
Subject: Multi-morbidity 2023
Date of report: 8 February 2024

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 life¹, have more frequent and lengthy hospital admissions², and may be more likely to die prematurely³, than those who do not have multi-morbidity. Managing the health and care needs of people with multiple conditions also becomes increasingly complex.

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 General Practitioners (GPs). The analysis shows the prevalence of patients with more than one of these conditions (multi-morbidity), and which diseases are most commonly co-occurring. The analysis presented refers to prevalence of conditions and multi-morbidities as at year end 2023, 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

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](#)

Multi-morbidity (2023)

Approximately **14%** of individuals in Jersey are living with multiple morbidities



Hypertension was the most common morbidity, affecting **17%** of the population

Morbidities become more common with age

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



The same **10 pairs** of co-occurring morbidities have remained the most common over the **last 8 years**



The most commonly co-occurring morbidities are

Hypertension & Obesity



The most commonly co-occurring set of three morbidities are

Hypertension, Diabetes & Obesity

Long-term conditions (morbidities) amongst the population

Prevalence of long-term conditions

As at the end of 2023, there were 32,820 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 population⁴ suffering from each of the long-term conditions is shown in Table 1.

The most common long-term condition was hypertension (with 17,800 patients registered), whilst dementia and mental health were the least prevalent long-term conditions (with 820 patients and 780 patients registered respectively) (Figure 2).

Table 1. The number of patients on each long-term condition register as at year end 2023. “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 is shown, as well as the average age of patients on the register.

Condition	All Patients	Proportion of Population	Average Age	Patients (Single condition)	Average Age (Single condition)
Hypertension (HYP)	17,800	17%	68	7,035	65
Obesity (OB)	11,635	11%	55	4,740	46
Asthma (AST)	5,965	6%	49	3,340	39
Diabetes (DIA)	5,055	5%	66	870	56
Coronary Heart Disease (CHD)	2,925	3%	73	505	66
Atrial Fibrillation (AF)	2,815	3%	75	445	67
Chronic Kidney Disease (CKD)	2,535	2%	78	275	70
Chronic Obstructive Pulmonary Disease (COPD)	2,325	2%	70	530	64
Stroke and Transient Ischemic Attack (STIA)	2,015	2%	74	350	64
Heart Failure (HF)	1,175	1%	79	50	69
Dementia (DEM)	820	1%	84	145	81
Mental Health Problems (MH)	780	1%	52	395	46

*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).

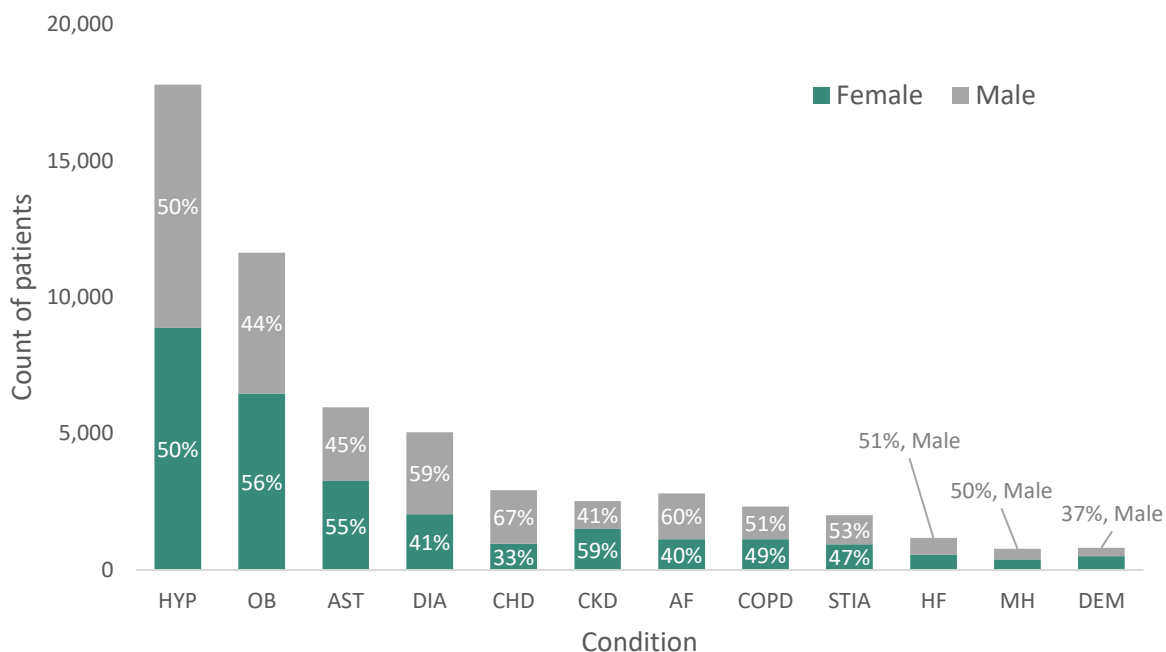
Of the 12 conditions considered:

- those conditions that were more likely to affect female patients were dementia (63% female and 37% male) and chronic kidney disease (59% female, 41% 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 groups⁴, 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).

⁴see Notes section for info on population denominators used

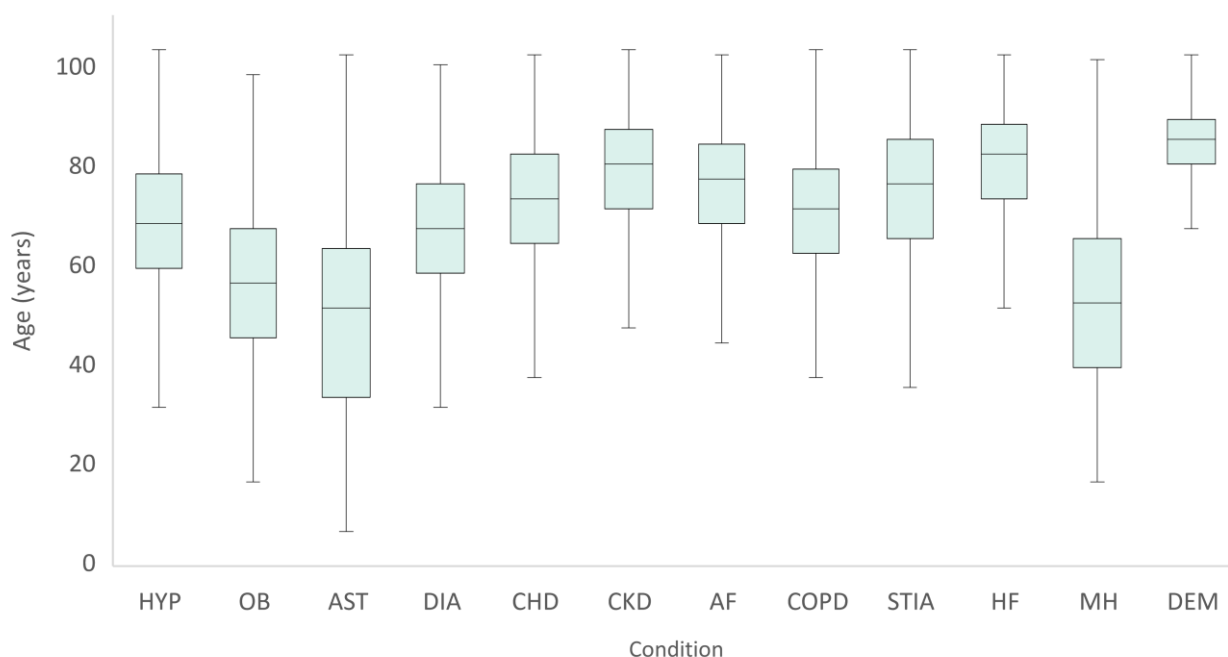
Figure 1. Prevalence of 12 long-term conditions amongst males and females in Jersey



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).

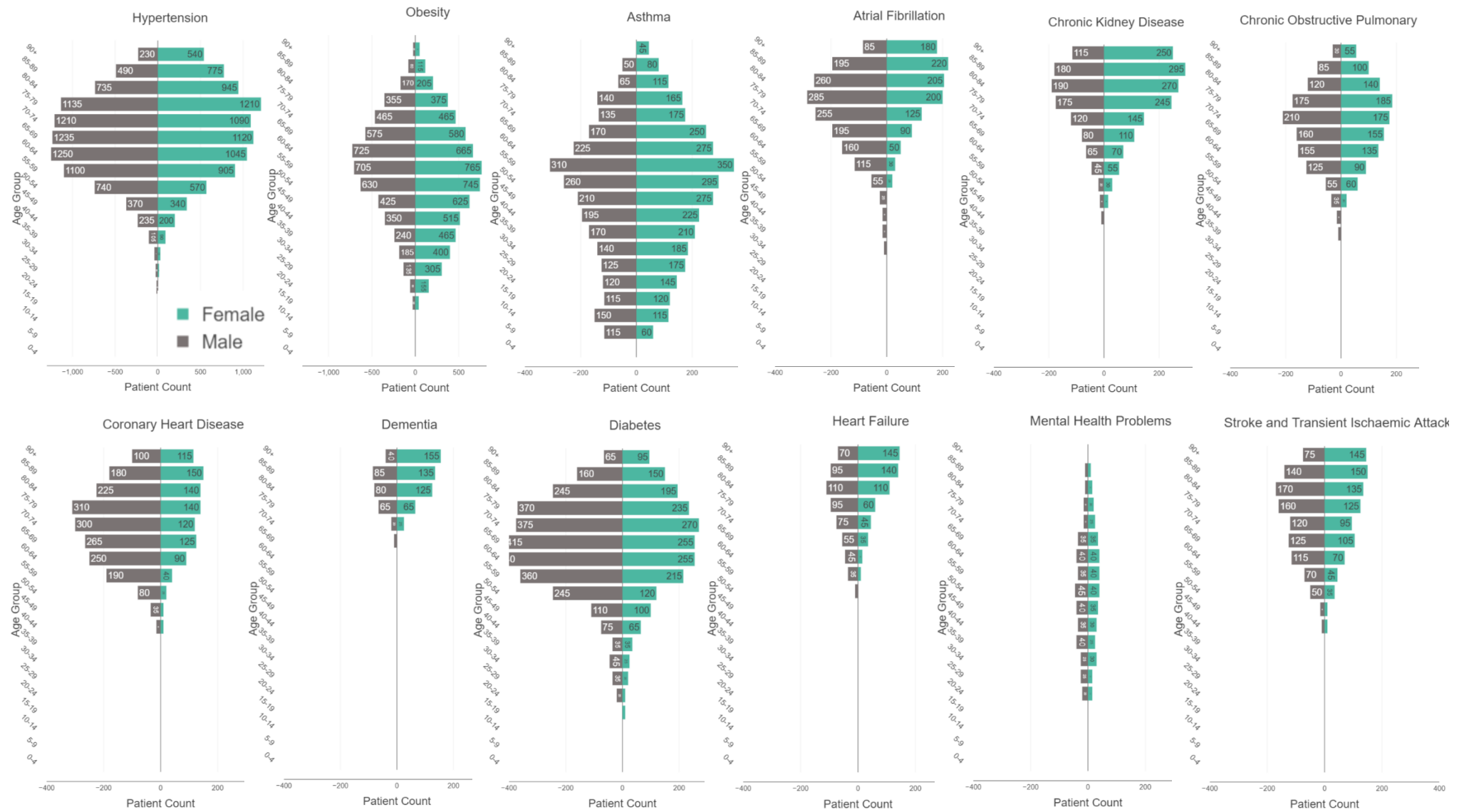
The average age for patients with only a single condition is lower than the average age of all patients (including those with other co-morbidities) (Table 1), because multiple morbidities become more common with age (see section on “Multi-morbidity by age”, Figure 8).

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



Patients with multiple morbidities

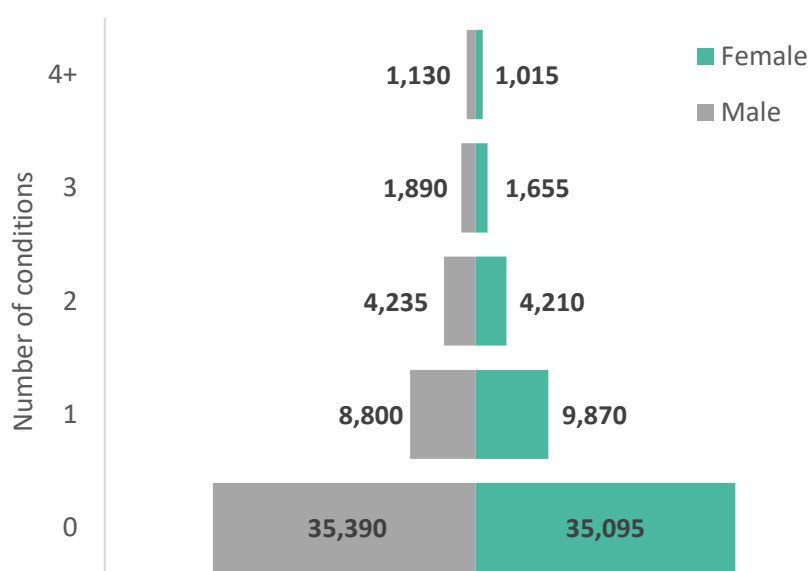
Of the 32,820 individuals who had at least one of the 12 long-term conditions as at the end of 2023:

- 18,675 individuals had a *single* long-term condition
- 14,140 individuals had *two or more* long-term conditions (multi-morbidity), around 765 more than the previous year
- approximately 14% of Jersey's overall population⁵ 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:

- 8,450 individuals had two conditions, equivalent to 8% of the population
- 3,545 individuals had three conditions, equivalent to 3% of the population
- 2,145 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 estimate

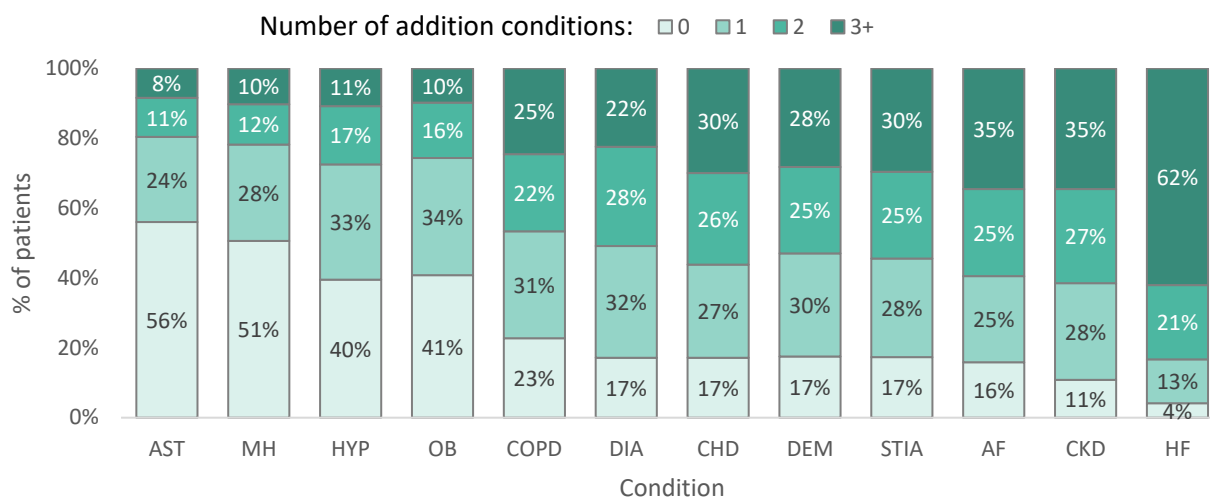


Some long-term conditions are more commonly found to co-occur with other diseases, and Figure 5 shows the number of *additional* conditions people on each of the disease registers are suffering from. For example:

- of those on the asthma register, 56% have only this *single* morbidity, whilst the other 44% have *at least one other* morbidity
- of those on the heart failure register, just 4% had only this *single* morbidity, and the other 96% had at least one other morbidity. Over half (62%) of patients on the heart failure register had 3 or more additional morbidities

⁵ see Notes section for info on population denominators used

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 4,940 people, this was more than 500 more than the previous year.

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.

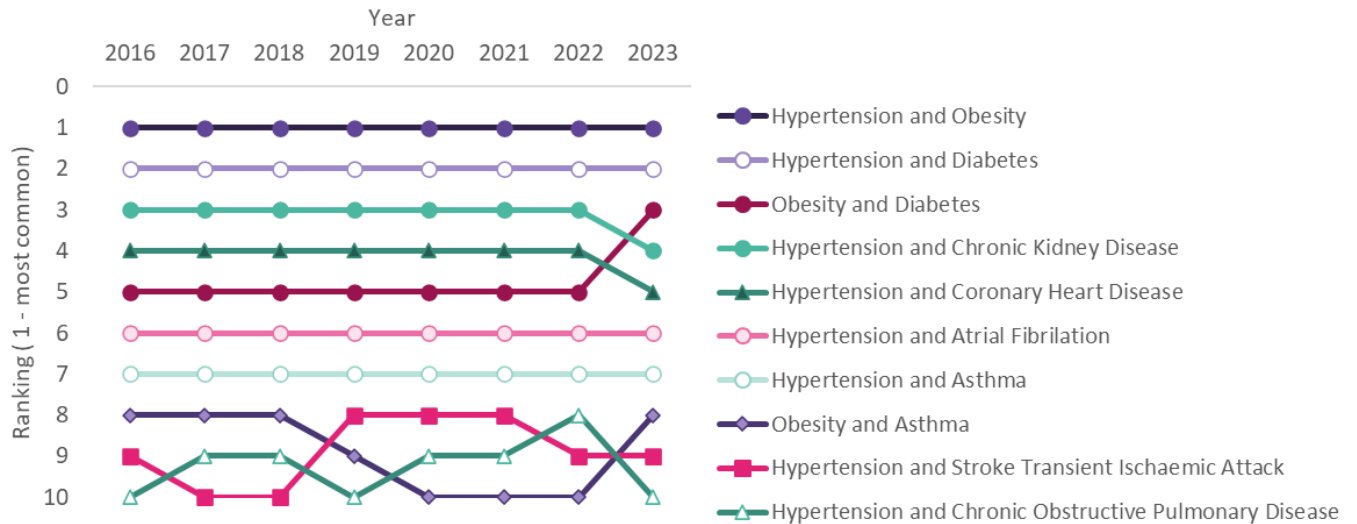
Table 2. Count of patients with each combination of co-occurring disease pairs, darker green indicates higher counts.

	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)
Asthma (AST)	210										
Coronary Heart Disease (CHD)	500	215									
Chronic Kidney Disease (CKD)	525	190	445								
Chronic Obstructive Pulmonary Disease (COPD)	250	555	335	240							
Dementia (DEM)	150	35	115	175	65						
Diabetes (DIA)	525	430	705	565	330	145					
Heart Failure (HF)	615	130	390	370	215	80	325				
Hypertension (HYP)	1,740	1,390	1,755	1,840	1,150	495	3,050	795			
Mental Health Problems (MH)	25	60	30	40	35	15	85	10	165		
Obesity (OB)	690	1,250	720	550	485	60	2,035	335	4,940	185	
Stroke and Transient Ischemic Attack (STIA)	445	140	320	325	195	170	385	205	1,235	20	340

The same 10 pairs of co-occurring morbidities have remained the most common over the last 8 years (Figure 6):

- the disease pairs ranked in positions 1 and 2 have remained in the same order of ranking
- obesity and diabetes has risen in ranking from 5th in 2022 to 3rd in 2023
- 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 2023)



Combinations of three conditions (triads)

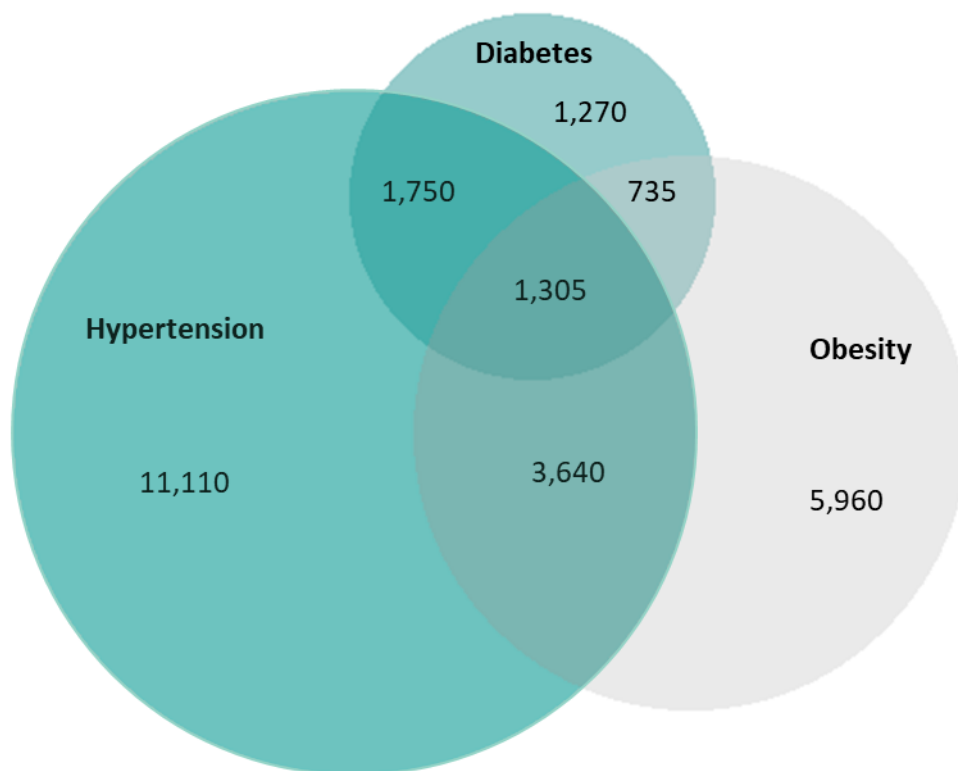
The most commonly co-occurring triads of morbidities are shown in Table 3

- hypertension, diabetes and obesity were the most commonly occurring triad of diseases, being present in 1,305 people
- hypertension and diabetes also commonly co-occurred with coronary heart disease (in 510 people)

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

Rank	Condition	Patients
1	Diabetes, Hypertension and Obesity	1,305
2	Coronary Heart Disease, Diabetes and Hypertension	510
3	Atrial Fibrillation, Hypertension and Obesity	490
4	Asthma, Hypertension and Obesity	490
5	Coronary Heart Disease, Hypertension and Obesity	485
6	Chronic Kidney Disease, Diabetes and Hypertension	465
7	Chronic Kidney Disease, Hypertension and Obesity	435
8	Atrial Fibrillation, Heart Failure and Hypertension	425
9	Atrial Fibrillation, Chronic Kidney Disease and Hypertension	425
10	Atrial Fibrillation, Diabetes and Hypertension	400

Figure 7. Venn diagram showing the most common occurring triad of disease (Hypertension, Obesity and Diabetes), Jersey, 2023



There has been some movement amongst the ranking of most common disease triads over the past 8 years. However, the same 12 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 2023.

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 195 people
- diabetes, hypertension and obesity also commonly co-occurred with chronic kidney disease (in 170 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	195
2	Chronic Kidney Disease, Diabetes, Hypertension and Obesity	170
3	Atrial Fibrillation, Chronic Kidney Disease, Heart Failure and Hypertension	165
4	Atrial Fibrillation, Diabetes, Hypertension and Obesity	160
5	Atrial Fibrillation, Heart Failure, Hypertension and Obesity	135
6	Asthma, Diabetes, Hypertension and Obesity	135
7	Atrial Fibrillation, Coronary Heart Disease, Heart Failure and Hypertension	135
8	Coronary Heart Disease, Chronic Kidney Disease, Diabetes and Hypertension	130
9	Atrial Fibrillation, Diabetes, Heart Failure and Hypertension	125
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 76 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	68	73	76

Figure 8a shows the distribution of multi-morbidity with age (by five-year age bands), and Figure 8b 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 8a. Number of long-term conditions by age; count of individual patients and b) proportion of population

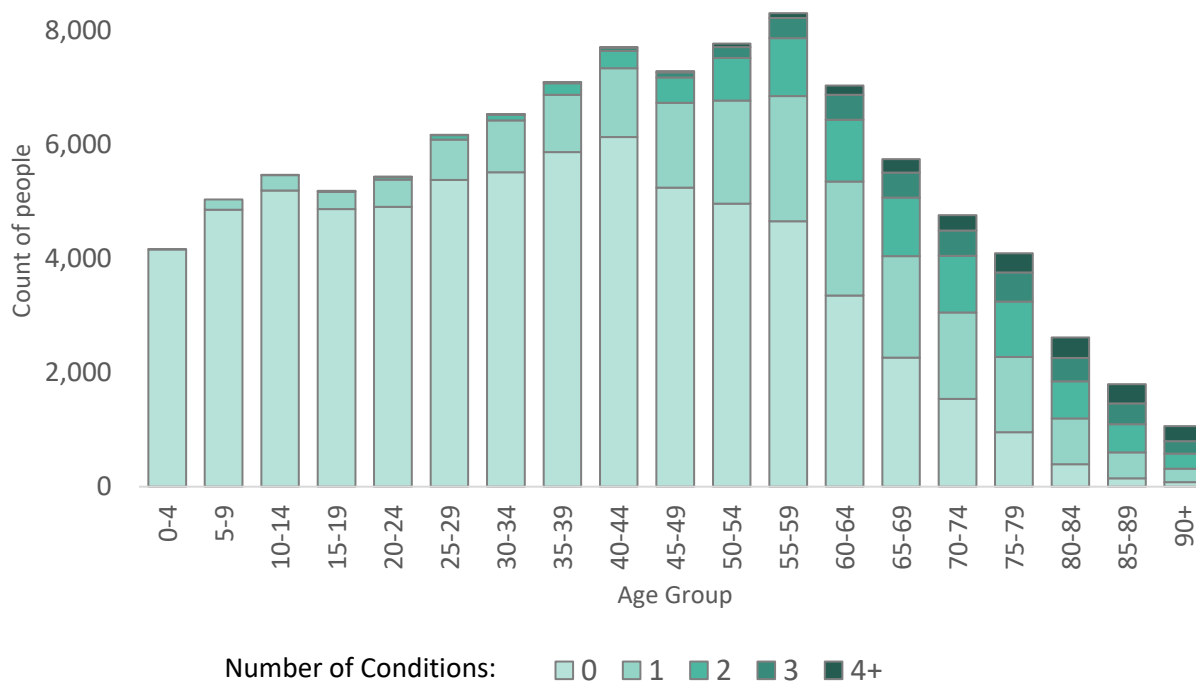
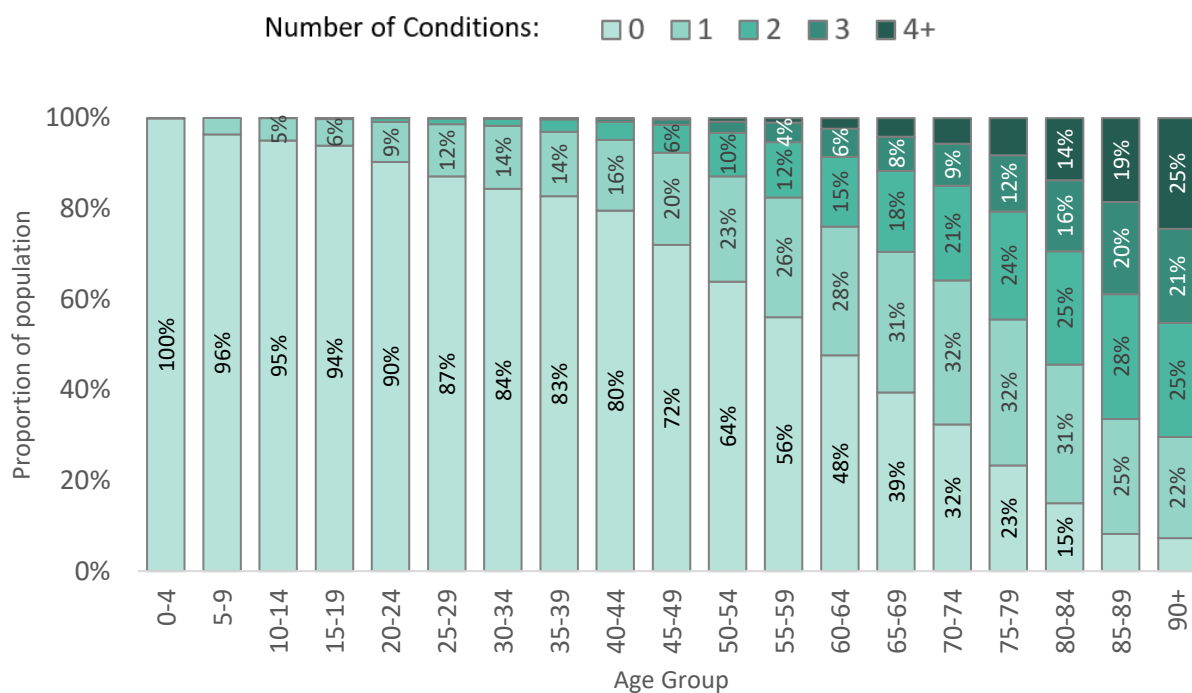
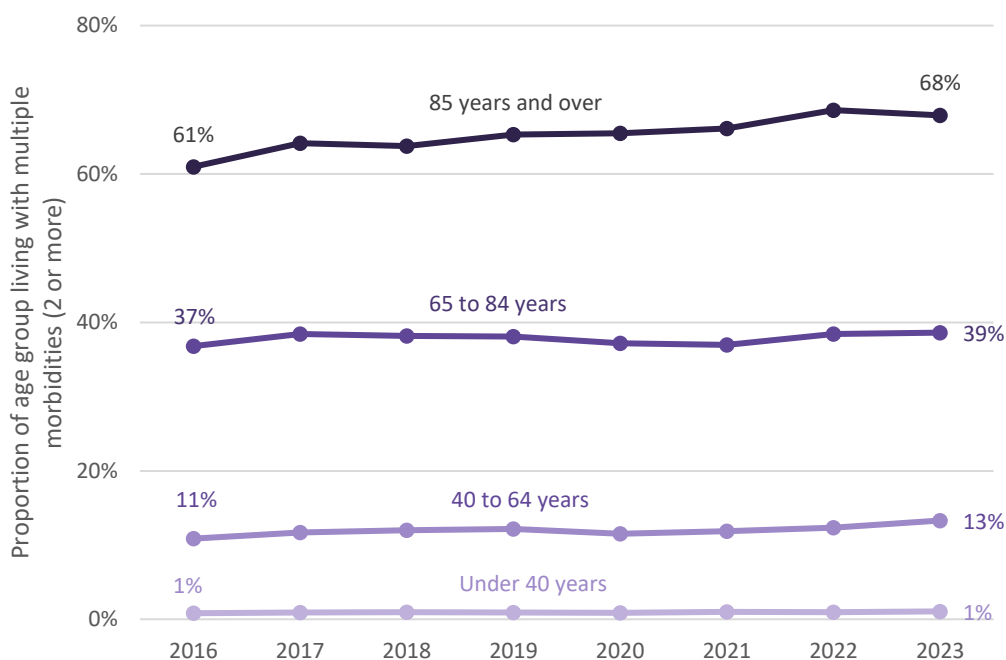


Figure 8b. Number of long-term conditions by age at year end 2023; proportion of population⁶



Overall, there has been a slight increase in the estimated proportion of the population living with multi-morbidity, from 11% in 2016 to 14% in 2023. This increase is mostly driven by an increase in the proportion of those aged 85 or over living with multi-morbidities, from 61% in 2016 to 68% in 2023 (Figure 9).

Figure 9. Proportion of Jersey's population⁶ in different age bands with multiple morbidities (2 or more long term conditions) between 2016 and 2023;



⁶ see Notes section for info on population denominators used

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 **220** 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.

Population figures

Where figures are expressed as a proportion of the population, most recent population estimates⁷ and projected population figures for 2023⁸ provided by Statistics Jersey have been used as denominators. Note that there may be some differences in prevalence estimates compared to previous versions of this report, and older reports used interim estimates in lieu of the official figures being published by Statistic Jersey in 2023.

Appendix 1: Jersey Quality Improvement Framework (JQIF) disease register descriptions:

Code	Condition	Definition
AST005	Asthma	A register of patients with asthma, over the age of 6, excluding patients with asthma who have been prescribed no asthma-related drugs in the preceding 12 months
AF007	Atrial fibrillation	A register of patients with atrial fibrillation
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)
COPD009	Chronic Obstructive Pulmonary Disease	A register of patients with a clinical diagnosis of COPD, confirmed by post-bronchodilator spirometry FEV1/FVC ratio below 0.7 between 3 months before or 6 months after diagnosis, where patient is able to undertake spirometry
DEM001	Dementia	A register of patients diagnosed with dementia
DM017	Diabetes mellitus	A register of all patients aged 17 or over with diabetes mellitus, which specifies the type of diabetes
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, psychosis and other patients on lithium therapy
OB002	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

⁷ [Population and migration statistics update 2022](#)

⁸ [Population Projections 2023-2080](#) (0 net migration scenario)

Appendix 2: Data tables

Appendix 2.1 shows numbers of patients on the long-term condition registers at year end over the last 8 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. 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 2023. Patient numbers rounded to the nearest 5.

<i>Condition</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>
<i>Atrial Fibrillation (AF)</i>	1,865	2,015	2,120	2,255	2,375	2,510	2,695	2,815
<i>Asthma (AST)</i>	5,595	5,555	5,570	5,625	6,985	5,725	6,055	5,965
<i>Coronary Heart Disease (CHD)</i>	2,550	2,620	2,675	2,770	2,830	2,890	2,915	2,925
<i>Chronic Kidney Disease (CKD)</i>	2,900	3,140	3,035	2,965	2,875	2,815	2,720	2,535
<i>Chronic Obstructive Pulmonary Disease (COPD)</i>	1,915	1,995	2,055	2,105	2,160	2,215	2,305	2,325
<i>Dementia (DEM)</i>	600	670	685	685	715	715	765	820
<i>Diabetes (DIA)</i>	3,705	3,840	4,015	4,165	4,415	4,670	4,840	5,055
<i>Heart Failure (HF)</i>	825	895	945	1,025	1,040	1,105	1,125	1,175
<i>Hypertension (HYP)</i>	15,525	15,870	16,275	16,610	16,880	17,380	17,635	17,800
<i>Mental Health Problems (MH)</i>		740	755	785	825	825	770	780
<i>Obesity (OB)</i>	9,740	10,570	10,900	10,790	8,455	9,380	9,915	11,635
<i>Stroke and Transient Ischemic Attack (STIA)</i>	1,515	1,540	1,590	1,650	1,730	1,780	1,850	2,015

Appendices 2.2, 2.3 and 2.4 show a complete list of all disease pairs, triads and quads that occurred in at least 150 people in Jersey at year end (2023).

Appendix 2.2. Pair groups (inclusive) containing over 150 patients, JQIF year end 2023

<i>Rank</i>	<i>Condition</i>	<i>Patients</i>
1	Obesity and Hypertension	4,940
2	Hypertension and Diabetes	3,050
3	Hypertension and Chronic Kidney Disease	1,840
4	Hypertension and Coronary Heart Disease	1,755
5	Obesity and Diabetes	2,035
6	Hypertension and Atrial Fibrillation	1,740
7	Hypertension and Asthma	1,390
8	Stroke and Transient Ischemic Attack and Hypertension	1,235
9	Hypertension and Chronic Obstructive Pulmonary Disease	1,150
10	Obesity and Asthma	1,250
11	Hypertension and Heart Failure	795
12	Diabetes and Coronary Heart Disease	705
13	Diabetes and Chronic Kidney Disease	565
14	Obesity and Coronary Heart Disease	720
15	Coronary Heart Disease and Chronic Kidney Disease	445
16	Chronic Kidney Disease and Coronary Heart Disease	445

17	Heart Failure and Atrial Fibrillation	615
18	Obesity and Chronic Kidney Disease	550
19	Atrial Fibrillation and Obesity	690
20	Obesity and Atrial Fibrillation	690
21	Chronic Obstructive Pulmonary Disease and Asthma	555
22	Hypertension and Dementia	495
23	Diabetes and Atrial Fibrillation	525
24	Obesity and Chronic Obstructive Pulmonary Disease	485
25	Heart Failure and Chronic Kidney Disease	370
26	Heart Failure and Coronary Heart Disease	390
27	Stroke and Transient Ischemic Attack and Atrial Fibrillation	445
28	Diabetes and Asthma	430
29	Stroke and Transient Ischemic Attack and Chronic Kidney Disease	325
30	Chronic Obstructive Pulmonary Disease and Coronary Heart Disease	335
31	Stroke and Transient Ischemic Attack and Coronary Heart Disease	320
32	Stroke and Transient Ischemic Attack and Diabetes	385
33	Diabetes and Chronic Obstructive Pulmonary Disease	330
34	Heart Failure and Diabetes	325
35	Chronic Obstructive Pulmonary Disease and Chronic Kidney Disease	240
36	Stroke and Transient Ischemic Attack and Obesity	340
37	Obesity and Heart Failure	335
38	Chronic Obstructive Pulmonary Disease and Atrial Fibrillation	250
39	Stroke and Transient Ischemic Attack and Heart Failure	205
40	Heart Failure and Chronic Obstructive Pulmonary Disease	215
41	Coronary Heart Disease and Asthma	215
42	Chronic Kidney Disease and Asthma	190
43	Mental Health Problems and Hypertension	165
44	Stroke and Transient Ischemic Attack and Chronic Obstructive Pulmonary Disease	195
45	Dementia and Chronic Kidney Disease	175
46	Asthma and Atrial Fibrillation	210
47	Obesity and Mental Health Problems	185
48	Stroke and Transient Ischemic Attack and Dementia	170
49	Dementia and Atrial Fibrillation	150

**Patient counts rounded to the nearest 5*

Appendix 2.3. Triad groups containing over 150 patients, JQIF year end 2023

<i>Rank</i>	<i>Condition</i>	<i>Patients</i>
1	Diabetes, Hypertension and Obesity	1,305
2	Coronary Heart Disease, Diabetes and Hypertension	510
3	Atrial Fibrillation, Hypertension and Obesity	490
4	Asthma, Hypertension and Obesity	490
5	Coronary Heart Disease, Hypertension and Obesity	485
6	Chronic Kidney Disease, Diabetes and Hypertension	465
7	Chronic Kidney Disease, Hypertension and Obesity	435
8	Atrial Fibrillation, Heart Failure and Hypertension	425
9	Atrial Fibrillation, Chronic Kidney Disease and Hypertension	425
10	Atrial Fibrillation, Diabetes and Hypertension	400
11	Coronary Heart Disease, Chronic Kidney Disease and Hypertension	350
12	Atrial Fibrillation, Coronary Heart Disease and Hypertension	350
13	Atrial Fibrillation, Hypertension and Stroke and Transient Ischemic Attack	315
14	Chronic Kidney Disease, Heart Failure and Hypertension	300
15	Chronic Obstructive Pulmonary Disease, Hypertension and Obesity	295
16	Diabetes, Hypertension and Stroke and Transient Ischemic Attack	280
17	Coronary Heart Disease, Heart Failure and Hypertension	275
18	Asthma, Diabetes and Hypertension	270
19	Coronary Heart Disease, Diabetes and Obesity	260
20	Asthma, Chronic Obstructive Pulmonary Disease and Hypertension	260
21	Chronic Kidney Disease, Hypertension and Stroke and Transient Ischemic Attack	255
22	Chronic Obstructive Pulmonary Disease, Diabetes and Hypertension	250
23	Hypertension, Obesity and Stroke and Transient Ischemic Attack	250
24	Heart Failure, Hypertension and Obesity	240
25	Diabetes, Heart Failure and Hypertension	240
26	Coronary Heart Disease, Hypertension and Stroke and Transient Ischemic Attack	235
27	Atrial Fibrillation, Diabetes and Obesity	220
28	Coronary Heart Disease, Chronic Obstructive Pulmonary Disease and Hypertension	215
29	Asthma, Diabetes and Obesity	210
30	Atrial Fibrillation, Chronic Kidney Disease and Heart Failure	200
31	Chronic Kidney Disease, Diabetes and Obesity	200
32	Atrial Fibrillation, Heart Failure and Obesity	195
33	Atrial Fibrillation, Coronary Heart Disease and Heart Failure	180
34	Chronic Kidney Disease, Chronic Obstructive Pulmonary Disease and Hypertension	175
35	Atrial Fibrillation, Chronic Obstructive Pulmonary Disease and Hypertension	170
36	Atrial Fibrillation, Diabetes and Heart Failure	160
37	Heart Failure, Hypertension and Stroke and Transient Ischemic Attack	150
38	Coronary Heart Disease, Chronic Kidney Disease and Diabetes	150
39	Chronic Obstructive Pulmonary Disease, Heart Failure and Hypertension	150

**Patient counts rounded to the nearest 5*

Appendix 2.4. Quad groups containing over 150 patients, JQIF year end 2023

<i>Rank</i>	<i>Condition</i>	<i>Patients</i>
1	Coronary Heart Disease, Diabetes, Hypertension and Obesity	195
2	Chronic Kidney Disease, Diabetes, Hypertension and Obesity	170
3	Atrial Fibrillation, Chronic Kidney Disease, Heart Failure and Hypertension	165
4	Atrial Fibrillation, Diabetes, Hypertension and Obesity	160

**Patient counts rounded to the nearest 5*