Future of Adult Social Care in North East Lincolnshire

1.0 Introduction

North East Lincolnshire (NEL) has significant health and social care needs, with considerable health inequalities between different areas of the Borough. Overall, the population is ageing, however with an ageing population comes a range of social and economic challenges, and these place particular demands on public services, since for adults in general, care needs increase with age. The ageing population is due partly to longer life expectancy but mainly due to the large birth cohorts of the baby boom generation that are now reaching old age.

The increase in life expectancy has not been matched by an equivalent increase in healthy life expectancy and many people spend a large number of years experiencing disability and poor health. People are living longer with chronic conditions and services that were once designed to treat people with acute illnesses have had to evolve to support people to live better with long term conditions. This pattern is likely to continue with more diseases that might once have been considered terminal becoming amenable to chronic disease management to a greater or lesser degree. Obviously the impact on social care of these trends is enormous as it inevitably leads to more and more people requiring support to continue to function effectively.

These trends have been occurring at a time when the political and economic landscape has been against providing the sort of increased budget into health and social care that would be required to meet the rapid increase in demand and this is leading to unprecedented challenges in providing these services and ensuring they are appropriately staffed. The model of health and social care provision is therefore likely to continue to evolve over the next decade with a growing pressure for transformational change from Governments.

There are a range of conditions which are particularly associated with old age e.g. sensory impairment, dementia, falls, frailty etc. There has been an increase in the number of older people reporting long-term health conditions, and the likelihood of being diagnosed with two or more long-term conditions has been increasing too. In addition to age, multi morbidity is also strongly correlated with deprivation, with people in deprived communities found to have the same prevalence of multi-morbidity as people who are over a decade older in more affluent areas. Therefore, health inequalities are also an important factor when considering potential adult social care (ASC) demand.

There is also increased demand in the under 65 population. This is driven by a range of factors, such as increased survival of babies born prematurely or with complex conditions, better treatments for a range of life shortening conditions and increased prevalence of a range of learning disabilities

in children that is not fully understood. Mental illness in adults and children has also been increasing which is adding additional pressures. Formal care for this population can be extremely costly due to more intensive needs or because the care will be required for a much longer period, sometimes extending over many decades. Therefore, the capacity to understand and forecast future demand is an important component of commissioning across health and social care.

2.0 Aims of the Study

This study aims to:

- To understand and forecast future adult social care demand in North East Lincolnshire (NEL) between now and 2035 to support commissioning across health and social care.
- To get an insight into future social care workforce
- To understand the role public health measures can play
- To undertake a literature review which includes steps that can be taken to reduce pressure on social care and
- Make recommendations on changing the way social care is delivered in NEL.

3.0 Methodology

The most recent population estimates, and population projections published by the Office for National Statistics (ONS) were analysed. Many of the figures were taken from the Projecting Older People Population Information (POPPI) and Projecting Adult Needs And Service Information (PANSI) systems, which are provided by the Institute of Public Care on licence from the Department of Health. This data may be useful to help understand adult social care demand between now and 2035. This includes a range of projections for the local population, some of which are for the population overall, however most projections regard the prevalence of particular conditions that are most likely to require a social care response.

A literature review was undertaken by summarising different sources of information in this subject area. This literature review includes steps that can be taken to reduce pressure on social care.

4.0 **Population Estimates and Population Projections**

As mentioned earlier, this section includes the most recent population estimates and population projections published by the ONS. Many of the figures presented below are taken from POPPI and PANSI systems, which are provided by the Institute of Public Care on licence from the Department of Health. These projections are trend based projections which mean assumptions are based on observed levels mainly over the most recent years. They show what the population will be if recent trends in these continue. It is important to understand that these projections do not take into account policy changes, or economic, or health factors, that could impact the population in the future.

Whilst the overall population of NEL is not projected to increase over the next 5 to 10 years, due to changes in the internal structure of the local population, the number of older people is projected to rise considerably over the next decade, and this is likely to lead to increased demands on health and social care services associated with old age. As mobility decreases with age, consideration needs to be given to the availability of transport and the accessibility of services.

The most recent population estimates are the mid-2022 resident population estimates published by the ONS on 23 November 2023. These estimate the NEL resident population at 157,754 people, of which 33,453 are aged 65 years and over. This equates to 21.2% (over a fifth) of the local population being aged 65 years and over, which is higher than that for the England population overall (18.6%).

The latest subnational population projections are 2018-based and were published on 24 March 2020. Long-term subnational population projections are an indication of the future trends in population by age. The assumptions used in the subnational population projections are based on past trends, for example births, deaths, and migration. They show what the population will be if recent trends continue. Population projections for NEL suggest a considerable increase in the 65 years and over population, along with a marked increase in the 85 years and over population. Thus by 2035, it is projected that there will be over 8,000 additional people added 65 and over living in NEL compared to the 2023 baseline.

	2023	2025	2030	2035
People aged 65-69	9,300	9,700	11,100	10,800
People aged 70-74	8,200	8,300	9,200	10,500
People aged 75-79	7,700	8,000	7,500	8,400
People aged 80-84	4,800	5,100	6,600	6,300
People aged 85-89	3,100	3,200	3,500	4,500
People aged 90+	1,700	1,800	2,000	2,400
Total population 65+	34,800	36,100	39,900	42,900

Table 1: Population aged 65 and over, numbers projected to 2035, North East Lincolnshire

Source: POPPI Crown copyright

Table 2: Population aged 65 and over, and percentage change from 2023 to 2035, North East Lincolnshire and England

	2023	2025	2030	2035
		NEL (Eng)	NEL (Eng)	NEL (Eng)
People aged 65-69	-	4% (5%)	19% (21%)	16% (24%)
People aged 70-74	-	1% (-1%)	12% (10%)	28% (27%)
People aged 75-79	-	4% (3%)	-3% (-3%)	9% (8%)
People aged 80-84	-	6% (9%)	38% (37%)	31% (29%)
People aged 85-89	-	3% (4%)	13% (20%)	45% (53%)
People aged 90+	-	6% (4%)	18% (19%)	41% (41%)
Total population 65+	-	4% (4%)	15% (15%)	23% (25%)

Source: POPPI Crown copyright.

England figures in ()

Table 3:Population aged 65 and over as a percentage of the total population, projected to 2035,North East Lincolnshire and England

	2023	2025	2030	2035		
	NEL (Eng)	NEL (Eng)	NEL (Eng)	NEL (Eng)		
People aged 65+	22% (19%)	23% (20%)	25% (21%)	27% (23%)		
People aged 85+	3% (3%)	3% (3%)	3% (3%)	4% (4%)		

Source: POPPI Crown copyright.

England figures in ()

Population projections for the NEL 65 years and over population for 2035 show that approximately 45% of the population will be male and 55% female. The 65 years and over population being comprised of a higher percentage of females compared to males is to be expected given the higher life expectancy of females.

Loneliness and social isolation can have implications for physical health and lead to higher rates of mortality. By 2035, just over 8,800 people aged 75 years and over are projected to be living alone in NEL. Prevalence figures (29% males and 50% females) were taken from the Labour Force Survey and applied to ONS population projections for NEL. A larger proportion of those living alone are female because there are more women than men in the total population aged 75 and over, again due to women's higher life expectancy, and also because husbands are typically older than their wives leading to more women than men becoming widowed.

Table 4: People aged 75 and over predicted to live alone, numbers projected to 2035, and percentage change from 2023 to 2035, North East Lincolnshire

	2023	2025	2030	2035	2023 to 2035
Males	2,175	2,291	2,523	2,755	+27%
Females	4,900	5,100	5,450	6,050	+23%
Total	7,075	7,391	7,973	8,805	+24%

Source: POPPI Crown copyright

By 2035, there are close to 2,000 people projected to be living in care homes in NEL, over 60% of whom are predicted to be aged 85 years and over. Figures have been calculated by taking prevalence figures from the ONS Census and applying these to ONS population projections for NEL.

<u>Table 5:</u> People aged 65 and over living in a care home, numbers projected to 2035, and percentage change from 2023 to 2035, North East Lincolnshire

	2023	2025	2030	2035	2023 to 2035
People aged 65-74	143	147	166	174	+22%
People aged 75-84	439	460	495	516	+18%
People aged 85+	765	797	877	1,100	+44%
Total population	1,348	1,405	1,538	1,934	+43%

Source: POPPI Crown copyright

Just over 5,900 people aged 65 and over are projected to be providing **unpaid care to a partner**, family member, or other person by 2035, which is an increase of over 1,000 people from the 2023 baseline of 4,850. A person is a provider of unpaid care if they look after or give help or support to family members, friends, neighbours or others, because of long-term physical or mental ill health or disability, or because of problems related to old age. Again, figures have been calculated by taking prevalence figures from the ONS Census and applying these to ONS population projections for NEL. Providing support to carers is essential considering how integral they are to the health and social care system. Relying on unpaid care is likely to become more challenging in the future due to the average number of children per family reducing and many families being dispersed geographically.

As people age, they are increasingly likely to need **help with everyday tasks**. Just under 12,700 people aged 65 and over are projected to need help with at least one domestic task by 2035, which is an increase of over 2,500 people from the 2023 baseline of 10,100. Nearly half of these are in the 80 years and over age group with approximately two thirds being female. Similar numbers of people

will require help with at least one self-care activity. For younger adults it is predicted that there will be over 4,000 adults aged 18 to 64 years with a moderate or severe personal care disability by 2035. All these figures were calculated from prevalence figures from the Health Survey for England and applying these to ONS population projections for NEL.

Approximately 10,900 people aged 65 and over are projected to be **living with a limiting long-term illness by 2035** and whose day-to-day activities are limited a lot, which is an increase of over 2,200 people from the 2023 baseline of just under 8,700. These figures were calculated by taking prevalence figures from the ONS Census and applying these to ONS population projections for NEL.

Neurological conditions are associated with the highest levels of social care need and the most prevalent of these conditions is dementia. Over 3,250 people are predicted to be living with dementia in NEL by 2035, of which 2,000 will be female. Figures were calculated by taking prevalence figures from a Dementia UK report prepared by King's College London and the London School of Economics for the Alzheimer's Society and applying these to ONS population projections for NEL.

	2023	2025	2030	2035	2023 to 2035
People aged 65-74	404	414	461	501	+24%
People aged 75-84	993	1,045	1,180	1,202	+21%
People aged 85+	1,075	1,154	1,256	1,555	+45%
Total males	918	970	1,100	1,227	+34%
Total females	1,555	1,642	1,796	2,030	+31%
Total population	2,473	2,612	2,896	3,257	+32%

Table 6: People aged 65 and over predicted to have dementia, numbers projected to 2035, and percentage change from 2023 to 2035, North East Lincolnshire

Source: POPPI Crown copyright

Cardiovascular disease (CVD) is one of the main causes of death and disability in the UK. Approaching 14,000 people aged 65 years and over are predicted to be living with CVD in NEL by 2035. Figures were calculated from CVD estimates from the Health Survey for England and applying these to ONS population projections for NEL. CVD estimates are defined as ever having any doctor-diagnosed heart attack, angina, heart murmur, abnormal heart rhythm, or stroke.

Table 7:People aged 65 and over predicted to have any cardiovascular disease, by age and
gender, North East Lincolnshire, numbers projected to 2035, and percentage change from 2023 to
2035

	2023	2025	2030	2035	2023 to 2035
People aged 65-74	4,797	4,898	5,503	5,820	+21%
People aged 75+	6,384	6,684	7,251	7,983	+25%
Total males	6,006	6,242	6,952	7,458	+24%
Total females	5,145	5,340	5,802	6,345	+23%
Total population	11,151	11,582	12,754	13,803	+24%

Source: POPPI Crown copyright

Falls are the largest cause of emergency hospital admissions for older people, and significantly impact on long term outcomes e.g. being a major cause of people moving from their own home to long-term residential care. Falls that result in injury can be very serious, leading to fractures and hospitalisation. Over 11,700 people aged 65 years and over are predicted to have a fall in 2035. There are also predicted to be close to 1,500 admissions to hospital of people aged 65 years and over as a result of a fall in 2035.

Figures for the number of falls were calculated using prevalence figures from the Health Survey for England. Figures for hospital admissions were calculated using Admitted Patient Care Hospital Episode Statistics. Both of these prevalence figures were applied to ONS population projections for NEL.

Table 8: People aged 65 and over predicted to have a fall, by age and gender, North East Lincolnshire, numbers projected to 2035, and percentage change from 2023 to 2035

	2023	2025	2030	2035	2023 to
					2035
People aged 65-79	5,646	5,828	6,184	6,688	+18%
People aged 80+	3,633	3,815	4,519	5,025	+38%
Total males	3,699	3,859	4,373	4,749	+28%
Total females	5,580	5,784	6,330	6,964	+25%
Total population predicted to have a fall	9,279	9,643	10,703	11,713	+26%
Total population predicted to be admitted to hospital	1,125	1,176	1,344	1,467	+30%

Source: POPPI Crown copyright

Sight loss is a particularly important issue in the context of an ageing population such as NEL. Avoidable sight loss is both a serious and modifiable public health issue. Early detection and treatment are vital for the prevention of sight loss, and this assists people to maintain independent lives and reduce social care support needs which would be necessary for permanent sight loss. In addition to the loss of independence, sight loss can increase the risk of depression, falls and hip fractures, and of living in poverty. Prevalence figures from a report published by the RNIB have been applied to ONS population projections for NEL. Approximately half have cataracts or refractive error (i.e. correctable sight loss). Age related macular degeneration is the most common cause of registerable sight loss in older people.

Table 9:People aged 75 and over predicted to have a moderate or severe visual impairment, andpeople aged 75 and over predicted to have registrable eye conditions, North East Lincolnshire,numbers projected to 2035, and percentage change from 2023 to 2035

	2023	2025	2030	2035	2023 to
					2035
People aged 75+ predicted to have a moderate or severe visual impairment	2,145	2,244	2,430	2,678	+25%
People aged 75+ predicted to have registrable eye conditions	1,107	1,158	1,254	1,382	+25%

Source: POPPI Crown copyright

Hearing loss is a common long term condition and is also another important issue in the context of an ageing population. Hearing loss can be a serious condition adversely impacting health and quality of life. People with hearing loss can find it difficult to communicate and there are increased risks of social isolation and dementia. Most cases are not treatable as such by medication and the primary intervention is usually the provision of hearing aids. Prevalence figures for adult hearing loss and severe hearing loss were taken from a national study and applied to ONS population projections for NEL. Over 35,500 adults are predicted to be living with some hearing loss in NELin 2035, and over 4,000 adults are predicted to be living with severe hearing loss.

Table 10: P	eople aged	18 to 6	4 and ac	ed 65	and over	predicted	to have	hearing	loss,	North	East
Lincolnshire	numbers n	rojecter	- 1 to 2035	and n	ercentado		from 202	- 23 to 20'	35		

2020	2025	2030	2035	2023 to
				2035
9,835	9,821	9,295	8,824	- 10%
596	598	562	522	-12%
21,281	22,042	24,581	26,690	+22%
2,765	2,878	3,352	3,650	+32%
31,116	31,863	33,877	35,514	+14%
3,361	3,477	3,913	4,172	+24%
	9,835 596 21,281 2,765 31,116 3,361	9,835 9,821 596 598 21,281 22,042 2,765 2,878 31,116 31,863 3,361 3,477	9,835 9,821 9,295 596 598 562 21,281 22,042 24,581 2,765 2,878 3,352 31,116 31,863 33,877 3,361 3,477 3,913	9,835 9,821 9,295 8,824 596 598 562 522 21,281 22,042 24,581 26,690 2,765 2,878 3,352 3,650 31,116 31,863 33,877 35,514 3,361 3,477 3,913 4,172

Source: PANSI and POPPI Crown copyright

Obesity is a significant public health concern. Obesity is a risk factor for a wide range of chronic diseases, and the risk and severity of these diseases increases with a higher body mass index (BMI). The prevalence of obesity has been steadily increasing at all ages in recent decades which will impact negatively on public health in the future and increase demand for health and social care services. The prevalence in the future is harder to predict as societal changes could have a positive or negative impact on future obesity levels. However, based on current data close to 13,000 adults are predicted to be obese by 2035 in NEL. Prevalence figures were taken from the Health Survey for England and applied to ONS population projections for NEL.

Table 11:	People	aged 6	5 and	over wh	no are	e obese	(BMI	30+),	, North	East	Lincolns	shire,	numbers
projected to	o 2035,	and per	centa	ge chan	ge fro	m 2023	to 20	35					

	2023	2025	2030	2035	2023 to 2035
People aged 65-74	5,639	5,801	6,509	6,897	+22%
People aged 75+	4,864	5,090	5,512	6,074	+25%
Total males	4,784	4,961	5,536	5,921	+24%
Total females	5,719	5,929	6,485	7,050	+23%
Total population	10,503	10,890	12,021	12,971	+24%

Source: POPPI Crown copyright

Diabetes is a chronic condition that affects how the body regulates blood sugar, leading to high blood sugar levels. There are two main types of diabetes. Type 1 diabetes is an auto-immune

condition where the cells that produce insulin are destroyed. Type 2 diabetes occurs when the body stops producing enough insulin, or the insulin produced does not work effectively. There are distinct differences in risk profiles and prevalence between Type 1 and Type 2 diabetes. The most significant factors for the onset of Type 2 diabetes are age and weight. Prevalence figures for doctor diagnosed diabetes were taken from the Health Survey for England and applied to ONS population projections for NEL. Over 8,200 adults are predicted to be living with diabetes in NELin 2035. In addition to these, there will be people with undiagnosed diabetes, and also many people who will have blood sugar above the normal range, but not high enough to be diagnosed as having diabetes, which is known as having pre-diabetes.

Table 12:People aged 18 to 64 and aged 65 and over predicted to have Type 1 or Type 2diabetes, by age and gender, North East Lincolnshire, numbers projected to 2035, and percentagechange from 2023 to 2035

	2023	2025	2030	2035	2023 to 2035
People aged 18-64	3,195	3,170	3,001	2,879	+10%
People aged 65-74	2,265	2,328	2,615	2,766	+22%
People aged 75+	2,041	2,148	2,330	2,565	+26%
Total males	4,208	4,277	4,440	4,562	+8%
Total females	3,292	3,368	3,505	3,649	+11%
Total population	7,500	7,645	7,946	8,211	+9%

Source: PANSI and POPPI Crown copyright

POPPI and PANSI apply existing prevalence estimates to population projections to calculate future prevalence estimates. Should health behaviours deteriorate it may be that these projections will be underestimated. However, with new technology being employed and rolled out in the adult social care system, along with developments in medicine and treatment, it may be that the rate of social care needs will fall over time, resulting in the number of people with social care needs increasing more slowly than the growth in the older population, and therefore these projections will be overestimated.

5.0 Social Care Workforce

As already stated, the demand for social care services is expected to increase due to the ageing population with complex needs. One of the biggest challenges to delivering sufficient high-quality services is the availability and quality of the workforce. Social care workers are among the lowest paid in the UK, impacting recruitment and retention, creating high turnover and vacancy rates, all of which will impact the care received by service users in the future. With the pay and benefits received by social care workers lower than other care professions, despite the important and demanding nature of their work, social care faces severe competition from these other sectors that offer more

attractive staff benefits, pay, pension, and other terms and conditions. Low pay can be demotivating for staff, who are often required to work long hours with some on zero-hours contracts, making it difficult to secure a stable income. In addition, many workers are not paid for travel time or expenses, which increases the financial pressure. In terms of career progression, social care workers often have limited opportunities for progression in their career, and this can be attributed to factors such as funding and resources, as well as a lack of clearly defined career pathways and training opportunities. Additionally, social care workers may not have access to the same benefits and training opportunities as other healthcare professionals within the NHS.

Skills for Care is the strategic workforce development and planning body for adult social care in England. Skills for Care has published a workforce intelligence summary for each local authority in England summarising the adult social care sector and workforce of the area. These reports use information from the Adult Social Care Workforce Data Set (ASC-WDS) and present data on a range of themes. Figures from the NEL summary for 2022/23 are presented below. *Source of information: Skills for Care workforce intelligence, summary of the adult social care sector and workforce in NEL, 2022/23.*

Size and structure of the workforce:

- The adult social care workforce had an estimated 5,700 posts, which was comprised of 5,300 filled posts and 400 vacancies.
- Compared to 2021/22, the number of posts had increased by 450 (9%), the number of filled posts had increased by 475 (10%), and the number of vacancies had decreased by 25 (-5%).
- Of the 5,300 filled posts, 88% of posts (equating to 4,660 posts) were with independent sector providers, 8% were for working for direct payment recipients, and 5% were with other sectors.
- As at March 2023, there were 74 CQC regulated services, of which 55 were residential and 19 were non-residential services.

Recruitment and retention:

Of the estimated 4,600 filled posts in the independent sector in NEL-

- The staff turnover rate was 23.9% which was lower than the regional average of 29.9% and lower than England at 28.3%.
- The estimated vacancy rate was 7.2%, which was similar to the regional average of 8.0% and lower than England at 9.9%.
- Around two thirds (60%) of starters were recruited from within the adult social care sector.
- Workers had on average 9.8 years of experience in the sector and 78% of the workforce had been working in the sector for at least three years.

Employment information:

Of the estimated 4,600 filled posts in the independent sector in NEL-

- It is estimated that 325 are management roles, 100 are regulated professionals, 3,500 are direct care workers (including 2,700 care workers), and 700 are other non-care providing roles.
- The average number of sickness days taken in NEL was lower than that for both England and the Yorkshire and the Humber.
- A much lower proportion of NEL workers were on zero hours contracts compared to England and the Yorkshire and the Humber.
- It is estimated that a higher proportion of the direct care providing workforce in NEL hold a relevant adult social care qualification (57%) compared to England (46%) and the Yorkshire and the Humber (50%).

Workforce demographics:

Of the estimated 4,600 filled posts in the independent sector in NEL

- The majority (91%) of the workforce were female.
- The average age was 45 years old.
- Workers aged under 25 years old comprised 9% of the workforce. Workers aged 55 years and over comprised 31% of the workforce, therefore, approximately 1,400 posts will have reached or be approaching retirement age over the next 10 years.

Source: Skills for Care workforce intelligence, summary of the adult social care sector and workforce in North East Lincolnshire, 2022/23

6.0 Role of Public Health

Public health has a critical role to play, however it should also be recognised that to successfully address the needs of an aging population, it will require the collective efforts from across the breadth of the health and social care system.

Working with national and local decision makers, public health will be able to support the establishment of policies that promote healthy aging and can be at the forefront of research to inform emerging policy and practice. Public health has a wide remit and can work across systems to join up partners and agree optimal pathways. This may involve working with planners, housing, and transport, to ensure the needs of an aging population are fully accommodated in future designs. Public health can also have an advocacy role, for instance with the voluntary and community sector regarding their support for carers, and also a system steering role to ensure there is a collective focus on the conditions which are particularly associated with old age.

Many of the underlying factors that will contribute to the increased demand of adult social care that is forecast over the next decade, serve to **reinforce the importance of public health prevention and early intervention programmes**, which can prevent or delay the onset of long-term conditions and improve the wellbeing and independence of older people.

The adoption of a life course approach will lead to a recognition that activities undertaken earlier in life impact health and wellbeing in later years. Promoting healthy aging involves encouraging older adults to maintain physical, mental, and social wellbeing, which includes physical activity, mental stimulation, social engagement, good diet and nutrition, health screening to detect and consequently manage health conditions, and immunisation to ensure that older adults are receiving the recommended vaccines. Healthy aging is amenable to a wide range of initiatives such as falls prevention and managing hearing loss for example. In addition, public health investment to impact children and adults in terms of, for example, exercise, obesity, managing diabetes, and reducing smoking, can impact future population multi-morbidity.

Since improvements in living standards and medicine have contributed to people remaining healthy and independent later into life, particularly in our most affluent areas, it needs to be remembered that this is not necessarily the case in our most deprived neighbourhoods, therefore an understanding of local health inequalities will be essential. Our local health inequalities are stark, however public health are well positioned to take a lead in highlighting these inequalities, which may involve identifying hard to reach groups, accessibility inequalities, or areas of low service uptake. Effective population health management can help with the identification and management of people with the conditions that drive adult social care demand.

7.0 Literature Review - Future of Adult Social Care

The England age demographic structure is changing. Due to advances in medicine and public health, life expectancy in England and Wales (and many other countries with advanced economies) has substantially increased over the years, from just over age 40 in 1840 to almost double in 2021, as shown in Figure 1 (Chief Medical Officer, 2023).

As a result of these improvements in life expectancy, as well as the fact that people are now having fewer children than in the past, England's demographic age structure is changing (Chief Medical Officer, 2023), with a larger proportion of the overall population being aged over 65 (and over 85) than in previous generations (The Health Foundation, 2021). This change in demographic structure can be seen by the population pyramids in Figure 2, comparing the age structures of England and Wales between 1948 (when the NHS was first established) and 2021.



Figure 1: Life expectancy at birth in England and Wales between 1841 - 2021

Source data: Office for National Statistics, Mortality in England and Wales1



Figure 2: 1948 and 2021 population pyramids for England and Wales

Source data: Office for National Statistics, Population estimates - England and Wales⁵

Various projections for future changes in population growth have been carried out and all agree that these trends are set to continue for several decades at least, with the largest increases in population growth predicted among the 85 and older age group (Chief Medical Officer, 2023).

Whereas in 2016 there were 1.6 million people aged over 85 years, in 2041 there is projected to be double that amount (3.2 million), and in 2066 there will be treble (5.1 million). In contrast, there is a projected increase in 16 - 64-year-olds of just 2% by 2041, and 5% by 2066 (Chief Medical Officer,

2023). These projected changes to the English population structure in future years can be visualised in Figures 3 and 4 (The Health Foundation, 2023).





Source: Office for National Statistics





Source: 2020-based ONS principal population projections for England;¹⁰ ONS historical estimates of the population for the UK and constituent countries.²

Impact of the ageing population on long term conditions

The prevalence of diagnosed long-term conditions increases among older age groups, as shown in Figure 5 (The Health Foundation, 2021)





Source: CPRD, 2015.

Figure 6 below shows that whilst life expectancy increased between 2010 and 2019 (from 80.6 years to 81.7 years) and is projected to increase further by 2040 (to 83.1 years), the number of years which people can expect to live free from major illness will remain constant at 70 years. This is thought to be because although there have been favourable trends in certain risk factors (such as smoking, cholesterol and blood pressure) this has been counteracted by rising levels of obesity, which almost doubled between 1993 and 2019 (The Health Foundation, 2023). This means that people will live longer with illness, which is sometimes referred to as an 'expansion of morbidity'(The Health Foundation, 2023). The Health Foundation predict that improvements in life expectancy will be accompanied by an increase in the time spent with major illness, from 11.2 years to 12.6 years between 2019 and 2040).

The incidence of age specific rates of long-term conditions are projected to remain mostly stable, apart from coronary heart disease (which is expected to decrease) and asthma (which is expected to increase)(The Health Foundation, 2023). However, the number of diagnosed cases of long-term conditions are projected to increase between 2019 and 2040, mostly due to population ageing (The Health Foundation, 2023). By 2040 there is projected to be a 37% increase in overall numbers of people living with major illness, from 6.7 million in 2019 to 9.1 million in 2040 (Figure 7), most of which is among those aged 70 and over (The Health Foundation, 2023).

Figure 6: Average years of life lived without illness, with some illness, and with major illness in England. For those born in 2010, 2019, and projected for 2040



Source: Analysis of linked health care records and mortality data conducted by the REAL Centre and the University of Liverpool.

Notes: The black capped bars represent uncertainty intervals. The chart shows expectancy, which is a summary measure. In reality illness and death are distributed across all ages.



Figure 7: Past and projected numbers of people living with major illness in England

Source: Analysis of linked health care records and mortality data conducted by the REAL Centre and the University of Liverpool.

Note: The black capped bars represent uncertainty intervals. To better represent the working age population, for Figures 5 and 6 we present the estimated and projected number of people living with and without major illness aged 20 years and older. The model is designed to project the population aged 30 years and older. We therefore assume that the proportion of people living with major illness aged 20–29 years is the same in 2040 as in 2019. For more detail see our modelling working paper. Watt T, Raymond A, Rachet-Jacquet L, Head A, Kypridemos C. A microsimulation model for multimorbidity in England. The Health Foundation; 2023 (www.health.org.uk/publications/health-in-2040).

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People are also living longer in NEL and evidence and projections in the sections above have shown that more people in England including NEL are likely to have long-term conditions and would therefore be needing more support from Adult Social Care. A review of the top diseases that are on the increase in NEL are shown in Table 13 below. The table shows the associated impact of these conditions on patients and some of their care needs. These care needs would need to be considered in any discussions about deciding how ASC changes in delivering its services.

Table 13: Top diseases that are on the increase in NEL and associated impact on patients and careneeds they might have

Long Term Condition (LTC)	Considerations				
Diabetes	Increased subcutaneous injection therapy.				
	 Increased risk of diabetic foot and retinopathy. 				
	Increased blood monitoring				
	Increased need for wound care need				
Dementia	Increased need to support DOLS and long term care				
	planning.				
	Increase need for medication prompting.				
	Increased time or skills to prompt independence, promote				
	positive outcomes and work positively against risks				
CVD	Increased wound care from CVD.				
	Increased polypharmacy				
	Increased blood monitoring				
	 Increased need for good skin management as prevention 				
	of wounds.				
	Higher risk of stroke leading to morbidity, need for enteral				
	feeding				
Parkinsons	Increased use of enteral feeding				
	Increased risk of falls				
Frailty	High prevalence of falls and then associated impact, rehab				
	and or wound care.				
	Higher moving and handling requirements				
Respiratory Disease	Increased need for BIPAP/CPAP cough assist				
	Support with inhalers and or oxygen				
Multi co-morbidity	Increased prevalence of pressure ulcers				

Figure 8: Projected changes (from 2019 to 2040) in diagnosed cases of the 10 conditions with the highest impact on health care use and mortality among those aged 30 and over. England



It is not only the number of years lived with a long-term condition that is on the rise, but also the number of conditions experienced. Multimorbidity is the term used to define the presence of 2 or more conditions (Chief Medical Officer, 2023). As Figure 9 demonstrates, multimorbidity becomes more common as people age, as many people start to accumulate medical conditions in middle age, and the number of conditions they have gradually increases over their life course (Chief Medical Officer, 2023).



Figure 9: Proportion of the population with 0 to 6 long term conditions by age, in England, 2018 (Chief Medical Officer, 2023)

Source data: Department of Health and Social Care, analysis of data from Health Survey for England 2018[®] Image source: Redrawn from image in Chief Medical Officer's Annual Report 2020, Health trends and variation in England[®] However, the proportion of over 75s with multimorbidity increased between 2006 and 2015 (The Health Foundation, 2021). Prevalence of multimorbidity is projected to rise further for all age groups (Figure 10), with the biggest increase among the 85 year and older age group (The Health Foundation, 2023). Obesity is predicted to be a key driver of increased multimorbidity amongst younger generations in the future (Department for Health and Social Care, 2021).

Fig 10: Average number of Cambridge Multimorbidity Score conditions by 5 year age groups, England, 2019 and projected for 2040 (The Health Foundation, 2023)



Source: Analysis of linked health care records and mortality data conducted by the REAL Centre and the University of Liverpool.

How does this impact on 'need for care'

The proportion of people with limitations on activities of daily living (ADLs) is often used as a measure of 'disability' and 'social care need' (The Health Foundation, 2021). It is common to have a long-term condition without having ADL limitations (and hence social care needs). However, the likelihood of having a related social care need varies according to the long-term condition an individual has. Figure 11 shows that the long-term conditions most associated with ADL limitations (although not necessarily causal) are neurological conditions (such as motor neurone disease, multiple sclerosis, Parkinsons, dementia and stroke) and heart failure (The Health Foundation, 2021).

Having multimorbidity is more likely to result in a need for social care, as diseases can interact and cause complications, therefore someone who could have maintained independence and quality of life with one of these diseases, may not be able to with the combination (Chief Medical Officer, 2023).

Figure 11: Proportion of the elderly population needing ADL support by long term condition, 2018



Source: ELSA, 2018.

Long term conditions **are not the only factors** influencing whether someone has social care need. Other factors such as frailty and sensory loss, can also contribute.



Figure 12: Age-specific years lived with disability (YLDs) by age and disease group, England, 2019

Source data: Global Burden of Disease Study 2019 (GBD 2019), Institute for Health Metrics and Evaluation (2020)⁷ – Used with permission. All rights reserved.

Figure 12 **above** shows that the biggest contributors to '**years lived with a disability**' among older age groups include sense organ diseases (such as hearing or vision impairment), chronic respiratory diseases, unintentional injuries (such as falls and fractures), neurological disorders (such as Parkinsons disease) and musculoskeletal disorders (such as arthritis) (Chief Medical Officer, 2023). Although many people have long term conditions without having a social care need, those with social care needs are very likely to also have a long-term condition (The Health Foundation, 2021).

The English Longitudinal Survey of Ageing (ELSA) is a cohort study of people aged 50 and over in England and measures the percentage of respondents (living in the community, not in residential care) needing help with one or more Activities of Daily Living (ADLs) (Department for Health and Social Care, 2021).

As can be seen in Figure 13, the ELSA data shows that ADL limitations increase with age, slowly until the age of 85 and more rapidly thereafter (with around 13% of 65 – 69-year-olds, and 42% of over 85s, needing help with at least one ADL) (The Health Foundation, 2021). This contrasts with long term conditions which are already common at age 65 and increase more slowly with age (The Health Foundation, 2021). Social care needs (due to ADL limitations) therefore develop at older ages than for health care needs (due to long term conditions)(The Health Foundation, 2021).



Figure 13: Proportion of people aged over 65 who need help with activities of daily living (ADL) by age group, 2018

Source: ELSA, 2018.

The ELSA data shows that between 2006 and 2018 there was an increase in the proportion of individuals aged over 65 who have no ADL limitations (i.e. no social care need), with the largest increase in the over 80 age group (Figure 14)(The Health Foundation, 2021).

Figure 14: Proportion of the older population free from any ADL limitations (hence no social care need) by age group, 2006 - 2018



Whilst ELSA figures only represent people living in the community, there is also evidence that reduced proportions of over 85-year-olds are now needing residential care, as the number of people living in residential homes increased by a much lower proportion than the overall increase in the over 85 population between 2007 and 2019. Furthermore, there has been an increase in the average age of people using care homes (The Health Foundation, 2021). This tells us that the proportion of people able to live independent lives has increased, despite an increase in the proportion of over 75-year-olds with two or more long term conditions, and therefore that more people with long term conditions can live independently (The Health Foundation, 2021). This does not translate to a decrease in use of social care however, since overall numbers of older people in the population have increased.

Between 2018 and 2038 the number of disabled older people (over 65s reporting ADL difficulties) is projected to increase by 48% (from 3.5 million to 5.2 million), and the number of adult social care users (public and private) to increase by 50% (Department for Health and Social Care, 2021) (CPEC, 2020). Furthermore, those who do have social care needs are now likely to have more long-term conditions (The Health Foundation, 2021).

Figure 15 below shows the number of people aged 65 years and older in England with dependency (thousands); 2015, and the numbers projected for 2025 and 2035. The number of people with low dependency and those who are independent is set in increase by 2035. This is also the case for people with high dependency.

Figure 15: Numbers of people aged 65 years and older in England with dependency (thousands); 2015 and projected for 2025 and 2035 (Department for Health and Social Care, 2021)



Old age dependency ratio

The ageing population will mean an increase in the proportion of English people who are retired in relation to those of working age. The 'Old Age Dependency Ratio' is a measurement of the balance between individuals under and over the State Pension Age (SPA). This ratio is set to increase as can be seen in Figure 16, after remaining relatively stable over the last 50 years (excluding a drop in 2020 when the State Pension age increased) (Department for Health and Social Care, 2021). This increased old age dependency ratio raises concerns over who will care for this ageing population (Chief Medical Officer, 2023).



Figure 16: Projected increase in the Old Age Dependency Ratio in England (1980 – 2066)

Steps we can take to reduce pressures on social care

To reduce the pressure on social care we can use a combination of three main approaches:

- <u>Prevention initiatives:</u> To prevent, delay and minimise disability and frailty, therefore reducing the amount of time people spend living with illness and disability in old age.
- <u>Environmental adaptations</u>: To change the environment so that it is suitable for those with a given level of disability, hence enabling them to maintain their independence for longer (Chief Medical Officer, 2023).
- <u>Changing the way health and care is delivered:</u> To adapt how medicine and social care is delivered, hence allowing more efficient care.

Prevention initiatives

As discussed previously, increases in life expectancy have been accompanied by an 'expansion of morbidity' meaning that in general, people are spending these extra years of life with disease and disability (Chief Medical Officer, 2023). However, this is not inevitable, and some countries have less dependent older populations, such as Scandinavian countries and Japan. In his 2023 annual report the Chief Medical Officer described how it is entirely possible to 'push disease out to the right' so that onset of disease and disability occurs later (ideally shortly before someone's eventual death, hence allowing them to spend more time with good health and quality of life) or not at all before someone reaches their natural end (Chief Medical Officer, 2023). Chronical ageing occurs at the same rate for everyone, but biological ageing does not. Differences in biological ageing are in large part preventable. This is evident by the large gap in biological ageing experienced between those in the most and least deprived living circumstances (Figure 17) (Chief Medical Officer, 2023).

Figure 17: Inequality in life expectancy and healthy life expectancy at birth for females in the most and least deprived areas in England, 2018 to 2020 (Chief Medical Officer, 2023)



Source data: Office for National Statistics (ONS), Health state life expectancies by national deprivation deciles, England: 2018 to 2020*

Primary prevention by government organisations or health services, and secondary prevention by the NHS, are very important to achieve this 'shift to the right'. Prevention is also the most effective way to reduce multimorbidity, as it can delay the onset of chronic disease till later in life, reducing the risk of multimorbidity, which will in turn reduce the amount of time a person spends in dependency (Chief Medical Officer, 2023).

Primary prevention initiatives include addressing risk factors such as hypertension, high cholesterol, physical inactivity, social isolation, smoking, substance misuse, exposure to environments that promote obesity, and air pollution (Department for Health and Social Care, 2021) (Chief Medical Officer, 2023).

Secondary prevention includes improving the identification and management of conditions, to delay or stop the onset of serious disease (Department for Health and Social Care, 2021) such as through screening programmes and identification of risk factors (Chief Medical Officer, 2023).

Environmental adaptations

For those who have developed disabilities of older age, they may still be able to maintain their independence and quality of life if the environment is adapted and optimised for them. This includes the built environment and housing (Chief Medical Officer, 2023). Adapting the built environment can involve making pavements, parks, and cycle paths safe and appropriate for older people to use, ensuring availability of adequate public transport, and improving access to places of leisure and exercise (Chief Medical Officer, 2023).

Poor or unsuitable housing is detrimental to public health for all age groups. However, this can be a particular risk for the over 65s, exacerbating difficulties with activities of daily living (ADLs) hence increasing the need for care (Department for Health and Social Care, 2021). People over the age of 65 are also more likely to live in homes which go not meet the Decent Home Standard (Department for Health and Social Care, 2021).

Poor housing has been estimated to cost the NHS £1.4 billion per year in terms of costs associated with excess cold and falls (Department for Health and Social Care, 2021). Falls (and related injuries) are also a leading cause of entering social care (Department for Health and Social Care, 2021). Specifically designed housing can help people to maintain their independence and improve health outcomes (Department for Health and Social Care, 2021). Better health outcomes and improved satisfaction and wellbeing is reported among residents of housing built specifically for over 65s (Department for Health and Social Care, 2021). Specialist housing can reduce reliance on health and social care services for older people (Department for Health and Social Care, 2021). We should also be ensuring that new homes are built to take account of an older population.

However, although increasing the number of specialist homes could be beneficial, it is estimated that 80% of the homes in which people will live in 2050 have already been built (Department for Health and Social Care, 2021). Therefore, it is also important that we adapt the current housing stock, much of which is designed for younger families rather than older adults (Chief Medical Officer, 2023).

Home adaptations are reported to delay the move to residential care by an average of 4 years (Department for Health and Social Care, 2021). Housing adaptations can include things like grab rails and stair lifts, which can reduce the risk of injury and delay the move to residential care. They can also include adaptations for hearing and visual impairments, helping people to maintain their security and safety (Department for Health and Social Care, 2021).

Changing the way social care is delivered

Over time there has been a change in the social care sector. Institutional care was common in the 1940s, followed by a move towards smaller residential homes in the 1960s, and towards a focus on community care from the 1980s whereby people were supported within their own homes (Chief Medical Officer, 2023). Between 2016/17 and 2022/23 there has been a further decrease in residential establishments and an increase in non-residential establishments (such as domiciliary care) (Chief Medical Officer, 2023). Demand for adult community services is reported to be greater than current capacity and resources in many areas (NHS Providers, 2023). This increase in demand for community care is believed to be due to the expansion of morbidity, meaning that people are now living longer with poor health (including long term conditions and multi-morbidity) and frailty (NHS Providers, 2023) whilst also being able to live independent lives for longer after being diagnosed with long term conditions (The Health Foundation, 2023). However, these changes also mean that when people do require social care in old age, their health care needs are typically more complex (The Health Foundation, 2023).

The table below shows that numbers of older people using both community and residential care in England are projected to increase between 2018 and 2038 (CPEC, 2020).

	2018	2023	2028	2033	2038	Change %
Community care						
Direct payments	41	44	50	57	63	55%
Publicly funded care	191	215	235	275	309	62%
Privately funded care	114	121	144	164	178	56%
Residential care						
Publicly funded residents	150	157	174	192	211	41%
Privately funded residents	168	189	211	253	281	67%
Total	664	719	791	920	1028	55%

Table 14: Projected number of older social care service users (thousands) in England, 2018 - 2038

Note: Figures may not add exactly due to rounding.

In a survey of social care providers, all trusts predict further increase in demand for community services, with the top reason cited as 'increase in complexity' (Figure 18) (NHS Providers, 2023).

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The present offer from community nursing in North East Lincolnshire in supporting ASC has increased over the years. There is potentially a lot more wrap around nursing support from the **community nursing team** whether someone is at home or in residential car. There is also the Community Urgent Care response team from the General Practices. All these together has led to people not reaching the threshold for needing nursing care or as much in-house 24 hour nursing care. However, this offer will still need to increase further.

Figure 18: The top reasons why social care providers think demand for community services will increase



It is reported that the social care workforce will need to grow to meet the projected increase in demand for social care, especially considering the increased old age dependency ratios (Department for Health and Social Care, 2021). However, a greater emphasis will be required on attracting and retaining the workforce since unfortunately there is high staff turnover and many unfilled vacancies within social care (Department for Health and Social Care, 2021).

Investing in workforce skills (such as by ensuring appropriate qualifications and training) are also important for quality and efficiency of care and may additionally encourage staff retention (Department for Health and Social Care, 2021).

So far there has been relatively low uptake of technology and innovation within social care, and this is described as one reason for low productivity in the sector (Department for Health and Social Care, 2021). Technology can potentially complement support from social care workers, hence reducing demand and improving quality of care (Department for Health and Social Care, 2021).

Examples of technology which could be useful in social care include:

- **Digital processes** can be used to streamline workflow processes and help staff work more efficiently and effectively, such as to facilitate faster information flows, more efficient movement of people through the health and social care system, to organise staff rotas, and to carry out administration (Department for Health and Social Care, 2021).
- **Telemedicine:** This involves care to be provided from a distance using telecommunication (The NHS Constitution, 2019). One example is audio and video consultation, and in care homes a secure video link between the care home provider and a healthcare provider can enable direct access to medical advice (The NHS Constitution, 2019).
- Sensors and wearables for diagnostics and management: With increased use of sensors and point of care testing people with long term conditions could monitor their own health (for example using an app linked to the sensors) or send data to clinicians who could monitor them remotely (Department for Health and Social Care, 2021)(The NHS Constitution, 2019). However, since a large amount of automatically transmitted data may overwhelm healthcare professionals, it is suggested that AI can be applied to generate patient summaries (The NHS Constitution, 2019)
- Sensors for patient monitoring: Using video cameras installed into patients rooms, care staff can better identify and respond to incidents (such as if someone is stuck in bed, or is walking at night disorientated) and predict incidents before they happen (such as using machine learning algorithms to predict falls from differences in gait) (Department for Health and Social Care, 2021).
- **Predictable analytics using AI**: Predictive modelling can be used to assess deterioration, or frailty. The electronic frailty index is available to all GP practices and uses health data routinely collected in the GP record systems to identify people at risk of poor health outcomes and care home admission (The NHS Constitution, 2019).
- **Robotics** could improve people's mobility and independence (such as beds which can adapt into wheelchairs, robots which can help with balance support, and robots which can provide functionality to patients with physical disability) and also offer social interaction (such as robots which can provide basic conversation, games, and exercises). (Department for Health and Social Care, 2021) or support such as pillbots (The NHS Constitution, 2019).

Artificial intelligence devices can potentially provide assistance to people, especially those with cognitive impairment or provide an easy means of communication or interaction.

To adopt digital technologies, the workforce will need to be trained to develop specialist digital skills, and new roles may need to be created in fields such as data science, data security, ethics and implementation science. (The NHS Constitution, 2019).

8.0 Summary

The overall population of NEL is not projected to increase over the next 5 to 10 years. However, with people living longer and the relatively low birth rate in recent decades, the internal structure of the local population is ageing. The number of older people is projected to rise considerably over the next decade, and this will almost certainly lead to increased demands on health and social care services associated with old age.

Various steps can also be taken to reduce pressures on social care. These include prevention initiatives, environmental adaptations and changing the way health and care is delivered. The social care workforce in NEL needs to grow to meet the projected increase in demand for social with greater emphasis on attracting and retaining the workforce. The benefits of digital technology should be harnessed to support the workforce and improve care of the elderly and quality of care.

9.0 Recommendations

Adult Social Care

We need to change the way Adult Social Care is delivered in North East Lincolnshire. It is therefore recommended that:

- Some Adult Social Care tasks currently restricted to certain professions should be delegated to other staff, e.g. care workers to be delegated to undertake some of the tasks being undertaken by nursing staff with adequate training and with the support of nurses, with the creation of additional roles to support this.
- 2. We should enhance skills in the home first approach by following the national framework i.e. keeping people in their homes and providing services to them in their homes in order to maintain their independence and quality of life for as long as possible. For this to be maximised, home adaptations will need to be considered and delivered more quickly than at present.
- 3. We need to support a modern approach to adult social care which will require further integration of services, working across organisational health and social care boundaries.
- 4. We must invest in workforce skills to ensure appropriate qualifications and provide training to ensure quality and efficiency of care.
- 5. We need to increase digital connectivity and the use of IT/digital solutions to promote social interaction and to access carers and medications when required.
- 6. We must promote digital literacy in order to enhance people's ability to understand and use digital technologies for meaningful actions within life situations. That is, people should have the

ability to access the computer/mobile/internet for their day-to-day activities and being connected with others through the internet.

- 7. We must ensure that we are working in a way that harnesses digital technology and equipment alongside a reduced care handling approach to support people's independence and wellbeing.
- 8. We need to ensure individuals have access to support them to receive reablement provision to support them to maintain, regain or improve their independence.
- 9. The Future of Adult Social care work is used in all future strategy and commissioning plans across the health and social care landscape in North East Lincolnshire.
- 10. The council and ICB should increase investment in voluntary sector programmes that provide support to older people living at home through the winter and at other difficult periods in the year.

ICB and Public Health

The Health and Care Partnership and the Director of Public Health should mitigate the inevitable impact of an increasing older population by ensuring people remain in good health for as long as possible. It is therefore recommended that:

- 11. A more aggressive approach is taken into primary and secondary prevention programmes that are targeted at the over 40s in North East Lincolnshire. In particular local primary care providers should be performance managed and if necessary incentivised to ensure that they are delivering services to more people in order to identify and control risk factors as smoking, hypertension, high cholesterol, physical inactivity, high alcohol use and poor diets *(ICB/DPH)*
- 12. Public health services that support people to stop smoking, maintain healthy weights and avoid harmful drug and alcohol use are seen as priority services for the place and are well invested in *(ICB/HWB/DPH)*.
- 13. Services provided by the new diagnostic centre and those provided by NHS Screening are accessible to all, targeted into communities of high need and wherever possible appropriately incentivised to ensure good uptake. *(NHS England/ICB)*.

Wider Determinants and Place

With the changing demography of North East Lincolnshire, in particular an ageing population, that will probably persist for many decades we must ensure that North East Lincolnshire becomes a more Age Friendly place. It is therefore recommended that:

14. North East Lincolnshire Council and key partners work in close collaboration with the voluntary sector to develop a culture and leisure plan for older people and others with disability to ensure that people can remain active (both socially and mentally) for as long as possible (Economy/ HWB)

- 15. In order to ensure that older people and others with disability who are not able to drive can continue to enjoy an active lifestyle it is important that suitable age-friendly public transport is available throughout the day. *(Economy/ HWB)*
- 16. Given the large and growing population older people and others with additional needs in North East Lincolnshire it is vital that an 'age friendly approach' (Based on WHO age Friendly cities Framework) is taken to the planning and development of homes and communities that will support people to remain living at home for as long as possible. *(NEL Planning/ Economy/ HWB).*

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