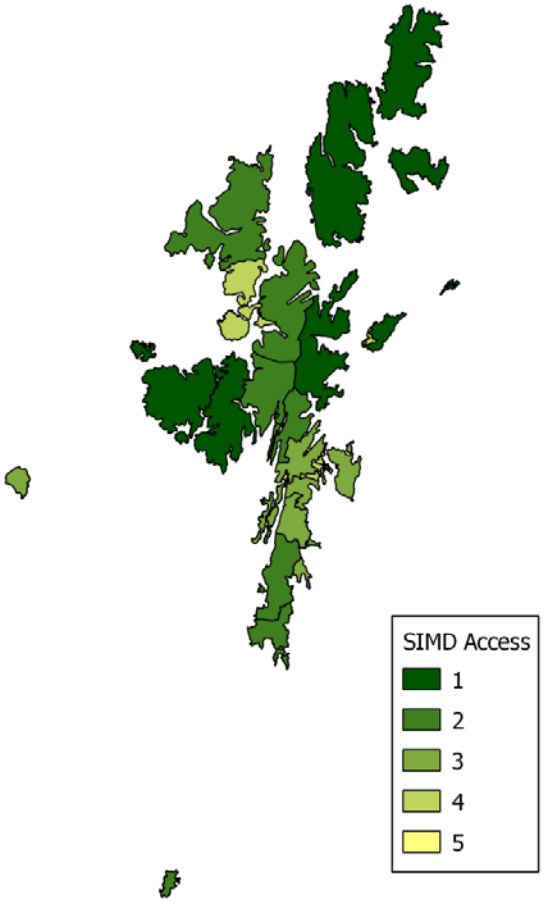
Deprivation - SIMD Classifications

The Scottish Index of Multiple Deprivation is a measure used nationally to describe the features and amount of deprivation in households, combining individual measures on employment, income, crime, housing, health, education and access. This is usually shown as quintiles – the whole distribution is divided into 5, so we see the areas with the best and worst 20%, and those in the middle.

The following maps show the 5 quintiles within Shetland for each separate domain and finally for the combined index. Nationally there are also 5 quintiles, as you would expect, however no area of Shetland is within the lowest two national quintiles. The quintiles are from 1 (most disadvantaged) to 5 (least disadvantaged).

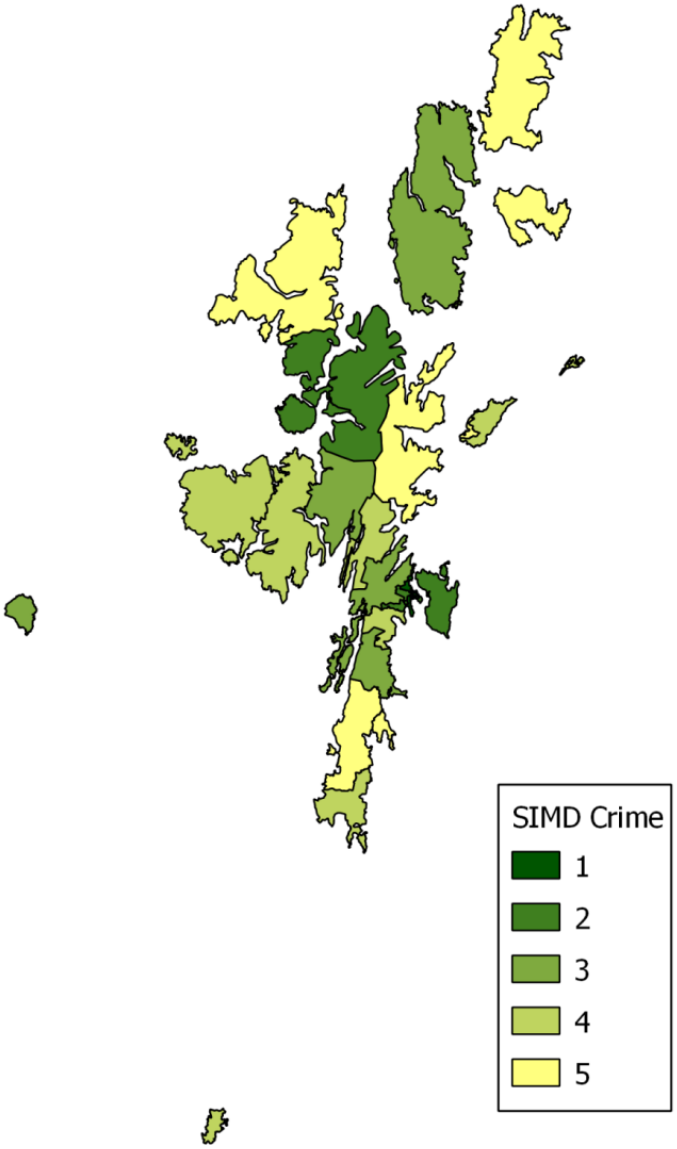
Access is measured as a combination of drive time to key facilities such as GP, petrol station, schools, post office; and public transport to GP, retail centre and post office. Unsurprisingly, the more remote parts of Shetland are worse, and the population centres around Lerwick, Scalloway and Brae show as best.

Access



Crime - this shows recorded crime rates for**:**

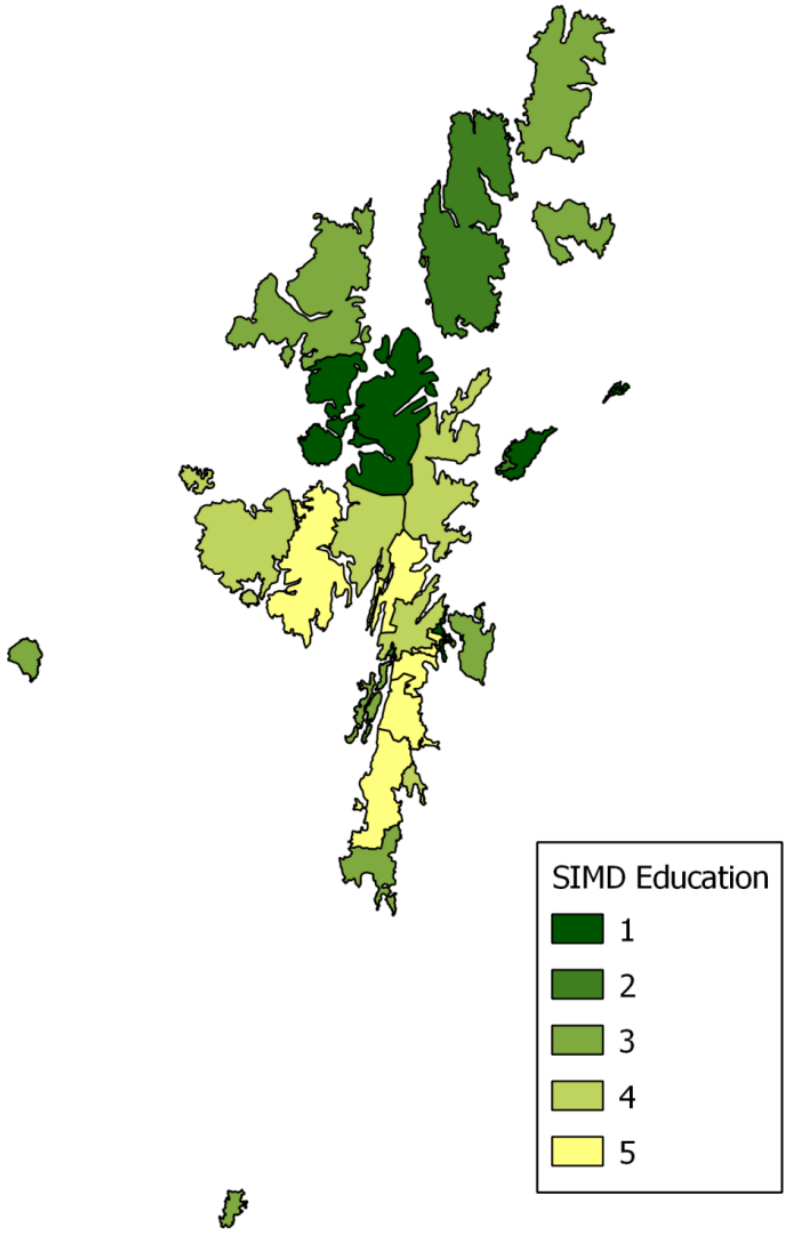
- Domestic house breaking
- Drug offences
- Common assault
- Crimes of violence
- Vandalism
- Sexual offences



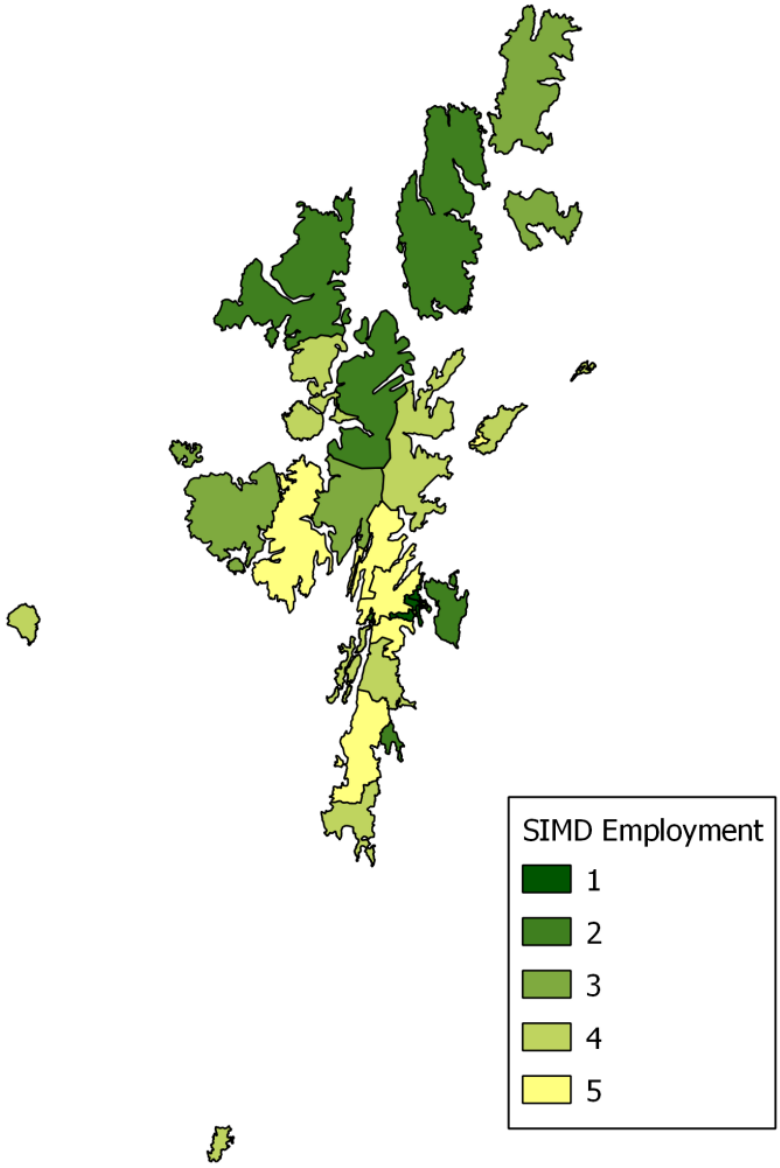
Education - shows:

- School pupil absences
- Pupil performance on SQA at stage 4
- Working age people with no qualifications
- 17-21 year olds enrolling into full time higher education
- School leavers aged 16-19 not in education, employment or training

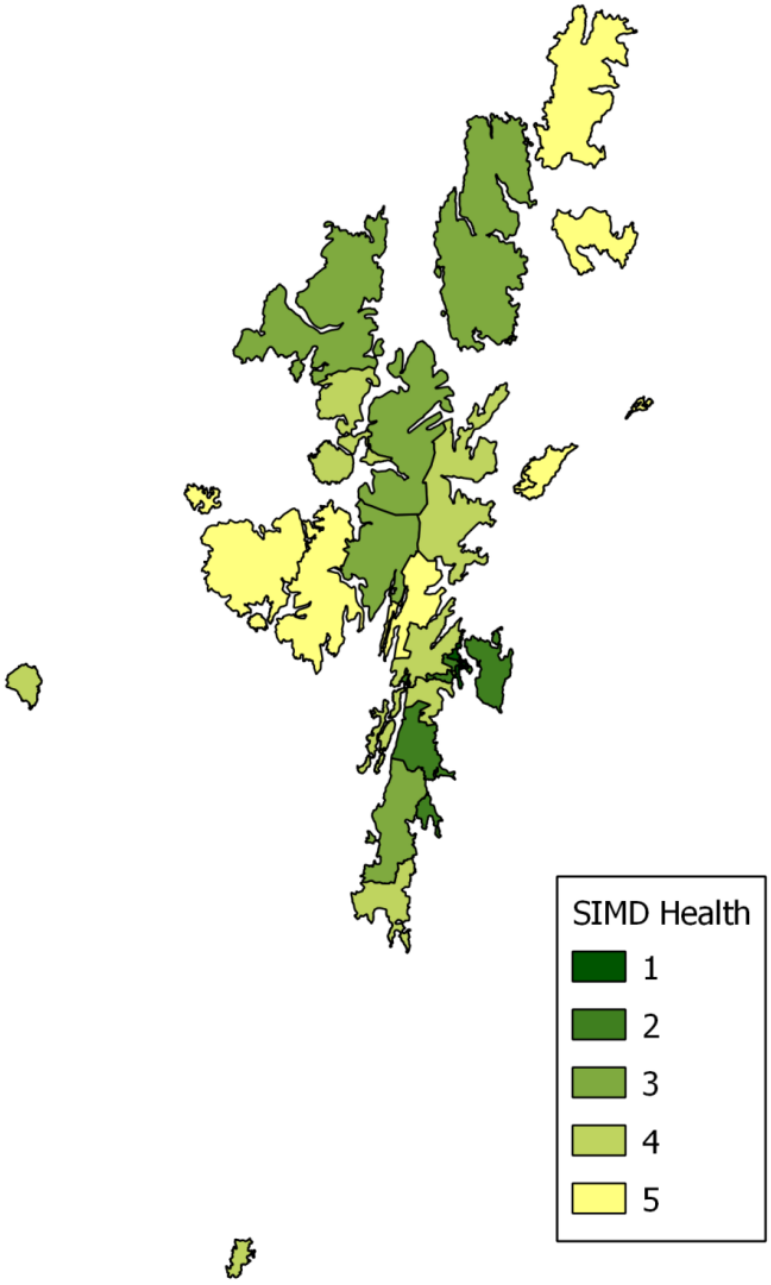
The data is made up from the postcode of pupils homes within each datazone – which are areas smaller than wards, so shows variation within a locality.



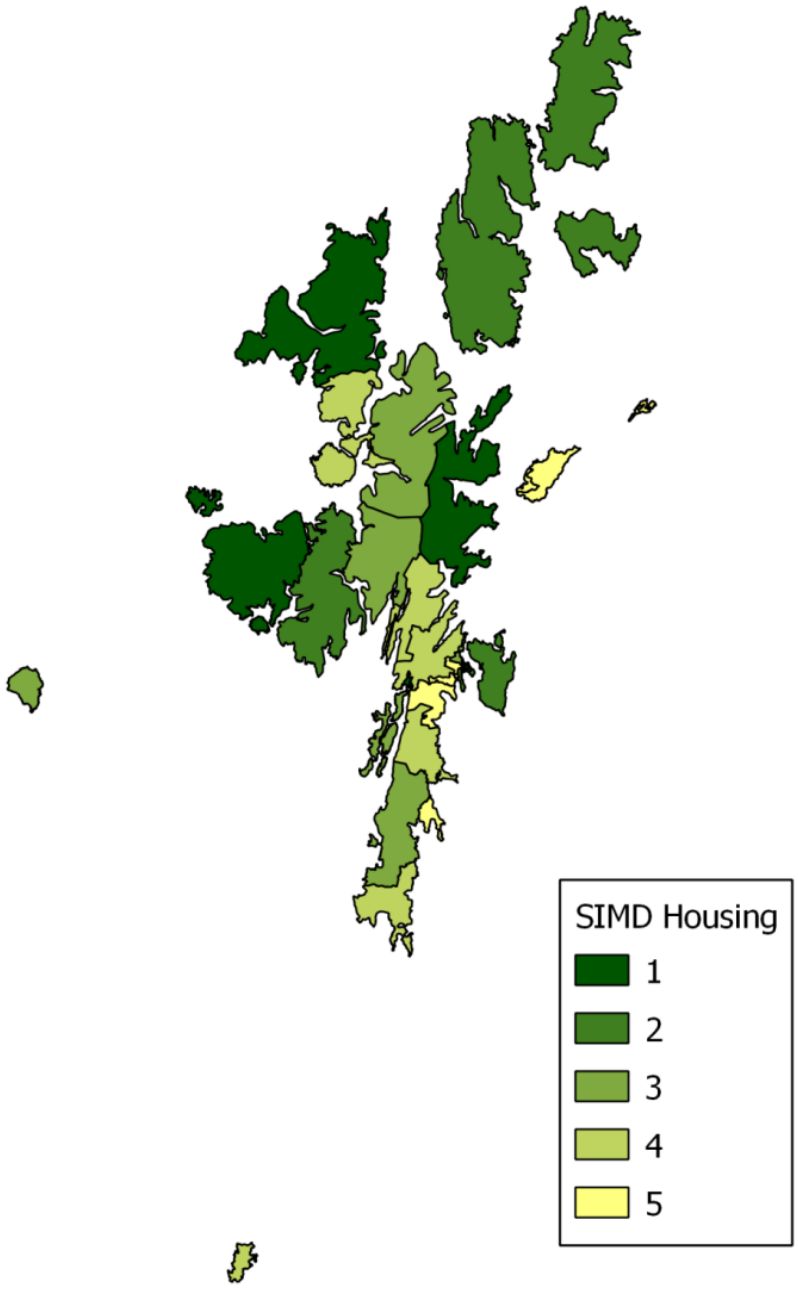
Employment- this is made up of unemployment figures and related benefits: Incapacity Benefit, Employment Support Allowance and working age Severe Disablement Allowance recipients.



Health- the health domain is made up of a combination of mortality data, hospital stays related to alcohol and drug misuse, emergency stays in hospital, an estimated proportion of population being prescribed drugs for anxiety, depression or psychosis and low birth weight babies which are all signs of deprivation at a population level. (This does not mean that every individual experiencing these things is living in deprivation, but you are more likely to experience these things if you are living in poverty and less likely if you are well paid, in employment, have a permanent home etc.)

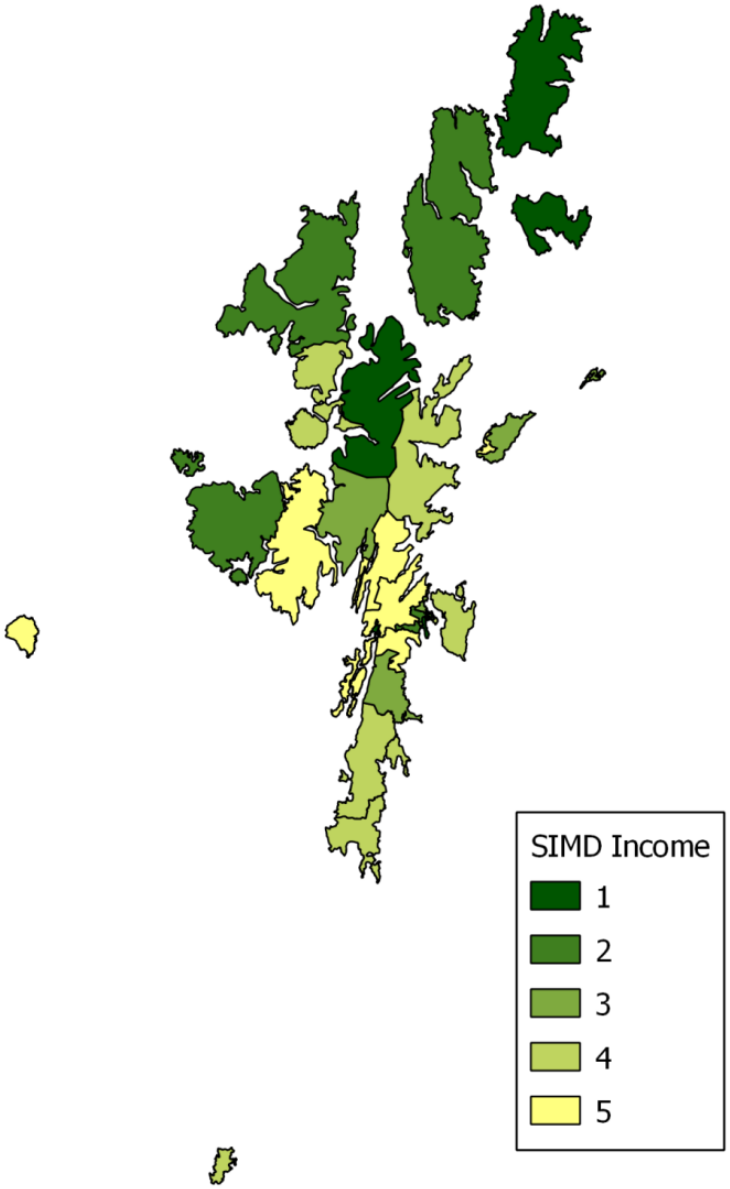


Housing- measures people living in overcrowding, and those living without central heating as a measure of deprivation. Fuel poverty is a well established indicator that is overall high in Shetland and other remote and rural areas compared to Scotland as a whole.

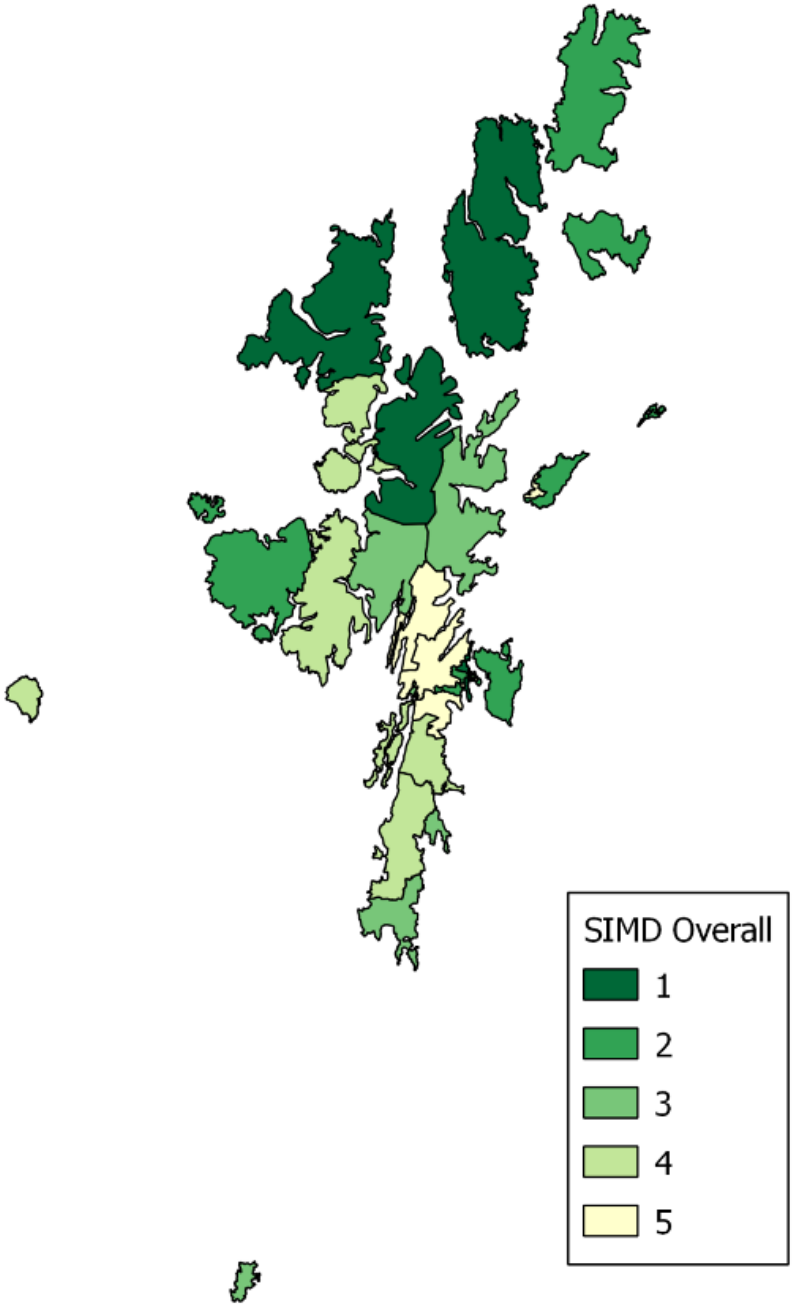


Income- the index measures a number of specific benefits related to low income:

- Adults and children in Income Support or Income-based Employment Support Allowance households
- Adults in Guarantee Pension Credit Households
- Adults and children in Job Seekers Allowance households
- Adults and children in Tax Credit Families



Overall - these measures are combined with a weighting to make an overall SIMD indicator that is used to compare local areas across Scotland. Shetland has no areas in the worst two quintiles for Scotland, but this map shows the overall variation across Shetland. Central mainland has a variable picture of variation, which fits with the distribution of the individual domains in different parts of the locality (housing, employment, education and crime show differences across central mainland).



Fuel Affordability Report

In November 2015 a Domestic Fuel Affordability Survey was sent out to all Shetland homes, 10,800 in total. 2425 were returned for processing, a 22% return. The results confirm that the fuel poverty level in Shetland in 2015/16 is 53%, with the North Isles having the highest level of poverty with a rate of 64%. This was an increase of 10% since 2010 and demonstrates that more than half of all Shetland homes are now living in fuel poverty.

The detailed analysis breakdown of data has been undertaken to try and understand the factors contributing to Fuel Poverty in Shetland and develop a more proactive action plan to address it.

In summary, people are more likely to be in fuel poverty: -

- due to low incomes, especially below £16,500 pa
- if they are in receipt of benefits
- if they live in social housing
- if their homes are heated by solid fuel or electricity
- if their water is heated by electricity
- if their home is of solid wall or cavity wall construction
- if their property was built before 2012
- if their property had less than 100mm of loft insulation
- if the property is under-occupied
- if they paid for their electricity on a payment card
- if the residents are over 65

The full report is available and further related documentation is here