

## A PICTURE OF HEALTH

## OLDER PEOPLE

## 1. INTRODUCTION

The purpose of this paper is to present the Board with evidence in relation to older people and particular issues in relation to their health.

It concludes that the full range of developments outlined in 'A Picture of Health' are important to improve and maintain the health of older people, and that the location of emergency hospitals will not significantly affect the care for older people.

## 2. DEMOGRAPHIC TRENDS

The population is getting older and this trend is predicted to continue for the next twenty years at least. Population projections for Scotland, Health Board areas and Council areas covering the period 2005 - 2021 have been issued by the General Register Office for Scotland. Table 1 shows the projected changes for Lanarkshire NHS Board area<sup>1</sup> and Figure 1 illustrates the rising trend in the proportion of older people in the population.<sup>2</sup>

Table 1

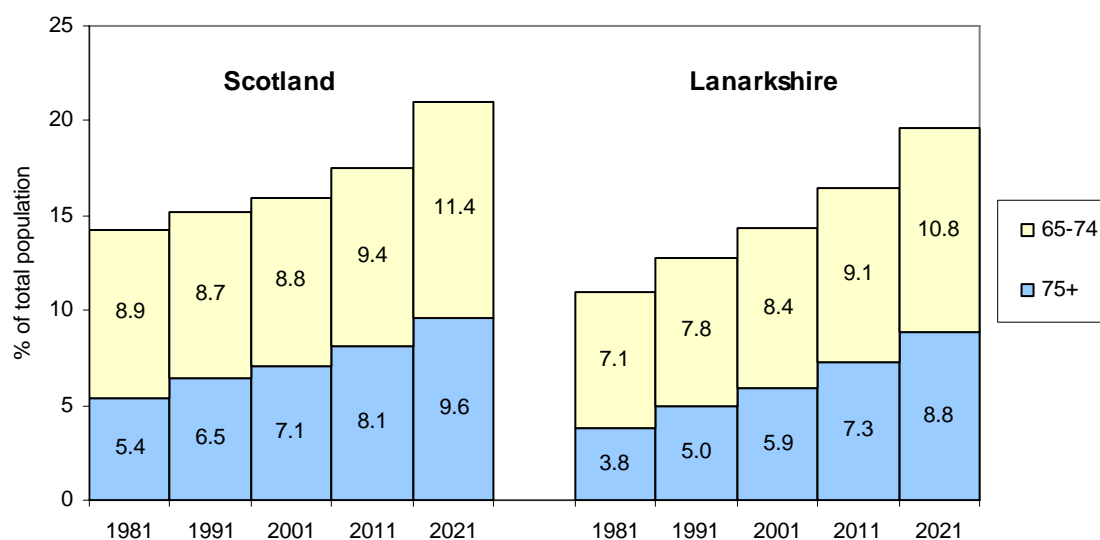
Projected change by age group, Lanarkshire 2002-2021

	Lanarkshire number ('000)				Percentage change 2005 - 2021	
	2005	2011	2016	2021	Lanarkshire	Scotland
0-4	31.2	30.5	30.0	29.8	-4.5	-3.8
5-14	69.6	65.8	63.9	62.3	-10.6	-13.5
15-29	103.0	106.7	103.3	99.3	-3.6	-6.9
30-44	126.4	112.2	104.6	105.2	-16.8	-15.0
45-59	113.2	122.0	127.3	120.3	+6.3	+2.3
60-74	78.0	85.8	91.0	98.9	+26.7	+27.3
75+	35.6	40.9	46.5	49.9	+40.1	+29.6
All ages	557.1	564.0	566.6	565.6	+1.5	+0.2

Populations for 2005 are mid-year estimates; populations for 2011-2021 are projections based on mid-year estimates for 2004.

Figure 1

Older age groups as percentage of population; Scotland, Lanarkshire; 1981-2021



The age structure of Lanarkshire will grow older at a greater rate than Scotland's structure, probably largely because of the impact of ageing in the former New Towns of East Kilbride and Cumbernauld. These populations lowered the average age of Lanarkshire since they were mostly younger than the longer established populations in other parts of Lanarkshire when they moved in. As these populations age, so Lanarkshire's age structure is moving towards the Scottish average.

Within NHSL area, the largest numbers of older (75+) people live in Hamilton, East Kilbride and Motherwell. The fastest rate of increase in the over 75's in the period 1991-2001 was in East Kilbride and Cumbernauld as shown in Table 2.

**Table 2**

Sector	Population 65-74			Population 75+		
	1991 N	2001 N	change %	1991 N	2001 N	change %
East Kilbride	6,351	7,695	21.2	3,411	4,887	43.3
Hamilton	8,123	8,632	6.3	5,318	6,348	19.4
<b>Hairmyres sector</b>	<b>14,474</b>	<b>16,327</b>	<b>12.8</b>	<b>8,729</b>	<b>11,235</b>	<b>28.7</b>
Airdrie	3,826	4,343	13.5	2,499	3,028	21.2
Coatbridge	4,185	3,929	-6.1	2,474	2,704	9.3
Cumbernauld	3,758	4,643	23.5	2,170	2,799	29.0
<b>Monklands sector</b>	<b>11,769</b>	<b>12,915</b>	<b>9.7</b>	<b>7,143</b>	<b>8,531</b>	<b>19.4</b>
Clydesdale	4,689	5,044	7.6	3,544	4,125	16.4
Motherwell	6,597	6,078	-7.9	4,118	4,643	12.7
Wishaw	5,864	6,046	3.1	3,906	4,058	3.9
<b>Wishaw sector</b>	<b>17,150</b>	<b>17,168</b>	<b>0.1</b>	<b>11,568</b>	<b>12,826</b>	<b>10.9</b>
<b>NHSL</b>	<b>43,393</b>	<b>46,410</b>	<b>7.0</b>	<b>27,440</b>	<b>32,592</b>	<b>18.8</b>

There are no official population projections for areas smaller than local authorities. As a very rough guideline, Table 3 gives an estimation of what the size of the 75+ population in 2013 in each sector might be.<sup>2</sup> This is based on a straightforward extrapolation of past trends and as such may be less reliable than the official GRO figures at health board level, where more detailed assumptions about population change are incorporated into the projection process. The calculation assumes past trends continue, with the main trend driving the future 75+ population being the past trend in the 65-74 population.

**Table 3**

LHCC	Baseline 2004	Estimation for 2013	% change 2004-2013
East Kilbride	5,820	7,900	36
Hamilton	6,622	7,900	20
<b>Hairmyres Sector</b>	<b>12,442</b>	<b>15,800</b>	<b>27</b>
Airdrie	2,930	3,700	25
Coatbridge	2,912	3,100	7
Cumbernauld	3,013	4,100	35
<b>Monklands sector</b>	<b>8,855</b>	<b>10,900</b>	<b>23</b>
Clydesdale	4,301	5,200	20
Motherwell	4,958	5,300	7
Wishaw	4,175	4,700	14
<b>Wishaw sector</b>	<b>13,434</b>	<b>15,200</b>	<b>13</b>
<b>NHSL</b>	<b>34,731</b>	<b>41,900</b>	<b>20</b>

*Note – Estimated populations for 2013 are rounded to nearest 100  
 - Percentage change figures are rounded to nearest digit*

The data in Table 3 suggest that although East Kilbride, Hamilton and Motherwell have the highest numbers of people aged 75 years and over in 2004, the largest increases in this population group over the next few years are predicted to be in East Kilbride, Cumbernauld and Airdrie. The projected rate of increase up to 2013 is highest in the Hairmyres sector, followed closely by the Monklands sector, and it is projected that the Hairmyres sector will have the highest number of older people in 2013.

The distribution of older people across Lanarkshire according to township is detailed in Table 4. These data show that East Kilbride and Hamilton have the greatest number of older people followed by Wishaw, Airdrie and Coatbridge.

**Table 4**

**NHS Lanarkshire Township populations; Persons aged 65+**

Township	Population
East Kilbride	11987
Hamilton	7772
Wishaw	7758
Airdrie	7364
Coatbridge	6874
Cumbernauld	6117
Motherwell	5012
Bellshill	4579
Rural Clydesdale	4116
Larkhall/Stonehouse	3700
Lanark	2810
Carluke	2639
Blantyre	2435
Shotts area	2157
Uddingston/Bothwell	2060
Kilsyth	1988
Viewpark	1908
Strathaven	1675
Lanarkshire	82950

*Data source: Weighted CHI November 2004*

### **3. EPIDEMIOLOGY**

Overall life expectancy (LE) describes the number of years an individual is expected to live from birth and is calculated by using age-specific death rates. Healthy life expectancy (HLE) describes the number of years of healthy life that an individual can expect to live from birth<sup>4</sup>. HLE can be estimated by combining life expectancy with self-reported health status as measured in the census (presence of limiting long term illness (LLI)) or the Scottish Health Survey (self-assessed health (SAH)). The discrepancy between LE and HLE therefore indicates the length of time that people can expect to spend in poor health. As shown in Table 5, life expectancy (LE) in Lanarkshire at birth is similar to Scotland, but healthy life

expectancy at birth (HLE) is around 3 or 4 years less in Lanarkshire. Overall life expectancy (LE) is similar in North and South Lanarkshire but healthy life expectancy in North Lanarkshire is a few years less than for South Lanarkshire. These data indicate that people in Lanarkshire spend more time in poor health than the Scottish average and that people in North Lanarkshire spend more time in poor health than in South Lanarkshire.

**Table 5**

**Life expectancy and estimated healthy life expectancy at birth in Lanarkshire (1999/2000)<sup>4</sup>**

Area	Life expectancy at birth (year is 1999/2000)		Healthy life expectancy at birth (year is 1999/2000)	
	Females	Males	Females	Males
Lanarkshire NHS Board	78	72	53 (LLI) 64 (SAH)	50 (LLI) 61 (SAH)
North Lanarkshire Council	78	72	50 (LLI) 61 (SAH)	47 (LLI) 60 (SAH)
South Lanarkshire Council	78	73	56 (LLI) 66 (SAH)	54 (LLI) 62 (SAH)
Scotland	78	73	57 (LLI) 67 (SAH)	54 (LLI) 64 (SAH)

Table 6 provides an indication of life expectancy in each locality in Lanarkshire.

**Table 6**

**Life expectancy by locality in Lanarkshire<sup>5</sup>**

Locality	Male LE	Rank	Female LE	Rank
Cumbernauld	73.8	5	78.2	6
Airdrie	71.7	3	77.6	3
Coatbridge	70.1	1	76.9	1
Motherwell	72.5	4	77.1	2
Wishaw	71.4	2	77.8	5
Clydesdale	74.1	7	78.8	7
East Kilbride	74.8	8	79.9	8
Hamilton	73.9	6	77.7	4
Lanarkshire	73		78	

*Note – higher rank denotes higher life expectancy*

After the age of 65 years, the discrepancy between life expectancy (LE) and estimated healthy life expectancy (HLE) is similar across Lanarkshire, Scotland and North and South Lanarkshire (Table 7). These data indicate that after the age of 65, people in Lanarkshire spend approximately the same number of years in poor health as the Scottish average. Also people in North Lanarkshire spend the same number of years in poor health as in South Lanarkshire after the age of 65.

**Table 7****Life expectancy and healthy life expectancy at age 65 in Lanarkshire (1999/2000)<sup>4</sup>**

Area	Life expectancy at age 65 (year is 1999/2000)		Healthy life expectancy at age 65 (year is 1999/2000)	
	Females	Males	Females	Males
Lanarkshire NHS Board	17	14	8 (LLI) 11 (SAH)	7 (LLI) 10 (SAH)
North Lanarkshire Council	17	13	7 (LLI) 11 (SAH)	6 (LLI) 9 (SAH)
South Lanarkshire Council	17	14	8 (LLI) 12 (SAH)	7 (LLI) 10 (SAH)
Scotland	18	15	9 (LLI) 13 (SAH)	8 (LLI) 11 (SAH)

Based on data and trends in life expectancy and healthy life expectancy across Lanarkshire and Scotland, it is expected that the overall prevalence of health problems and disabilities among older people in Lanarkshire will increase by around 10% over the next ten years, in line with the predicted increase in the total number of older people<sup>6</sup>. The main causes of death in older people in Lanarkshire are similar to the general population with CHD/stroke, cancer and respiratory diseases being the most common. The main causes of emergency hospital admissions in older people in Lanarkshire are coronary heart disease, respiratory disease, fractured femur, stroke and non-specific signs and symptoms that cannot be attributed to any condition.<sup>7</sup> Older people are more likely to have multiple concurrent illnesses, are more susceptible to developing complications as a result of these, and are more likely to require intensive rehabilitation following an illness. Older people frequently have non-specific symptoms and it can be harder to reach a diagnosis as a result.<sup>8</sup> It is reasonable to assume that older people will use a higher level of health and social care resource even when compared with other population groups that have a similar level of illness.

**4. USE OF HOSPITAL SERVICES BY OLDER PEOPLE IN LANARKSHIRE**

A major part of the mainstream work of the NHS is the treatment and care of older people. In the year to 31 March 2004, Lanarkshire residents aged 65 and over attended Acute Hospitals as follows:

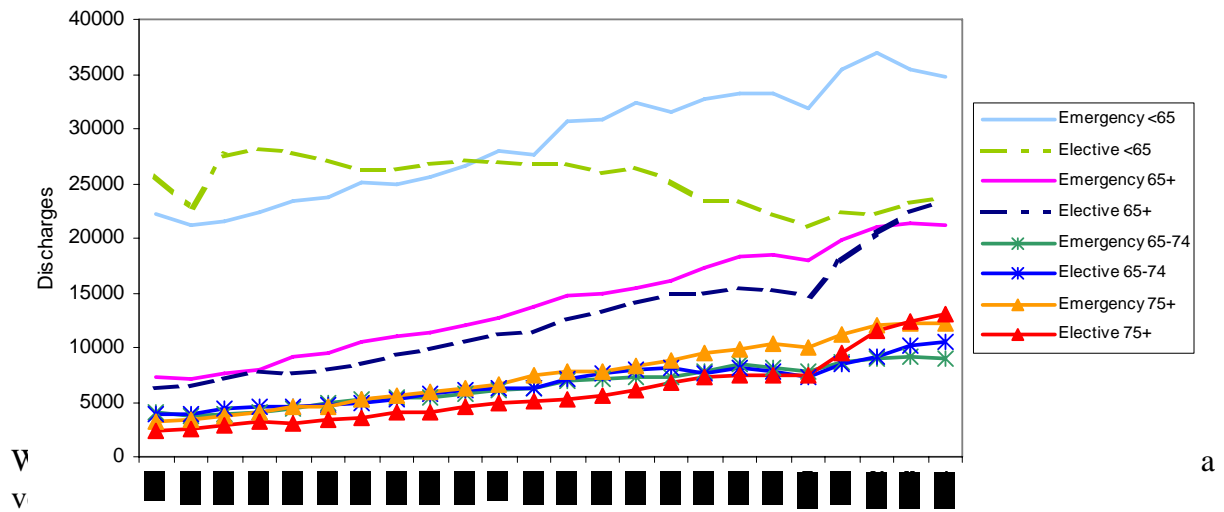
New outpatient attendances	- 32,251	- 21% of the total
Day case discharges	- 15,631	- 29% of the total
Inpatient discharges	- 45,216	- 38% of the total
Inpatient bed days	- 653,567	- 47% of the total

(Source: DPH Annual Report 2004, Table A22)

There are long-standing upward trends in emergency episodes for Lanarkshire residents aged both under 65 and 65 and over and also in elective episodes for those aged 65+ (Figure 2). In contrast, numbers of elective episodes under age 65 have shown a long-term tendency to fall, though rising in more recent years.<sup>9</sup> The rising trends for age 65+ are contributed to by those age 65-74 and age 75+. The most obvious recent increase (since 2000) is in the number of elective admissions in the population over 75 years.

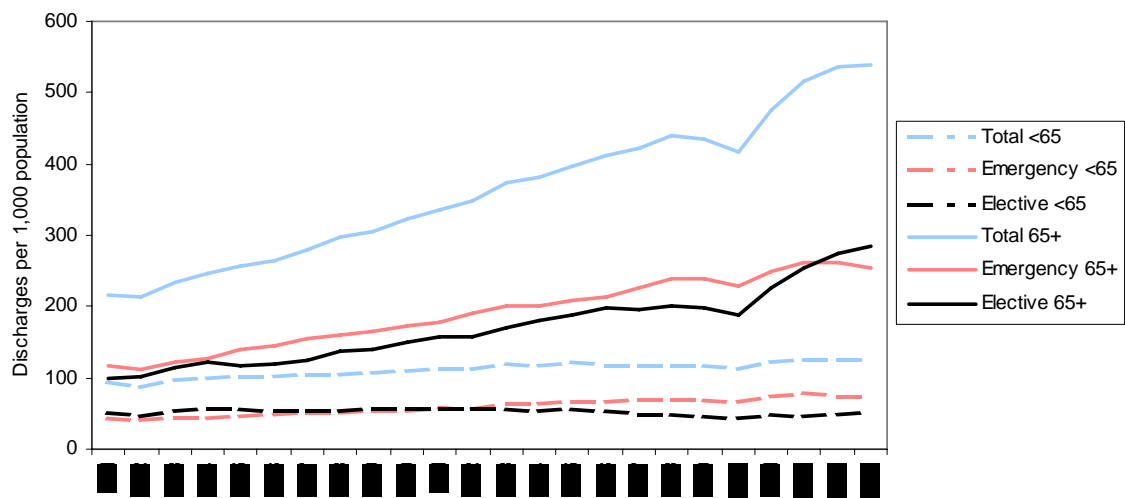
**Figure 2**

**Inpatient discharges: 1981-2004<sup>9</sup>**  
**Lanarkshire residents, by age group and type of admission**



**Figure 3**

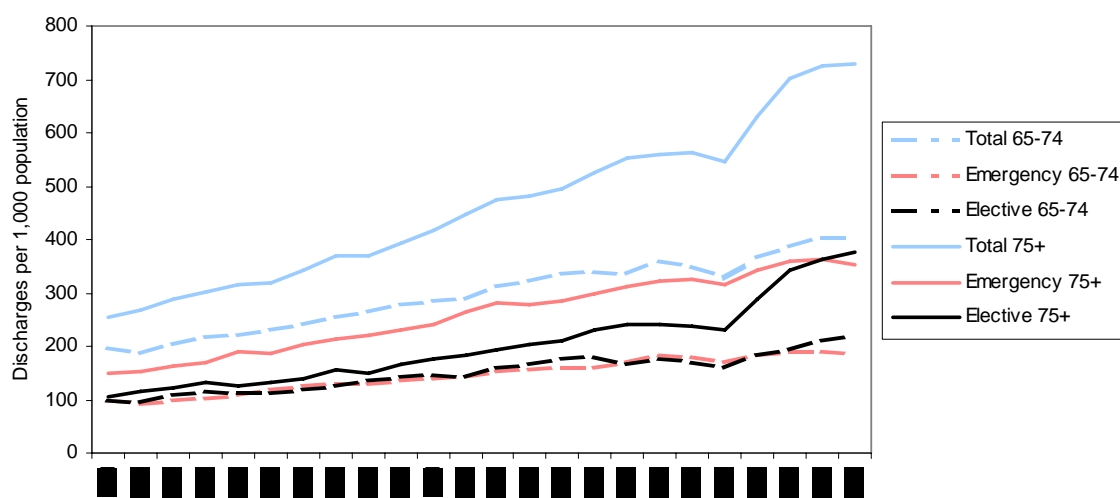
**Inpatient discharges per 1,000 age-specific population: 1981-2004<sup>9</sup>**  
**Lanarkshire residents aged <65 and 65+ years, by age group and type of admission**



Within the older age group, rates for those aged 75+ are higher and rising more rapidly than those for age 65-74, especially in relation to elective admissions since 2000 (Figure 4). In 2003 elective admission rates in the over 75's exceeded emergency rates for the first time.

**Figure 4**

**Inpatient discharges per 1,000 age-specific population: 1981-2004<sup>9</sup>**  
**Lanarkshire residents aged 65-74 and 75+ years, by age group and type of admission**



Over the period 1981-2004, the age balance of the population has become more elderly, but the change in the age balance of hospital admissions has been much more substantial (Table 8). Unplanned admission rates have risen at a slightly higher rate than the overall increase in older people. However overall inpatient episodes have risen at a considerably higher rate than the overall increase in the proportion of older people. This suggests that elective admissions are increasing at a faster rate than emergency admissions and account for most of the increase in the rate of admissions seen in older people, particularly those aged 75 and over.

**Table 8**

**Change in age balance of population and inpatient episodes, 1981-2004<sup>9</sup>**

		Percentages of all-ages totals							
		1981	1986	1991	1996	2001	2002	2003	2004
% population age	65+	10.9	11.7	12.8	13.5	14.4	14.6	14.7	14.9
	75+	3.8	4.4	5.0	5.4	5.9	6.1	6.1	6.2
% inpatient episodes age	65+	22.1	25.6	30.3	35.3	39.5	41.3	42.8	43.3
	75+	9.1	11.6	14.6	17.9	21.7	23.3	24.9	24.5
% unplanned IP episodes	65+	24.7	28.6	31.2	33.8	36.0	36.2	37.7	37.8
	75+	11.0	13.9	16.4	18.6	20.4	20.7	21.6	21.9

**Patterns of cross-boundary flow**

NHSL is a net ‘exporter’ of older people for hospital care, for both geriatric assessment and for all acute specialities (Table 9).

**Table 9**

**Acute In-patient episodes and flows age 65+: 2004/05<sup>9</sup>**

	All acute specialties	Geriatric assessment
Lanarkshire residents admitted in Lanarkshire	40,170	2,103
Lanarkshire residents admitted elsewhere	4,640	158
Non-Lanarkshire residents admitted in Lanarkshire	1,937	82

Within Lanarkshire, Monklands has the second highest number of inpatient episodes in people aged 65 and over in spite of the fact that it has the lowest resident population in this age group (Table 10). It appears likely that part of the explanation for this is that sectors/localities do not entirely reflect the hospital catchments. This may particularly be the case in the Bellshill/Viewpark area of Motherwell, defined as part of Wishaw sector. The overall effect, however, is that the resident population base substantially under-estimates the actual level of acute elderly inpatient demand in the Monklands sector, while it over-estimates acute elderly inpatient demand in the Hairmyres and Wishaw sectors.

**Table 10**

**Acute episodes aged 65+ by sector of residence/treatment, NHSL 2004/05<sup>9</sup>**

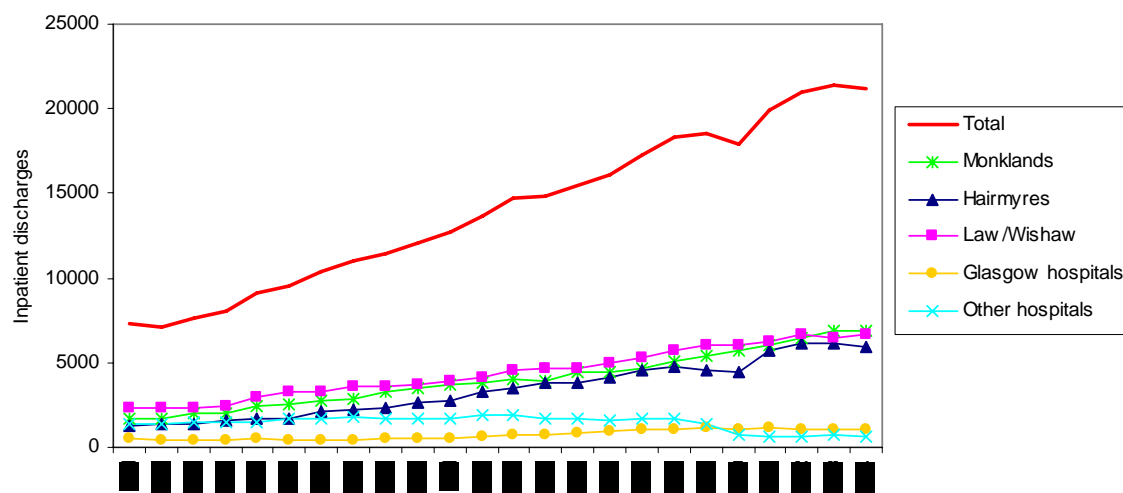
	Hairmyres	Monklands	Wishaw	NHSL	Other Board
Lanarkshire residents' episodes by sector of residence	15,646	12,670	16,494	44,810	
Lanarkshire residents' episodes by sector of treatment	12,271	13,730	14,169	40,170	4,640
Non-Lanarkshire residents by sector of treatment	1,398	347	192	1,937	
Total episodes by sector of treatment	13,669	14,077	14,361	42,107	
Total treatment episodes as % residents' episodes	87.4	111.1	87.1	94.0	
Total treatment episodes per 1000 population 65+	461	630	464	508	
Population 65+ (2003:DPH A2)	29,629	22,343	30,978	82,950	

Emergency and elective admissions of older people have been rising at a similar rate across all three hospitals in Lanarkshire since 1981, although admissions to hospitals outside Lanarkshire have started to fall more recently (Figure 5 and Figure 6).

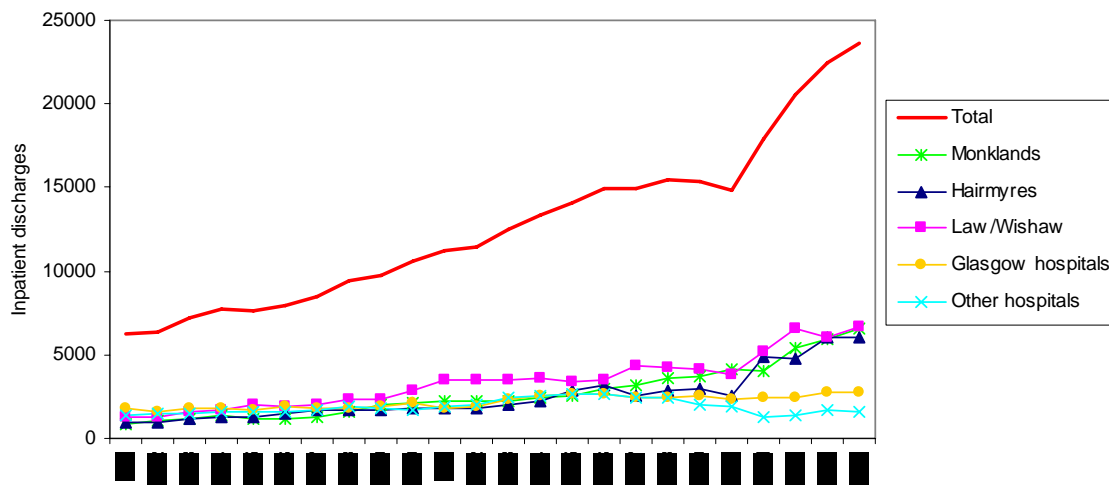
**Figure 5**

**Inpatient discharges: 1981-2004<sup>9</sup>**

**Lanarkshire residents aged 65+ years - emergency admissions**



**Figure 6**  
**Inpatient discharges: 1981-2004<sup>9</sup>**  
**Lanarkshire residents aged 65+ years - elective admissions**



Lanarkshire is reported as having well above the Scottish average rate for multiple admissions of older people, although the average length of stay on each admission in Lanarkshire is reported to be below the Scottish average<sup>10</sup> and maintaining this requires the provision of appropriate intermediate care beds. Multiple admissions refer to the number of people that are admitted to hospital on two or more occasions in a single year, and the data cover the period April 2001 to March 2004. This pattern of frequent short duration admissions is mostly accounted for by older people with chest pain (cardiac and non-cardiac) and acute exacerbations of Chronic Obstructive Pulmonary Disease (COPD), although some of these admissions are due to frail older people with multiple illnesses who are at high risk of falling in their homes.

## 5. COMMUNITY and HOSPITAL ASSESSMENT AND CARE FOR OLDER PEOPLE

*Adding life to years*, the Scottish Executive Report of the Expert Group on Healthcare of Older People published in 2001 highlighted this as the principle task of the NHS in the 21st century.<sup>11</sup> While there are increases in hospital admissions over 65 and increasingly over 75, the report noted that 95% of over 65's stay at home. Promoting healthy lifestyles for this group is an additional challenge to those emphasised in *Improving Health In Scotland - The Challenge*<sup>12</sup> which recommends health promotion action in early years, in the teenage transition, in the workplace and in communities, while some progress has been made in the community setting, given the increasing proportion of older people in the population, more focused action is required to promote healthy lifestyles in older people and assumes a new importance.

Encouraging physical activity, either individually or in groups, can help to maintain or even regain muscle strength. Maintaining social and mental activity is also important for health and wellbeing. A nourishing diet becomes increasingly important with increasing age, where under nutrition rather than obesity is an increasing problem. Dentition is also important in older people, so that they can eat and enjoy a variety of foods.

Smoking is a lesser problem in older people although many may be ex-smokers. Excess alcohol consumption is also a lesser problem, affecting 6% of males and 1.5% of women, but such drinking tends to occur on a daily basis and may be concealed.

The importance of promoting health in older people may therefore, be underestimated and requires further consideration.

Protecting health and preventing disease is also key to maintaining health in older people.

Annual immunisation against influenza and 10 year immunisation against pneumococcal pneumonia play an important part in reducing mortality in otherwise fit older people. The regular administration of aspirin to prevent recurrence of Stroke and Myocardial Infarction, and Warfarin in atrial fibrillation to prevent stroke are vital, along with Calcium and Vitamin D to reduce the likelihood of fractures. Depression in older people usually responds well to medication and practitioners must be trained to ensure its early diagnosis and treatment. Compliance with medication is therefore of particular importance in older people and training for professionals and patients alike is important to ensure that these potential benefits are not lost.

Planned admission to hospital for surgical treatment of cataract and joint replacement also play an important role in improving the quality of life of older people. Although there is evidence of differences in health service utilisation according to socio-economic group, there is generally a lack of data on specific healthcare needs to compare it with.<sup>8</sup> Nonetheless some specific published analyses suggest that older people from deprived communities are relatively disadvantaged in terms of access to healthcare, particularly elective procedures.

The Acheson Report<sup>13</sup> highlighted research, which showed that severe visual problems are less likely to be recognised and treated in older people from disadvantaged communities and further research in Scotland showed that older people from deprived areas are less likely to have planned surgery for inguinal hernia, while emergency hernia repair rates are similar across socio-economic groups.<sup>14</sup>

Surveys have shown that older people prefer to stay at home whenever possible and collaboration between health and social care services to make this possible has improved considerably over recent years. The Expert Advisory Group<sup>11</sup> also emphasized the importance of managing older people in the community or a brief stay in hospital for specialist assessment when this is required. Acute illness can, therefore, be treated at home when appropriate, with access to appropriate investigation and intervention where necessary, along with supported early discharge when appropriate to do so. This must be planned with multidisciplinary input and there has been significant investment in reducing to a minimum the number of patients whose discharge is delayed, the majority of whom are elderly.

Recent enhancements to some local services in Lanarkshire have been put in place to reduce the number of admissions in older people and other population groups. Chest pain and heart failure are two of the common causes of the need for unscheduled care and rapid access chest pain clinics reduce the need for emergency admission. Waiting times in all three hospital sites is under two weeks. Heart failure is increasingly managed by community-based heart failure nurses.

The Expert Advisory Group report<sup>11</sup> also noted that half of older people arrive at hospital for outpatient appointments by car, one quarter arrive by bus, less than one in ten walk, or by ambulance, 25% of older people did not have access to a car and the draft QIS standards for older people highlighted the role of CHPs in ensuring adequate transport to facilitate access for older people. The importance of access to information was also highlighted to enable older people to be active participants in their own care, including discharge planning and follow-up arrangements.

These issues are likely to become increasingly important as younger generations become older and are likely to be more demanding and have higher expectations of benefit from new technology such as minimal access surgery. NHS Lanarkshire recognizes the needs of the increasing number of older people, many of whom are living with long term conditions. These issues are recognised in *Delivering for Health*<sup>15</sup> and cannot be gainsayed.

The Older People Project Board, as part of a *Picture of Health*, has developed a set of service re-organisation proposals to reduce admissions in older people. Developments in Primary Care are key, particularly in those areas with the fastest growing elderly population, along with the development of a rapid assessment and treatment service, the proposed Respiratory Managed Clinical Network to manage acute exacerbations of COPD in the community, care management pilots targeting older people and enhanced support to residents in care homes and case management for vulnerable older people should begin to address these issues. It will be important to keep pace with the requirements of older people, particularly those over 75 years of age.

## **6. CONCLUSION**

The people of Lanarkshire are ageing like the rest of Scotland and the number of older people are projected to increase in all parts of the county. Ninety-five per cent of older people live at home and prefer to do so, and *A Picture of Health* describes improvements in primary care services, particularly for those with long term conditions. These, along with health promotion, health protection and planned secondary care are key to maintaining and improving the health of older people. While emergency admissions of older people are increasing, given the relatively short average length of stay the location of emergency hospitals will not significantly affect the quality of care for older people or their care experience.

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