Report
Public Health Intelligence

| Subject: | Multi-morbidity 2021 |
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| Date of report: | 3 November 2022 |

## Introduction

Morbidity is the state of having a long-term (chronic) medical condition. Multi-morbidity is defined as the presence of two or more long-term medical conditions in a patient.

Studies show that people with multiple chronic conditions (those with multi-morbidity) typically suffer a lower quality of life ${ }^{1}$, have more frequent and lengthy hospital admissions ${ }^{2}$, and may be more likely to die prematurely ${ }^{3}$, than those who do not have multi-morbidity.

This report assesses the burden of multi-morbidity experienced by Jersey's population. It summarises the prevalence of certain long-term conditions amongst Jersey residents, as recorded by GP's. The analysis shows the prevalence of patients with more than one of these conditions (multi-morbidity), and which diseases are most commonly cooccurring. The analysis presented refers to prevalence of conditions and multi-morbidities as at year end 2021, and trends over time are shown where appropriate.

## Long-term conditions (morbidities)

There are 12 long-term conditions which form the basis of the multi-morbidity analysis presented. The Government of Jersey incentivises GPs to record patients with any of these long-term conditions through the Quality Improvement Framework (JQIF).

The 12 long-term morbidities are:

- Atrial Fibrillation (AF)
- Asthma (AST)
- Coronary Heart Disease (CHD)
- Chronic Kidney Disease (CKD)
- Chronic Obstructive Pulmonary Disease (COPD)
- Dementia (DEM)
- Diabetes (DIA)
- Heart Failure (HF)
- Hypertension (HYP)
- Mental Health Problems (MH)
- Obesity (OB)
- Stroke and Transient Ischemic Attack (STIA)

See Appendix 1 for the definitions of the criteria used in order to identify patients recorded as having any of the above conditions

[^0]
## Multi-morbidity 2021

Approximately $\mathbf{1 2 \%}$ of individuals are living with multiple morbidities.

Hypertension was the most common morbidity affecting $17 \%$ of the population.


By age 65 over half of the population is suffering from 1 or more long-term conditions

By age 85 over half of the population is suffering from 2 or more long term conditions

The same 10 pairs of cooccurring morbidities have remained the most common over the last 6 years

The most commonly cooccurring morbidities are Hypertension \& Obesity


The most commonly co-occurring triad of morbidities

## Hypertension,

 Diabetes \& Obesity
## Long-term conditions (morbidities) amongst the population

## Prevalence of long-term conditions

As at the end of 2021, there were more than 31,100 individuals who had at least one of the 12 long-term conditions considered in this report who were registered, and considered active, with a GP in Jersey.

The number and proportion of the population ${ }^{4}$ suffering from each of the long-term conditions is shown in Table 1.
The most common long-term condition was hypertension (with 17,380 patients registered), whilst dementia was the least prevalent long-term condition (with 715 patients registered) (Figure 2).

Table 1. The number of patients on each long-term condition register as at year end 2021. "All patients" include everyone who is on the register, regardless of what other conditions they may have, whilst "patients (single condition)" includes patients who have only that single condition. The number of patients on the register as a proportion of the total population (Census 2021) is shown, as well as the average age of patients on the register.

| Condition |  | All <br> Patients | Proportion of <br> Population | Average <br> Age | Patients <br> (Single condition) | Average Age <br> (Single condition) |
| ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Hypertension (HYP) | 17,380 | $17 \%$ | 68 | 7,305 | 65 |  |
| Obesity (OB) | 9,380 | $9 \%$ | 55 | 3,790 | 45 |  |
| Asthma (AST) | 5,725 | $6 \%$ | 47 | 3,470 | 38 |  |
| Diabetes (DIA) | 4,670 | $5 \%$ | 66 | 900 | 57 |  |
| Coronary Heart Disease (CHD) | 2,890 | $3 \%$ | 73 | 525 | 66 |  |
| Chronic Kidney Disease (CKD) | 2,815 | $3 \%$ | 78 | 315 | 70 |  |
| Atrial Fibrillation (AF) | 2,510 | $2 \%$ | 75 | 425 | 66 |  |
| Chronic Obstructive Pulmonary Disease (COPD) | 2,215 | $2 \%$ | 70 | 545 | 64 |  |
| Stroke and Transient Ischemic Attack (STIA) | 1,780 | $2 \%$ | 74 | 310 | 64 |  |
| Heart Failure (HF) | 1,105 | $1 \%$ | 79 | 55 | 66 |  |
| Mental Health Problems (MH) | 825 | $1 \%$ | 52 | 450 | 46 |  |
| Dementia (DEM) | 715 | $1 \%$ | 84 | 130 | 81 |  |

*Patient numbers rounded to the nearest 5

While many long-term conditions affected males and females relatively equally, some conditions affected one sex more than the other (Figure 1).

Of the 12 conditions considered:

- those conditions that were more likely to affect female patients were dementia ( $63 \%$ female and $37 \%$ male) and chronic kidney disease ( $61 \%$ female, $39 \%$ male)
- those conditions that were more likely to affect male patients were: coronary heart disease ( $67 \%$ male, $33 \%$ female), atrial fibrillation ( $60 \%$ male, $40 \%$ female) and diabetes ( $59 \%$ male, $41 \%$ female)

For some conditions, the sex difference was largely attributable to the age profile of the condition. For example, there are more females than males overall in older age groups ${ }^{4}$, so there is expected to be a higher proportion of female patients for conditions affecting primarily older patients such as dementia and chronic kidney disease (average age is 84 amongst dementia patients, and 78 amongst chronic kidney disease patients, Table 1).

[^1]Figure 1. Prevalence of 12 long-term conditions amongst males and females in Jersey


Each long-term condition could affect people of any age, but some conditions are found more commonly in certain age groups. For example, dementia, heart failure and chronic kidney disease affect mainly older people, whilst asthma and mental health problems affect a much broader range of age groups (Figure 2 \& Figure 3).

The average age for patients with only a single condition is lower than the average age of all patients (including those with other co-morbidities) (Table 1), because multiple morbidities become more common with age (see section on "Multi-morbidity by age", Figure 8).

Figure 2. Box and whisker plot showing the average age and interquartile range of ages for each disease register (inclusive of all patients on each register regardless of whether they have other conditions)


Age-Gender Profiles
Figure 3. Counts of patients on each disease register, split by age and gender. Counts below 10 have been suppressed, and all counts rounded to the nearest 5

Coronary Heart Disease


Diabetes


Atrial Fibrillation


Heart Failure


Chronic Kidney Disease


Chronic Obstructive Pulmonary Disease


Mental Health Problems


Stroke and Transient Ischaemic Attack


## Patients with multiple morbidities

Of the 31,120 individuals who had at least one of the 12 long-term conditions as at the end of 2021:

- 18,215 individuals had a single long-term condition
- 12,905 individuals had two or more long-term conditions (multi-morbidity). This means that approximately $12 \%$ of Jersey's overall population ${ }^{5}$ were living with multiple morbidities

Of those individuals having two or more long-term conditions, progressively fewer had a higher number of long-term conditions:

- 7,690 individuals had two conditions, equivalent to $7 \%$ of the population
- 3,350 individuals had three conditions, equivalent to $3 \%$ of the population
- 1,865 individuals had four or more conditions, equivalent to $2 \%$ of the population

Figure 4. The numbers of long-term conditions amongst Jersey's population, by gender, as recorded by GP's. The number of people with 0 long-term conditions is estimated by subtracted the number of patients on long-term condition registers from the total population figure (Jersey Census 2021)


Some long-term conditions are more commonly found to co-occur with other diseases, and Figure 5 shows the number of additional conditions people on each of the disease registers are suffering from. For example:

- of those on the asthma register, $61 \%$ have only this single morbidity, whilst the other $39 \%$ have at least one other morbidity
- of those on the heart failure register, just $5 \%$ had only this single morbidity, and the other $95 \%$ had at least one other morbidity. Over half (59\%) of patients on the heart failure register had 3 or more additional morbidities

[^2]Figure 5. Percentage of patients with each condition having 0, 1, 2 or 3+ additional conditions


## Combinations of two conditions (pairs)

The most commonly co-occurring pairs of morbidities are shown in Table 2. Hypertension and obesity were the most commonly co-occurring morbidities, being present in over 4,100 people. Note that the analysis of co-occurring conditions is inclusive, meaning the patient count includes all patients with those two conditions, including those who may have other additional conditions.

Table 2. Count of patients with each combination of co-occurring disease pairs


The same 10 pairs of co-occurring morbidities have remained the most common over the last 6 years (Figure 6):

- the disease pairs ranked in positions 1 to 7 have remained in the same order of ranking
- there has been some movement amongst the pairs ranked in positions 8, 9 and 10

Figure 6. Ranking of the most commonly co-occurring disease pairs from 2016 to 2021


## Combinations of three conditions (triads)

The most commonly co-occurring triads of morbidities are shown in Table 3

- hypertension, diabetes and obesity were the most commonly occurring triad of diseases, being present in over 1,100 people
- hypertension and diabetes also commonly co-occurred with chronic kidney disease (in 505 people) and with coronary heart disease (in 490 people)

Table 3. Count of patients with different combinations of co-occurring disease triads, top 10

| Rank | Condition | Patients |
| :---: | :--- | :---: |
| 1 | Diabetes, Hypertension and Obesity | 1,115 |
| 2 | Chronic Kidney Disease, Diabetes and Hypertension | 505 |
| 3 | Coronary Heart Disease, Diabetes and Hypertension | 490 |
| 4 | Atrial Fibrillation, Chronic Kidney Disease and Hypertension | 415 |
| 5 | Coronary Heart Disease, Chronic Kidney Disease and Hypertension | 415 |
| 6 | Chronic Kidney Disease, Hypertension and Obesity | 405 |
| 7 | Coronary Heart Disease, Hypertension and Obesity | 395 |
| 8 | Asthma, Hypertension and Obesity | 380 |
| 9 | Atrial Fibrillation, Heart Failure and Hypertension | 360 |
| 10 | Atrial Fibrillation, Coronary Heart Disease and Hypertension | 345 |

Figure 7. Most common occurring triad of disease (Hypertension, Obesity and Diabetes)


There has been some movement amongst the ranking of most common disease triads over the past 6 years (Figure 8). However, the same 11 disease triads have been the most commonly co-occurring in Jersey's population over time, each occurring in at least 250 patients at each year-end between 2016 and 2021.

Figure 8. Ranking of the most commonly co-occurring disease triads from 2016 to 2021


## Combinations of four conditions (quads)

The most commonly co-occurring quads of morbidities are shown in Table 4:

- coronary heart disease, diabetes, hypertension and obesity were the most commonly occurring quad of diseases, being present in over 160 people
- diabetes, hypertension and obesity also commonly co-occurred with chronic kidney disease (in 160 people)

Table 4. Count of patients with different combinations of co-occurring disease quads, top 10

| Rank Condition |  | Patients |
| :---: | :--- | :---: |
| 1 | Coronary Heart Disease, Diabetes, Hypertension and Obesity | 160 |
| 2 | Chronic Kidney Disease, Diabetes, Hypertension and Obesity | 160 |
| 3 | Atrial Fibrillation, Chronic Kidney Disease, Heart Failure and Hypertension | 160 |
| 4 | Coronary Heart Disease, Chronic Kidney Disease, Diabetes and Hypertension | 155 |
| 5 | Atrial Fibrillation, Coronary Heart Disease, Heart Failure and Hypertension | 125 |
| 6 | Coronary Heart Disease, Chronic Kidney Disease, Heart Failure and Hypertension | 125 |
| 7 | Atrial Fibrillation, Coronary Heart Disease, Chronic Kidney Disease and Hypertension | 125 |
| 8 | Atrial Fibrillation, Diabetes, Hypertension and Obesity | 115 |
| 9 | Chronic Kidney Disease, Diabetes, Heart Failure and Hypertension | 115 |
| 10 | Atrial Fibrillation, Chronic Kidney Disease, Diabetes and Hypertension | 110 |

## Multi-morbidity by age

The number of morbidities people suffer from generally increases with age. The average age of someone who has one morbidity is 55 years, whereas the average age of those with 4 or more morbidities is 77 years (Table 5 ).

Table 5. Average age of people with 1, 2, 3 or 4+ morbidities

| Number of Conditions | 1 | 2 | 3 | $4+$ |
| :---: | :---: | :---: | :---: | :---: |
| Average Age (years) | 55 | 65 | 71 | 77 |

Figure 9a shows the distribution of multi-morbidity with age (by five-year age bands), and Figure 9b shows this expressed as a proportion of the population within each age band. The data shows that:

- most people aged under 30 years do not suffer from any long-term conditions
- by age 65 over half of the population is suffering from 1 or more long-term conditions
- by age 85 over half of the population is suffering from 2 or more long-term conditions

Figure 9. Number of long-term conditions by age; a) count of individual patients and b) proportion of population



## Notes

## Methods

The data used in this report is extracted from the General Practitioner Central Server (GPCS). The registers are calculated based on patients considered 'active' at year end - that is, any patient registered with a Jersey GP practice who had had a consultation within the previous five years, or who had registered with a GP surgery in the previous six months.

Appendix 1 details the criteria used to identify patients on each of the 12 long-term conditions. The criteria are defined as per the Jersey Quality Improvement Framework (JQIF).

Patient counts below 5 are suppressed, and all counts are rounded to the nearest 5 throughout the report.
Disease combinations (e.g. pairs, triads, quads) are inclusive, meaning for each combination all patients with that set of morbidities is included regardless of whether they have other additional conditions.

For example, somebody with 3 conditions (obesity, hypertension and diabetes) would be counted in all 3 of the following disease pairs:

- Obesity and hypertension
- Hypertension and diabetes
- Diabetes and obesity

The number of possible disease pair combinations is 66, for disease triad combinations is $\mathbf{2 2 0}$ and for disease quad combinations is 715. Not all disease combinations are found amongst Jersey's population. Analysis for this report looked at all combinations, and the report summarises those which were found to be most commonly co-occurring.

Where figures are expressed as a proportion of the population, the population figures from the 2021 Census (published by Statistics Jersey) have been used as a denominator.

## Appendix 1:

Jersey Quality Improvement Framework (JQIF) disease register descriptions:

| Code | Condition | Definition |
| :---: | :---: | :---: |
| ASTOO1 | Asthma | A register of patients with asthma, excluding patients with asthma who have been prescribed no asthma-related drugs in the preceding 12 months |
| CHD001 | Coronary Heart Disease | A register of patients with coronary heart disease |
| CKD005 | Chronic Kidney Disease | A register of patients aged 18 years or over with CKD with classification of categories G3a to G5 (previously stage 3 to 5) |
| COPD001 | Chronic Obstructive Pulmonary Disease | A register of patients with COPD |
| DEM001 | Dementia | A register of patients diagnosed with dementia |
| HF001 | Heart Failure | A register of patients with heart failure |
| HYP001 | Hypertension | A register of patients with established hypertension |
| MH001 | Mental Health | A register of people with schizophrenia, bipolar disorder and other psychoses and other patients on lithium therapy |
| OBOO2 | Obesity | A register of patients aged 16 or over with a BMI greater than or equal to 30 in the preceding 12 months. |
| STIA001 | Stroke and Transient Ischemic Attack | A register of patients with stroke and TIA |

## Appendix 2:

Appendix 2.1 shows numbers of patients on the long-term condition registers at year end over the last 6 years. Numbers are rounded to the nearest 5. Please note that slight changes in the register totals can occur as and when changes are made in the GP system (GPCS), and that such changes may not be accounted for as the data is held outside of Government of Jersey.

Note that crude changes in the overall number of patients on a given register may reflect overall changes in the Jersey's demographics, rather than an increase or decrease in the prevalence of the condition itself. Population normalisation will be carried out when updated population estimates for the period between the 2011 and the 2021 censuses become available ${ }^{6}$. Changes in the crude numbers of patients on a register may also reflect improvements in detection or treatment of conditions (e.g., as a result of awareness campaigns or population screening) and may not always indicate an improvement or worsening in the prevalence of the condition itself.

Appendix 2.1. Numbers of patients on the JQIF registers (data held in GPCS), at year end between 2016 and 2021. Patient numbers rounded to the nearest 5.

| Condition | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Atrial Fibrillation (AF) | 1,865 | 2,015 | 2,120 | 2,255 | 2,375 | 2,510 |
| Asthma (AST) | 5,595 | 5,555 | 5,570 | 5,625 | 6,985 | 5,725 |
| Coronary Heart Disease (CHD) | 2,550 | 2,620 | 2,675 | 2,770 | 2,830 | 2,890 |
| Chronic Kidney Disease (CKD) | 2,900 | 3,140 | 3,035 | 2,965 | 2,875 | 2,815 |
| Chronic Obstructive Pulmonary Disease (COPD) | 1,915 | 1,995 | 2,055 | 2,105 | 2,160 | 2,215 |
| Dementia (DEM) | 600 | 670 | 685 | 685 | 715 | 715 |
| Diabetes (DIA) | 3,705 | 3,840 | 4,015 | 4,165 | 4,415 | 4,670 |
| Heart Failure (HF) | 825 | 895 | 945 | 1,025 | 1,040 | 1,105 |
| Hypertension (HYP) | 15,525 | 15,870 | 16,275 | 16,610 | 16,880 | 17,380 |
| Mental Health Problems (MH) |  | 740 | 755 | 785 | 825 | 825 |
| Obesity (OB) | 9,740 | 10,570 | 10,900 | 10,790 | 8,455 | 9,380 |
| Stroke and Transient Ischemic Attack (STIA) | 1,515 | 1,540 | 1,590 | 1,650 | 1,730 | 1,780 |

Appendices 2.2, 2.3 and 2.4 show a complete list of all disease pairs, triads and quads that occurred in at least 100 people in Jersey at year end (2021).

Appendix 2.2. Pair groups containing over 100 patients, JQIF year end 2021

| Rank |  | Condition |
| :---: | :--- | :---: | Patients | 1 | Obesity and Hypertension |
| :---: | :---: |
| 2 | Hypertension and Diabetes |
| 3 | Hypertension and Chronic Kidney Disease |
| 4 | Hypertension and Coronary Heart Disease |
| 5 | Obesity and Diabetes |
| 6 | Hypertension and Atrial Fibrillation |
| 7 | Hypertension and Asthma |
| 8 | Stroke and Transient Ischemic Attack and Hypertension |
| 9 | Hypertension and Chronic Obstructive Pulmonary Disease |
| 10 | Obesity and Asthma |
| 11 | Hypertension and Heart Failure |
| 12 | Diabetes and Coronary Heart Disease |
| 13 | Diabetes and Chronic Kidney Disease |
| 14 | Obesity and Coronary Heart Disease |
| 15 | Coronary Heart Disease and Chronic Kidney Disease |

[^3]16 Chronic Kidney Disease and Coronary Heart Disease ..... 530
17 Heart Failure and Atrial Fibrillation ..... 530
Obesity and Chronic Kidney Disease ..... 500
19 Atrial Fibrillation and Obesity ..... 485
20 Obesity and Atrial Fibrillation ..... 485
21 Chronic Obstructive Pulmonary Disease and Asthma ..... 455
22 Hypertension and Dementia ..... 435
23 Diabetes and Atrial Fibrillation ..... 415
24 Obesity and Chronic Obstructive Pulmonary Disease ..... 405
25 Heart Failure and Chronic Kidney Disease ..... 390
Heart Failure and Coronary Heart Disease ..... 390
Stroke and Transient Ischemic Attack and Atrial Fibrillation ..... 380
Diabetes and Asthma ..... 345
Stroke and Transient Ischemic Attack and Chronic Kidney Disease ..... 330
Chronic Obstructive Pulmonary Disease and Coronary Heart Disease ..... 315
Stroke and Transient Ischemic Attack and Coronary Heart Disease ..... 310
Stroke and Transient Ischemic Attack and Diabetes ..... 300
Diabetes and Chronic Obstructive Pulmonary Disease ..... 300
Heart Failure and Diabetes ..... 295
Chronic Obstructive Pulmonary Disease and Chronic Kidney Disease ..... 270
Stroke and Transient Ischemic Attack and Obesity ..... 260
Obesity and Heart Failure ..... 245
Chronic Obstructive Pulmonary Disease and Atrial Fibrillation ..... 220
Stroke and Transient Ischemic Attack and Heart Failure ..... 200
Heart Failure and Chronic Obstructive Pulmonary Disease ..... 200
Coronary Heart Disease and Asthma ..... 190
Chronic Kidney Disease and Asthma ..... 190
Mental Health Problems and Hypertension ..... 180
Stroke and Transient Ischemic Attack and Chronic Obstructive Pulmonary Disease ..... 180
Dementia and Chronic Kidney Disease ..... 175
Asthma and Atrial Fibrillation ..... 170
Obesity and Mental Health Problems ..... 145
Stroke and Transient Ischemic Attack and Dementia ..... 130
Dementia and Atrial Fibrillation ..... 120
Heart Failure and Asthma ..... 120
Diabetes and Dementia ..... 115
Dementia and Coronary Heart Disease ..... 110
53 Stroke and Transient Ischemic Attack and Asthma ..... 110
*Patient counts rounded to the nearest 5
Appendix 2.3. Triad groups containing over 100 patients, JQIF year end 2021

| Rank |  | Condition |
| :---: | :--- | :---: |
| 1 | Diabetes, Hypertension and Obesity | 1,115 |
| 2 | Chronic Kidney Disease, Diabetes and Hypertension | 505 |
| 3 | Coronary Heart Disease, Diabetes and Hypertension | 490 |
| 4 | Atrial Fibrillation, Chronic Kidney Disease and Hypertension | 415 |
| 5 | Coronary Heart Disease, Chronic Kidney Disease and Hypertension | 415 |
| 6 | Chronic Kidney Disease, Hypertension and Obesity | 405 |
| 7 | Coronary Heart Disease, Hypertension and Obesity | 395 |
| 8 | Asthma, Hypertension and Obesity | 380 |
| 9 | Atrial Fibrillation, Heart Failure and Hypertension | 360 |

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Atrial Fibrillation, Coronary Heart Disease and Hypertension ..... 345
Atrial Fibrillation, Hypertension and Obesity ..... 340
Atrial Fibrillation, Diabetes and Hypertension ..... 320
Chronic Kidney Disease, Heart Failure and Hypertension ..... 310
Coronary Heart Disease, Heart Failure and Hypertension ..... 275
Atrial Fibrillation, Hypertension and Stroke and Transient Ischemic Attack ..... 270
Chronic Kidney Disease, Hypertension and Stroke and Transient Ischemic Attack ..... 265
Chronic Obstructive Pulmonary Disease, Hypertension and Obesity ..... 255
Coronary Heart Disease, Hypertension and Stroke and Transient Ischemic Attack ..... 235
Diabetes, Hypertension and Stroke and Transient Ischemic Attack ..... 225
Chronic Obstructive Pulmonary Disease, Diabetes and Hypertension ..... 225
Diabetes, Heart Failure and Hypertension ..... 225
Coronary Heart Disease, Diabetes and Obesity ..... 215
Coronary Heart Disease, Chronic Obstructive Pulmonary Disease and Hypertension ..... 210
Asthma, Diabetes and Hypertension ..... 205
Asthma, Chronic Obstructive Pulmonary Disease and Hypertension ..... 205
Atrial Fibrillation, Chronic Kidney Disease and Heart Failure ..... 200
Chronic Kidney Disease, Chronic Obstructive Pulmonary Disease and Hypertension ..... 195
Hypertension, Obesity and Stroke and Transient Ischemic Attack ..... 190
Heart Failure, Hypertension and Obesity ..... 185
Chronic Kidney Disease, Diabetes and Obesity ..... 185
Coronary Heart Disease, Chronic Kidney Disease and Diabetes ..... 180
Atrial Fibrillation, Coronary Heart Disease and Heart Failure ..... 175
Coronary Heart Disease, Chronic Kidney Disease and Heart Failure ..... 160
Atrial Fibrillation, Coronary Heart Disease and Chronic Kidney Disease ..... 155
Heart Failure, Hypertension and Stroke and Transient Ischemic Attack ..... 155
Atrial Fibrillation, Diabetes and Obesity ..... 155
Asthma, Diabetes and Obesity ..... 150
Atrial Fibrillation, Chronic Obstructive Pulmonary Disease and Hypertension ..... 145
Atrial Fibrillation, Diabetes and Heart Failure ..... 145
Asthma, Chronic Kidney Disease and Hypertension ..... 140
Chronic Obstructive Pulmonary Disease, Heart Failure and Hypertension ..... 135
Chronic Kidney Disease, Dementia and Hypertension ..... 135
Atrial Fibrillation, Heart Failure and Obesity ..... 130
Chronic Kidney Disease, Diabetes and Heart Failure ..... 130
Atrial Fibrillation, Chronic Kidney Disease and Diabetes ..... 130
Chronic Obstructive Pulmonary Disease, Hypertension and Stroke and Transient Ischemic Attack ..... 125
Chronic Obstructive Pulmonary Disease, Diabetes and Obesity ..... 125
Coronary Heart Disease, Diabetes and Heart Failure ..... 125
Asthma, Coronary Heart Disease and Hypertension ..... 115
Atrial Fibrillation, Chronic Kidney Disease and Stroke and Transient Ischemic Attack ..... 115
Diabetes, Heart Failure and Obesity ..... 110
Atrial Fibrillation, Asthma and Hypertension ..... 105
Atrial Fibrillation, Heart Failure and Stroke and Transient Ischemic Attack ..... 105
Atrial Fibrillation, Coronary Heart Disease and Diabetes ..... 105
*Patient counts rounded to the nearest 5

| Rank Condition |  | Patients |
| :---: | :--- | :---: |
| 1 | Coronary Heart Disease, Diabetes, Hypertension and Obesity | 160 |
| 2 | Chronic Kidney Disease, Diabetes, Hypertension and Obesity | 160 |
| 3 | Atrial Fibrillation, Chronic Kidney Disease, Heart Failure and Hypertension | 160 |
| 4 | Coronary Heart Disease, Chronic Kidney Disease, Diabetes and Hypertension | 155 |
| 5 | Atrial Fibrillation, Coronary Heart Disease, Heart Failure and Hypertension | 125 |
| 6 | Coronary Heart Disease, Chronic Kidney Disease, Heart Failure and Hypertension | 125 |
| 7 | Atrial Fibrillation, Coronary Heart Disease, Chronic Kidney Disease and Hypertension | 125 |
| 8 | Atrial Fibrillation, Diabetes, Hypertension and Obesity | 115 |
| 9 | Chronic Kidney Disease, Diabetes, Heart Failure and Hypertension | 115 |
| 10 | Atrial Fibrillation, Chronic Kidney Disease, Diabetes and Hypertension | 110 |
| 11 | Atrial Fibrillation, Diabetes, Heart Failure and Hypertension | 110 |
| *Patient counts rounded to the nearest 5 |  |  |


[^0]:    ${ }^{1}$ Fortin et al., 2004. Health and Quality of Life Outcomes
    ${ }^{2}$ Vogeli et al., 2007. Journal of General Internal Medicine
    ${ }^{3}$ Menotti et al., 2001. Journal of Clinical Epidemiology

[^1]:    ${ }^{4}$ Jersey Census 2021

[^2]:    ${ }^{5}$ As a proportion of the total population figure from the 2021 Census published by Statistics Jersey

[^3]:    ${ }^{6}$ Population estimates due to be published by Statistics Jersey in 2023

