

THE CHANGING PICTURE OF MORTALITY AND LIFE EXPECTANCY IN TAMESIDE AND GLOSSOP



Abstract

The potential to live a long and healthy life is a fundamental aspect of human development.¹ Over the last few decades the UK has seen tremendous gains in mortality reductions and increased life expectancies. However, disparities exist across the UK and in particular within smaller geographical areas such as Tameside and Glossop, where the current life expectancy gap between the highest and the lowest is more than 10 years.

Premature mortality and life expectancy are significant indicators of the health of the population. Generally areas with higher life expectancy and lower rates of premature mortality contain populations that are both socially and economically advantaged.

For Tameside and Glossop, residents here experience some of the worst health and mortality outcomes in England and currently rank 137 out of 150 local authorities for premature death.

In November 2016, ONS implemented a revised methodology for the calculation of healthy life expectancy and life expectancy at birth by using an upper age band of 90 and over; whereas previously the upper age band was set to 85 and over. The change was made to reflect an increasing proportion of deaths at ages 85 and over, and results in greater accuracy of healthy life expectancy estimates. The new methodology has been implemented for healthy life expectancy figures from 2009-11 onwards.

This prompted the need to look at premature mortality, healthy life expectancy and life expectancy across the Tameside and Glossop area with a view to gain an in-depth understanding into the main causes of premature mortality and the major impacts on life expectancy for both males and females.

In Summary the following report illustrates the key challenges

- Mortality across Tameside and Glossop has remained fairly static, but is reducing.
- There are large reductions in deaths from cardiovascular conditions but increases in deaths from respiratory conditions and infections.
- Life expectancy is on the increase at a much faster rate than healthy life expectancy and this will have implication on the health economy as people live longer with long term/complex condition.
- Inequalities in life expectancy still exists in life expectancy at birth but this narrows significantly in the age groups of 65 years and older.
- The gap in life expectancy between Tameside and England is wider now than it was ten years ago.

1

<http://www.un.org/esa/population/publications/levelsandtrendsinmortality/Changing%20levels%20and%20trends%20in%20mortality.pdf>

- The gap between males and females in Tameside and Glossop is closing, but to the detriment of female life expectancy which has slowed down significantly in the last few years.
- The main causes of death are still similar to 10 years ago with the exception of dementia. This cause of death has significantly increased but this could be due to better death certification coding. However many of our dementia deaths are for vascular dementia, which like many of the CVD deaths is mainly preventable
- The main causes of death for females are concerning as they are related to life style behaviours such as smoking and alcohol use.
- A peak in deaths in the six week period of December/January 2014/15 showed that people waiting longer than 4 hours and delayed discharges were higher than the annual average.
- There were high levels of preventable deaths occurring across the borough in 2014/15 that could have been prevented through improving vaccination coverage of both influenza and pneumonia.
- Tameside and Glossop have high levels of deaths in people under 65 years compared to the England average. With a high proportion of these deaths being mainly preventable and related to lifestyle such as cardiovascular and respiratory disease, and cancer including bowel cancer. This is the main cause of low healthy life expectancy figures for Tameside & Glossop
- Tameside & Glossop will not reach its ambition of a similar Healthy life expectancy to the North West in 5 years for females. Male HLE will have improved to be similar to that of the North West.
- Tameside and Glossop will not reach its ambition of a similar healthy life expectancy to England in 10 years for females. Male healthy life expectancy will have improved to be no longer significantly lower.

Introduction

In England in 1901 life expectancy was 45 years for men and 49 years for women. By 2012 this had increased to 79.2 years for men and 83.3 years for women².

This is expected to rise further by 2032 to 83.3 years (an increase of 4.1 years) for men and to 86.8 years (an increase of 3.8 years) for women. The gap between male and female is predicted to be consistent, i.e., 3.7 years in 2012 and 3.6 years in 2032. Both biological and non-biological factors play a role in this difference³.

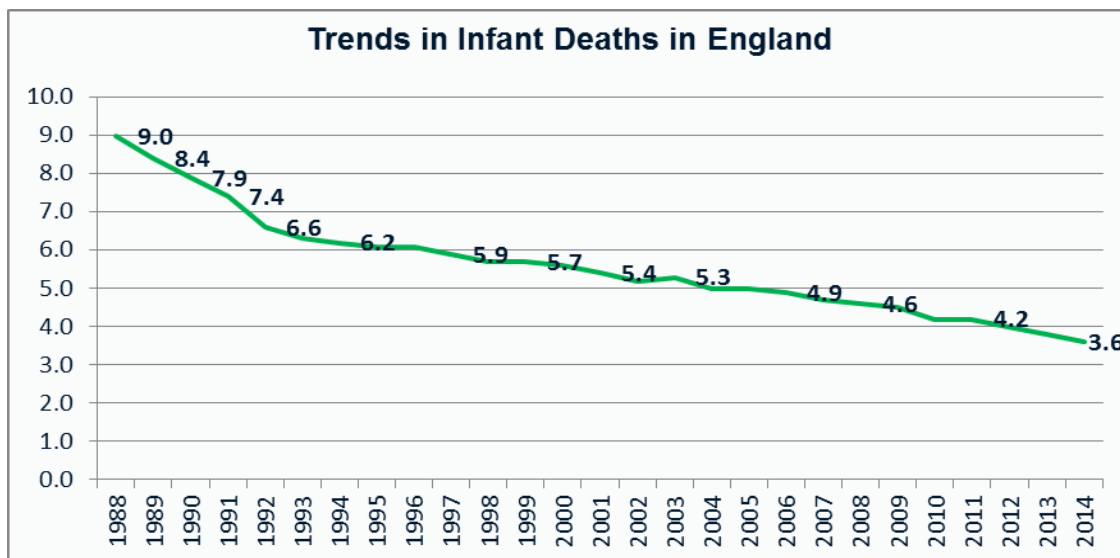
This projection is based on the current trend. The precise extent of the increase will depend on patterns of disease and the population lifestyle. Predictions by the Office for National Statistics over the next 70 years show a possible variation of 20 years by 2085².

Life expectancy at birth is the average number of years that a person can be expected to live from birth, assuming that age-specific mortality levels remain constant.

Life tables calculate the number of years a person is expected to live given that they have already reached a certain age. For example, a girl born in 2011 is expected to reach age 82.8 in England, however someone who was 60 years old already in 2011 was expected to live a further 25.2 years, that is until that are 85.

The low life expectancies of the past can be explained by the higher number of infant deaths. Survival past the first years of life was historically a predominant factor in life expectancies and once a child had reached five years of age, he or she was much more likely to reach a greater age.

The chart below illustrates the change in infant mortality rates in England over the past 25 years



Source: ONS

² Office for National Statistics (2009). Statistical Bulletin. Period expectation of life, England, 1981-2032 (uses 2008-based population projections)

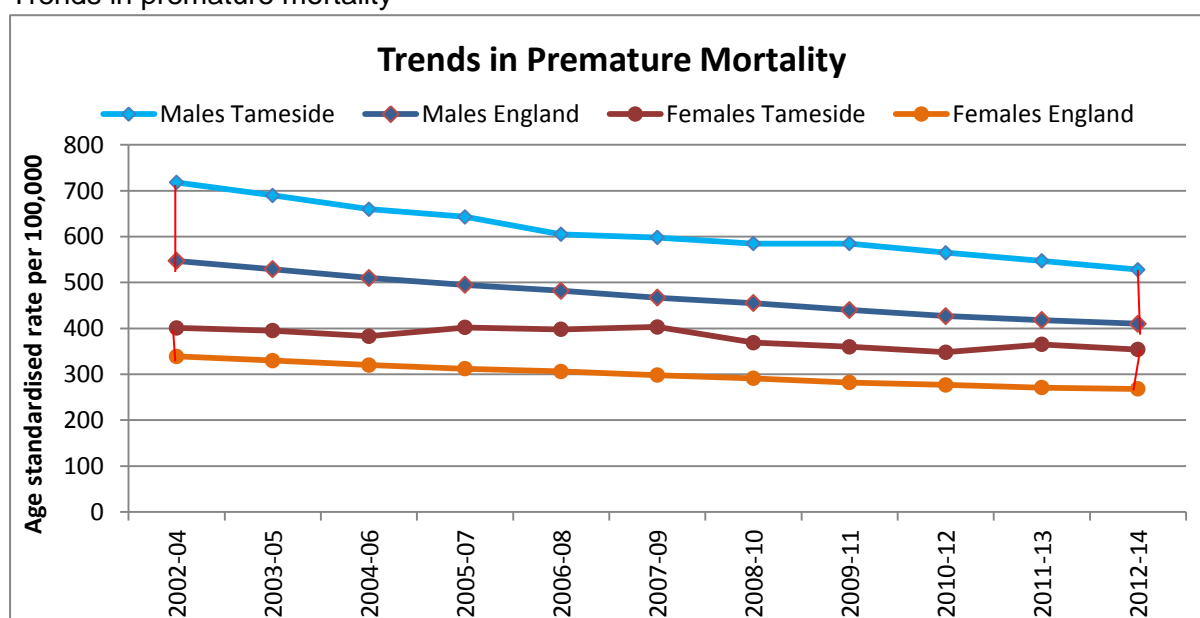
³ Office for National Statistics (2009). Statistical Bulletin. Period expectation of life, England, 1981-2032 (uses 2008-based population projections)

So what does this mean for Tameside and Glossop?

Tameside was created on 1 April 1974, by the Local Government Act 1972 as one of the ten metropolitan districts of Greater Manchester. It took over the local government functions of nine districts which were formerly in the administrative counties of Lancashire and of Cheshire. In 1986 Tameside effectively became a unitary authority with the abolition of the Greater Manchester County Council.

The area of Tameside has a history of being an industrial area and health outcomes have historically been worse than the England averages. However over time both nationally and locally there has been year on year increases in both life expectancy and the numbers of people reaching 85 years plus. This is mainly due to the fall in infant mortality and the reduction in people dying prematurely. However for Tameside between 2013 and 2015 2,450 people died before the age of 75 years. This makes Tameside the 137th out of 150 local authorities in England, which makes us significantly worse than the England average, a pattern that has not changed over the last 20 or so years.

Trends in premature mortality



Source: ONS

The chart above illustrates the improvement in premature mortality over the last 11 years and it shows that the gap between England and Tameside males has closed somewhat, with Tameside showing an overall 30% reduction compared to England's 28% reduction since 2002. However for Tameside females the improvement is less dramatic, with the gap in premature mortality now wider between England and Tameside than in 2002-04. Overall Tameside's reduction in premature mortality has only decreased by 12% compared to the rest of England's 23%, this therefore will have a knock-on effect on the life expectancy measures for females because the younger people die the higher the impact on life expectancy estimates.

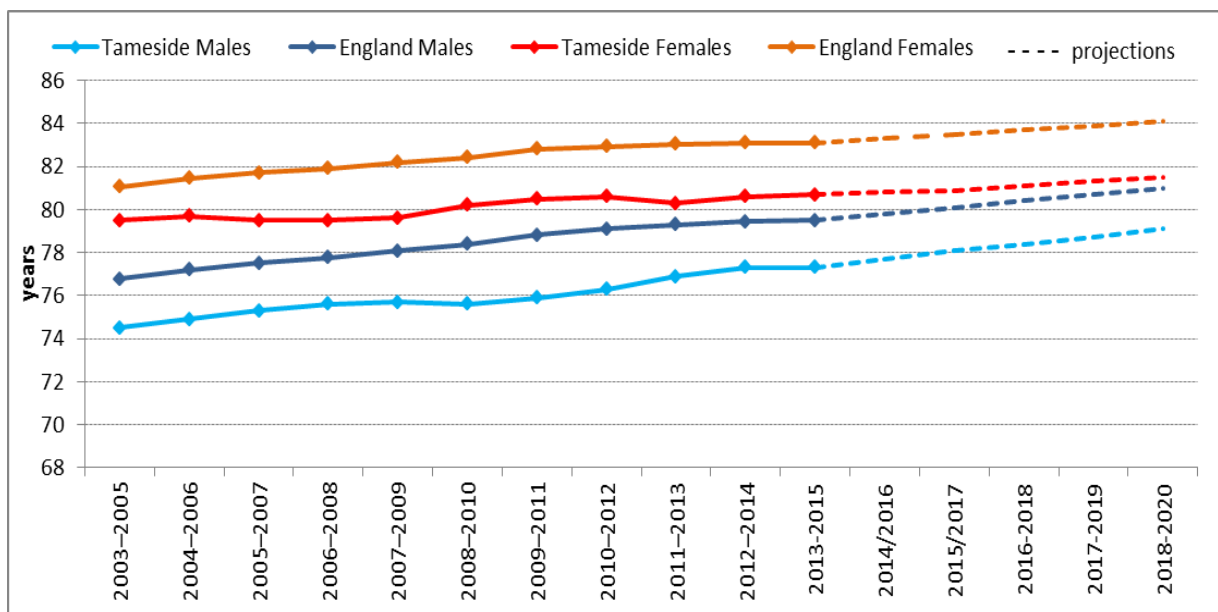
Trends in Life Expectancy at birth, 65 years, 75 years and 85 years

Life expectancy at birth reflects the overall mortality level of a population. It summarises the mortality pattern that prevails across all age groups in a given year – children and adolescents, adults and the elderly.

The increase in life expectancy for both men and women over the last few decades can be attributed to a number of factors including improvements in public health, nutrition and medicine, health and safety at work, the environment; with vaccinations and antibiotics greatly reducing deaths in childhood, and fewer people smoking.

The charts below illustrate the trends in both males and females at various stages in the life cycle, birth, 65 years, 75 years and 85 years.

Trends in Life Expectancy at Birth



Source: ONS

The chart above clearly illustrates the improvement in life expectancy over the last two decades; the chart also clearly illustrates the inequalities gap between England and Tameside with the gap between England and Tameside increasing somewhat over the same time period. For males however, we are starting to see a reduction in the gap after a brief period between 2004 and 2010, where the gap suddenly started to widen. The projections for male life expectancy are good with the predicted life expectancy in males in Tameside in 2018-2020 expected to reach approximately 79.1 years (81 yrs. Eng.). A 14% reduction in the gap between Tameside & Glossop and England and a similar life expectancy to the England average but not equal to.

For females though the trend is quite different and although we can see that female life expectancy is increasing over time, it is not increasing at the same rate as the rest of the country and therefore the gap between Tameside and England is getting wider and wider year on year. If current trends continue life expectancy for females is estimated to be 81.5

years by 2018-2020 (84.1 yrs. Eng.). This means that Tameside & Glossop will not meet our intended target of a similar life expectancy to England in 10 years.

Life expectancy for males at both England and Tameside level has increased since 1991 by 7%, but for females in England the increase was 5% and for Tameside only 3%. This has closed the gap between males and females but to the detriment of female life expectancy.

If Tameside & Glossop want to achieve the target laid down in our Locality Plan and Care Together plan, we need to reduce the number of deaths in people under 65 years, in particular female deaths. For males this means 51 less deaths per years in men aged between 15 and 64 years. For females this means 21 less deaths per year in women aged between 15 and 64 years. Currently in Tameside and Glossop 232 males die and 137 females die in the age group 15 to 64 years each year. Therefore this is the age group that needs to be targeted if we are to accelerate or life expectancy and healthy life expectancy target.

The table below illustrates the underlying causes of death in the 15 to 64 years age groups for both males and females

| Underlying Causes of Death in Tameside & Glossop 2014 to 2016 for males and females aged 15 to 64 years | | | | | | | | | | |
|---|-----------------------------------|--|-------------|------------|------------------|--------------------------------------|------|-------------|------------|------------|
| MALES | | | Number | % | FEMALES | | | Number | % | |
| | | | 631 | 20% | | | | 493 | 15% | |
| CVD | | | 174 | 28% | CVD | | | 70 | 14% | |
| of which | heart attacks | | 41 | 24% | of which | heart attacks | | 8 | 11% | |
| | Ischaemic Heart Disease | | 75 | 43% | | stroke | | 23 | 33% | |
| | Stroke | | 29 | 17% | | Ischaemic Heart Disease | | 23 | 33% | |
| cancer | | | 193 | 31% | Cancer | | | 182 | 37% | |
| of which | oral | | 10 | 5% | of which | lung | | 44 | 24% | |
| | oesophagus | | 14 | 7% | | bowel | | 17 | 9% | |
| | bowel | | 18 | 9% | | breast | | 31 | 17% | |
| | liver & pancreas | | 16 | 8% | | female genital organs | | 25 | 14% | |
| | lung | | 55 | 28% | | multiple sites | | 12 | 7% | |
| | urinary tract | | 17 | 9% | | Respiratory | | | 38 | 8% |
| | multiple sites | | 12 | 6% | | of which | COPD | | 24 | 63% |
| Respiratory | | | 38 | 6% | pneumonia | | | 7 | 18% | |
| of which | pneumonia | | 10 | 26% | Digestive | | | 58 | 12% | |
| | COPD | | 18 | 47% | of which | Alcoholic liver disease | | 35 | 60% | |
| Digestive | | | 76 | 12% | | Other | | | 145 | 29% |
| of which | alcoholic liver disease | | 52 | 68% | of which | diseases of the nervous system | | 14 | 10% | |
| Other | | | 150 | 24% | | accidental poisoning | | 14 | 10% | |
| of which | self harm and undetermined intent | | 49 | 33% | | self-harm and undetermined intent | | 11 | 8% | |
| | accidents | | 32 | 21% | | infection | | 5 | 3% | |
| | accidental poisoning | | 15 | 10% | | nutritional and metabolic conditions | | 6 | 4% | |
| | diseases of the nervous system | | 19 | 13% | | | | | | |
| Total deaths all age groups | | | 3192 | | | | | 3342 | | |

The table clearly shows that a high proportion of these deaths are preventable. And if we were to reduce the following number of deaths each year in this age group, we would surpass our target and our health life expectancy and life expectancy would improve significantly.

Males: 13 heart attacks, 9 strokes, 10 suicides, 10 accidents, 8 respiratory and 10 alcohol related deaths each year.

Females: 10 alcohol related, 8 strokes, 3 suicides, 5 respiratory and 8 breast cancer deaths each year.

So even though there are fewer deaths in females than males, what could be the cause of the slowdown in life expectancy in females?

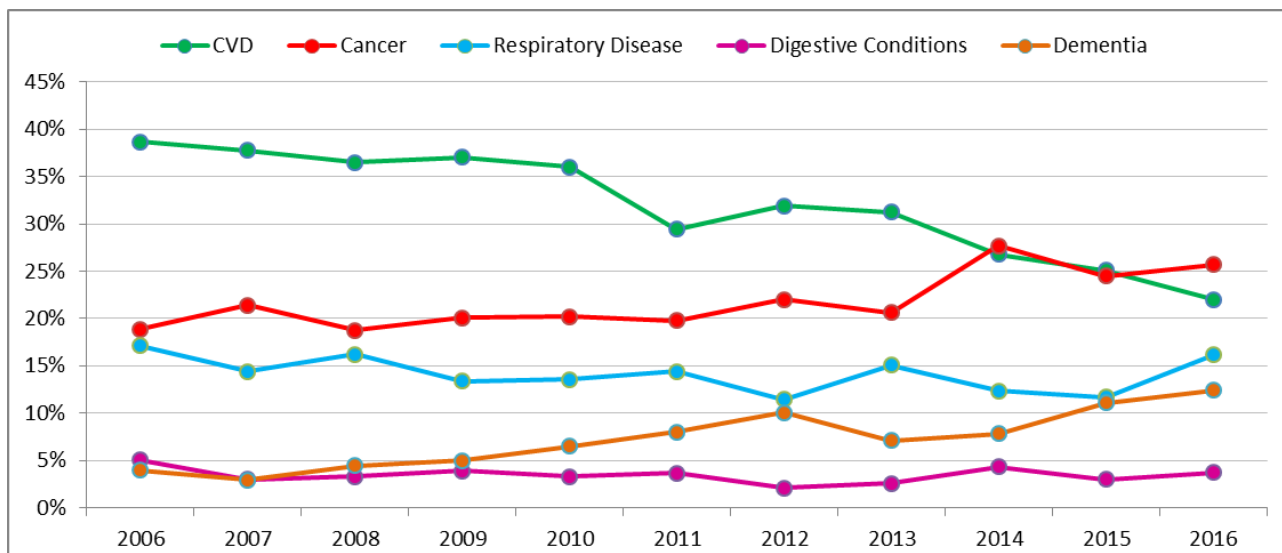
We firstly need to look at the average age of death for women over the last five years. Deaths for females over the last five years have reduced by 11% compared to males 16%. The average age of death for females is currently 61.8 years compared to the male average of 62.3 years. This statistic has only improved by 1% for females but 4% for males. This will have a major impact on life expectancy at birth estimates.

Main causes of death for females in Tameside & Glossop between Jan 2012 and December 2016 include:

| Cause of Death | number | % |
|--|--------|------|
| CVD | 4,095 | 32% |
| Cancer | 3,191 | 25% |
| Diseases of the Respiratory system | 1,904 | 15% |
| Dementia | 1,133 | 9% |
| Diseases of the Digestive system | 615 | 5% |
| Diseases of the nervous system | 436 | 3% |
| Falls | 249 | 2% |
| Conditions of the Genitourinary system | 221 | 2% |
| Other | 846 | 7% |
| All Deaths | 12,690 | 100% |

The table above illustrates the biggest causes of deaths for females across Tameside & Glossop. With CVD, Cancer and Respiratory conditions making up the biggest proportion of all deaths.

The chart below illustrates the movement of deaths from the 5 big killers in Tameside & Glossop and it is clear that over the last 10 years, CVD as started to decline quite significantly.



However, mortality from Cancer respiratory disease and Dementia are on the rise rather than decline and conditions relating to the digestive system, such as alcoholic liver disease, pancreatitis and hepatic diseases have remained very static. This will have a major impact on female healthy life expectancy and life expectancy at birth.

In terms of life expectancy, women are known to have advantage over men. This advantage is partly due to genetic and biological differences between the genders.⁴ Under normal circumstances women can expect to outlive men by several years. Where women's life expectancy is only slightly higher or the gap between males and females starts to close significantly; cultural, social, economic and environmental factors detrimental to women may offset this 'natural' advantage.⁵ This seems to be the case for the women of Tameside and Glossop and there are several factors that drive the increase in the conditions shown in the table above. Some of these factors are amenable to interventions such as stopping smoking, lowering alcohol intake and being more active etc. Others are down to the environment and social and demographic changes that females find themselves in.⁶ However over the last 5 years 44% of deaths (2,486) in Tameside & Glossop were deemed preventable, so relevant interventions aimed at females could slow or reverse the downward trend in female life expectancy. Therefore we need to target the conditions that are more prominent in females and either stop females getting the condition in the first place or ensure diseases are caught early enough allowing for effective treatment. The rest of the deaths are related to the environmental factors such as health and social care provision, the economic climate and social and cultural change etc.

Trends in life expectancy at 65 years, 75 and 85 years

One aspect of falling mortality rates, in particular deaths in older people is that in 2015 around 55% of all deaths nationally occurred in people aged 85 years and over. As the average age of death increases, patterns of mortality in older age groups become increasingly important. For Tameside the percentage of deaths in people 85 years and over was 34%, lower than the national average.

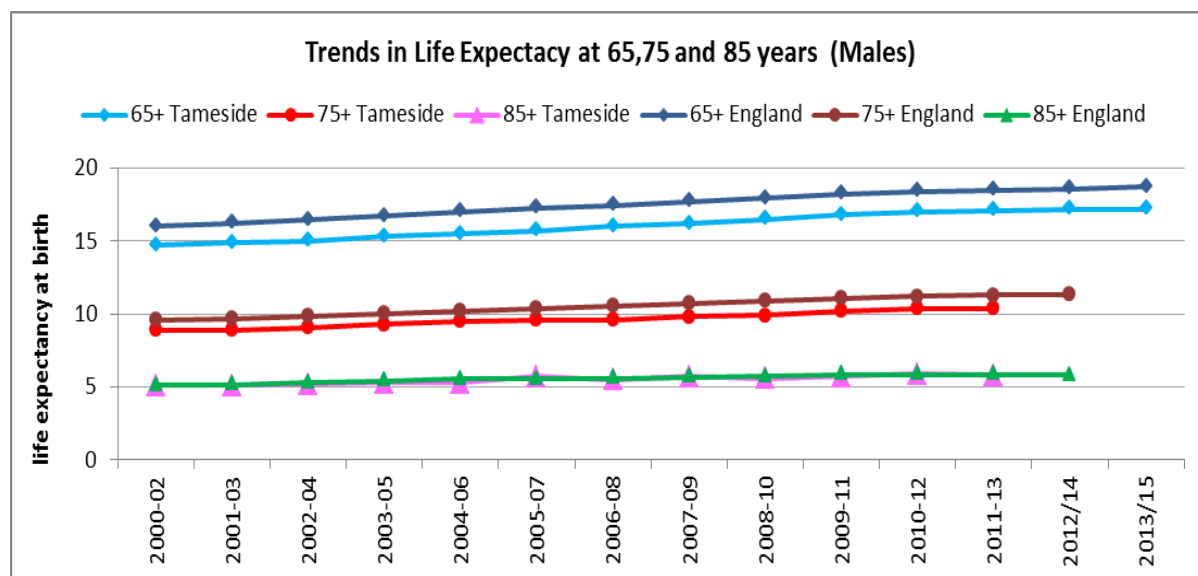
⁴ Women and the rapid rise of noncommunicable diseases. WHO 2002

⁵ Women and the rapid rise of noncommunicable diseases. WHO 2002

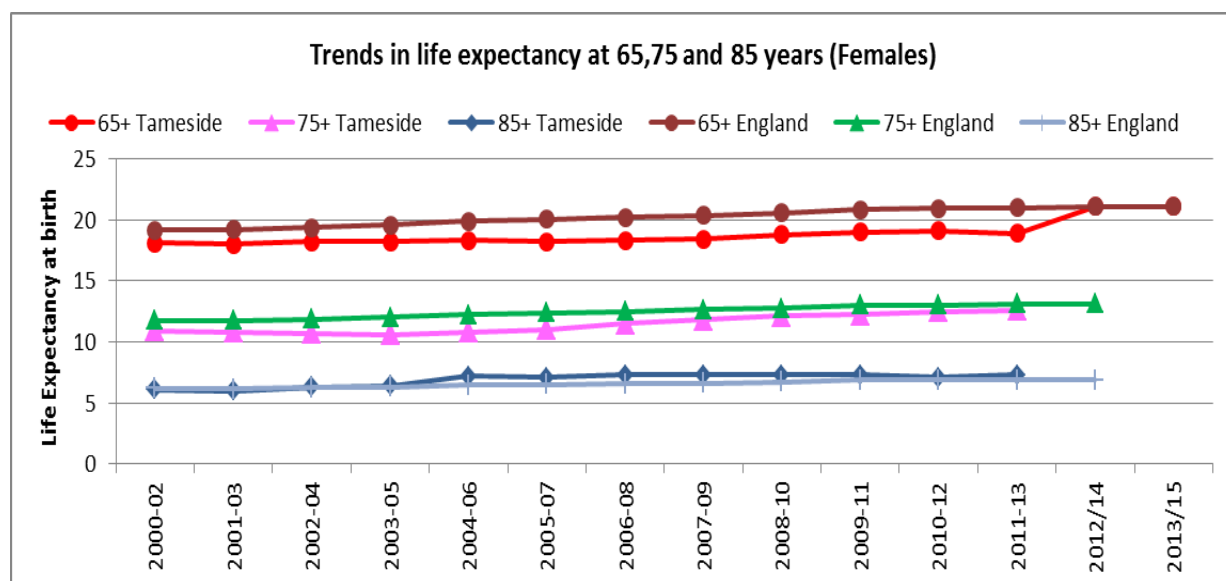
⁶ Women and the rapid rise of noncommunicable diseases. WHO 2002

In February 2016, Public Health England produced a report of life expectancy among those aged 65 years and older in England. The report confirmed that there had been an overall upward trend in life expectancy in this age group.

The charts below illustrate the increasing life expectancy for England and Tameside in this age group.



Source: ONS

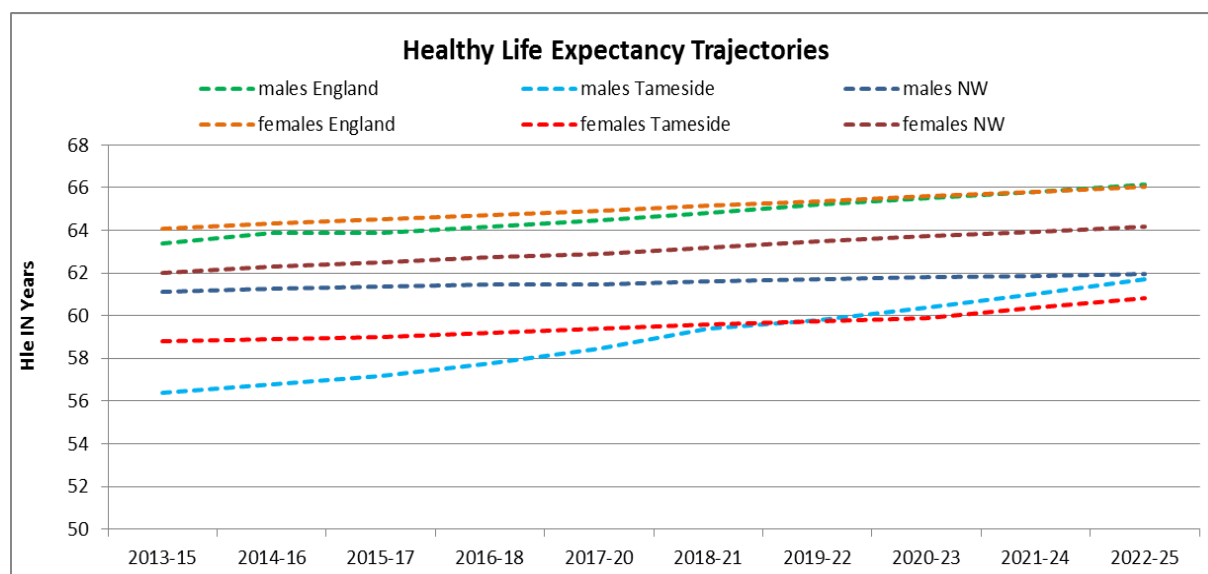


Source: ONS

The charts for both males and females show that life expectancy in these age groups have risen steadily over time. What is interesting is that the inequalities gap is very narrow in the older age groups compared to life expectancy at birth. Reiterating, that people in Tameside die younger, but once they do reach older age groups their life expectancy is similar to the rest of the country.

Healthy Life Expectancy Trajectories

However, as you will see from the chart below. The healthy life expectancy gap is quite significant between Tameside and England. This means that although life expectancy at 65 years plus is very similar to the England averages, older people in Tameside will be living longer with long term health conditions that have an impact of their quality of life and the health economy.

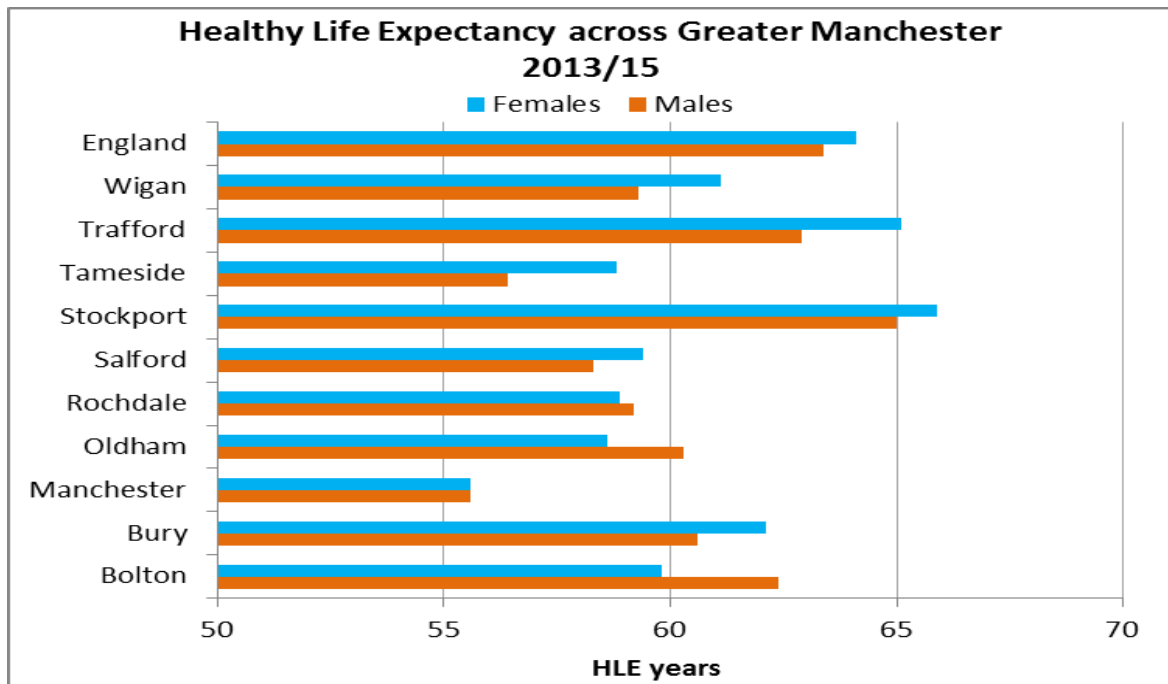


Source ONS

Where life expectancy is an estimate of average expected life span, healthy life expectancy is an estimate of the years of life that will be spent in good health. There are important socio-demographic differences in healthy life expectancy. Not only can people from more deprived populations expect to live shorter lives, but a greater proportion of their life will be in poor health.

Healthy life expectancy is the average equivalent number of years of full health that a new-born could expect to live, if he or she were to pass through life subject to the age-specific death rates and ill-health rates of a given period. The new measurement of healthy life expectancy was done to harmonise the calculation of healthy life expectancy with that of the European Union.

The chart above clearly illustrates that for Tameside healthy life expectancy is considerably lower than the England average. The chart below also shows that for the majority of local authorities across Greater Manchester, the outcome is similar, with the exception of Stockport and Trafford.



Projections for healthy life expectancy are difficult to forecast due to the complexity of the methodology. However using life expectancy at birth projections as an indicator for demonstrating the movement of Health Life Expectancy, projections show that healthy life expectancy will increase in Tameside for both males and females. With an estimated healthy life expectancy in 2017-2012 being 57.8 years for males and 59.4 years for females. This prediction is a low end estimate and therefore these predictions could be higher.

The length and quality of people’s lives differ substantially. Some of these differences are unavoidable (e.g., genetic differences) or random (e.g., accidents). However, factors that are amenable to change, such as socio-economic status, education and quality of immediate living environment, also play a significant part, leading to large inequalities in life expectancy⁷.

The gap in life expectancy between rich and poor persists. After some fluctuation, the gap is larger now than in the early 1970s. Men and women from the richest social class can on average expect to live more than seven years longer than those in the poorest social class.⁸ For Tameside this gap is now more than 10 years.

Changes in calculating life expectancies

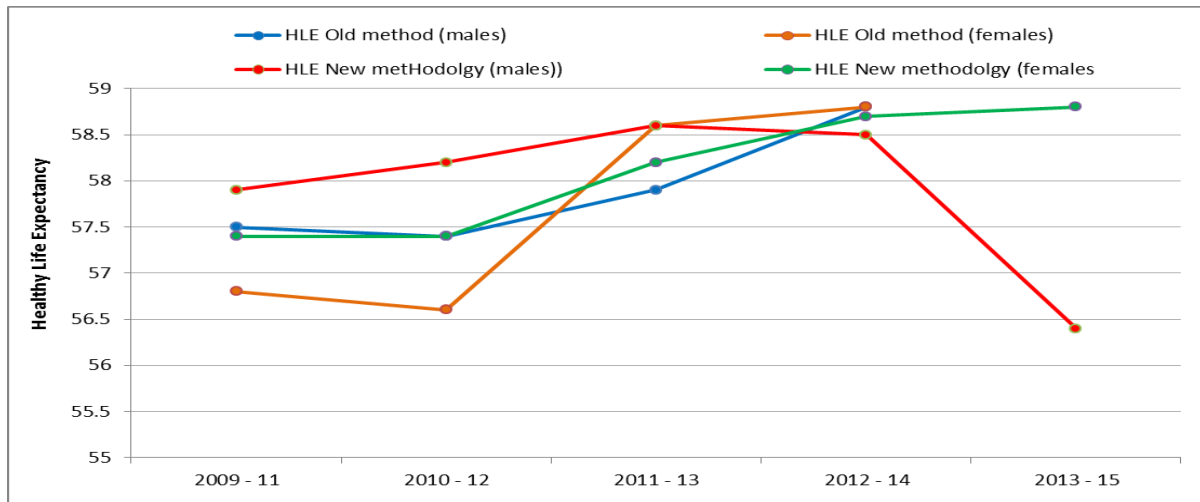
In November 2016, ONS implemented a revised methodology for the calculation of healthy life expectancy and life expectancy at birth by using an upper age band of 90 and over; whereas previously the upper age band was set to 85 and over. The change was made to reflect an increasing proportion of deaths at ages 85 and over, and results in greater accuracy of healthy life expectancy estimates. The new methodology has been implemented for healthy life expectancy figures from 2009-11 onwards. A detailed explanation of the

⁷ <https://www.kingsfund.org.uk/time-to-think-differently/trends/demography/life-expectancy#healthy>

⁸ 4. Department of Health (2011). Statistical Bulletin. Life expectancy, all-age-all-cause mortality, and mortality from selected causes, overall and inequalities

methodology change and the impact on healthy life expectancy estimates can be found on the ONS website: [new methodology for life expectancies](#)

For Tameside this change in methodology has had a profound effect on both healthy life expectancy and life expectancy at birth outcomes. For Healthy Life Expectancy the change is negative as it has reduced HLE for males in 2013/15, but on the whole it has made previous years better and for females the movement is still positive although the increase is not as steep as in previous years. *Please see chart and table below.*



The impact on the change in methodology will have a similar impact on all areas similar to Tameside and Glossop due to the fact that fewer people in Tameside & Glossop reach the age group 85 years plus. Again this will affect males more than females and thus the decrease in HLE for males in particular. Latest population figures illustrate this with Tameside and Glossop's current resident population figures (October 2016), showing that only 1.1% of the resident male population are aged 85 years and above, compared to the England average of 1.7% and for females 2.3% of the Tameside and Glossop resident population are aged 85 years plus, compared to the England average of 3%. This equates to approximately 1,180 less people reaching their 85th birthday compared to the rest of England.

It is important that we understand the methodology used in calculating healthy life expectancy, unlike Life expectancy at birth which uses purely population and mortality data. Healthy Life Expectancy also uses survey data relating to peoples perspectives around their own health ' good to bad'. This is very subjective and is not a whole population perspective. The survey is annual and the results fluctuate somewhat each year and this would have an effect on the final HLE figures. However it is still important to understand why the male HLE has reduced by 2 years. We do know that males deaths in Tameside and in particular deaths under 75 years are significantly worse than the England average and that there are wide inequalities between male and female life expectancy and mortality within Tameside and Glossop and there are various reasons for this, including genetics, work environment, life style choice and income. Extending the open-ended final age group interval from 85 years and over to 90 years and over, results in greater accuracy of life expectancy estimates across all age groups. The end estimate of life expectancy tends to be slightly lower when life tables were closed at 90 and

over compared with 85 and over.

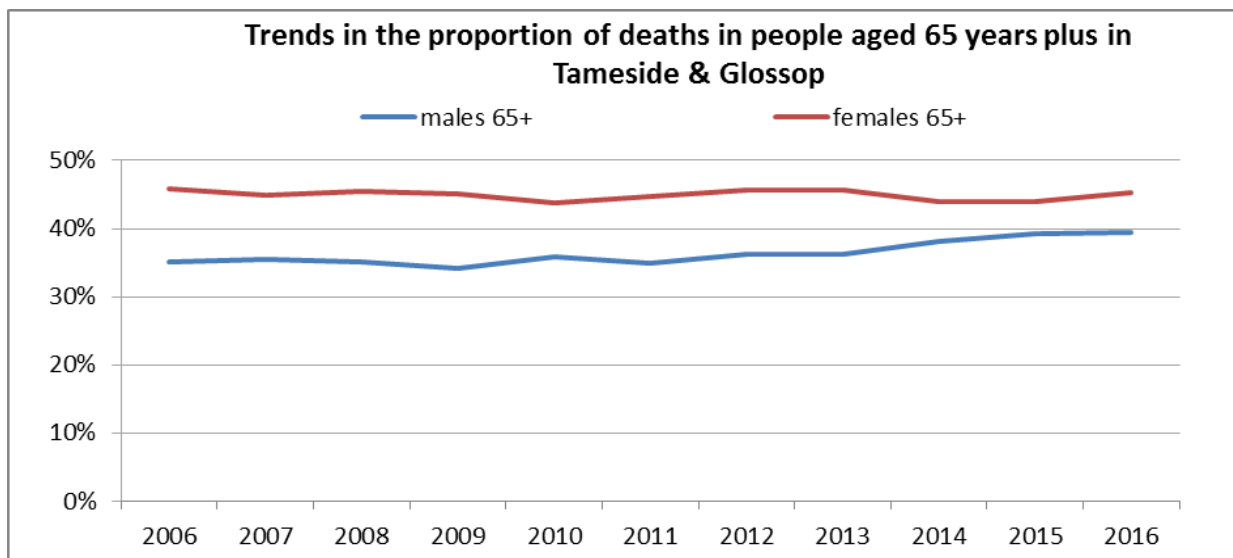
| Year | Old Methodology | | New Methodology | |
|---------|-----------------|---------|-----------------|---------|
| | Life Expectancy | | | |
| | Males | Females | Males | Females |
| 2009-11 | 75.6 | 80.2 | 75.8 | 80.4 |
| 2010-12 | 75.9 | 80.5 | 76.3 | 80.6 |
| 2011-13 | 76.3 | 80.6 | 76.8 | 80.4 |
| 2012-14 | 76.9 | 80.3 | 77.2 | 80.7 |
| 2013-15 | 77.3 | 80.6 | 77.3 | 80.7 |

The table opposite illustrates the change in life expectancy at birth between the old and new methodology. It shows that the new calculation has had a positive impact on overall trends in life expectancy over the last five years with the new methodology illustrating a high life expectancy result over all.

For areas like Tameside and Glossop who have a lower population of people aged 90 years plus, the impact will be a lower life expectancy at birth and healthy life expectancy overall. This impact will be felt in most areas where there are high levels of deprivation and poverty.

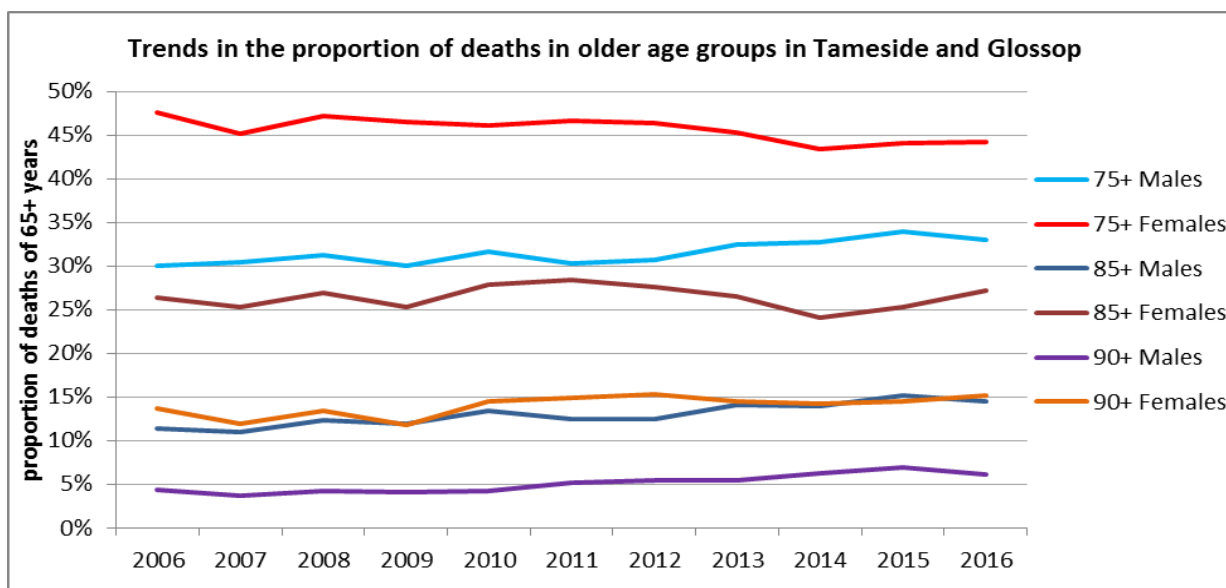
The aging population

The number of deaths occurring in Tameside as a proportion of all deaths shows that a high proportion of deaths occur in age groups 65 years and over. (85% of all deaths in 2016)



Source: PCMD

People are living longer both nationally and locally. The chart below illustrates the proportion of deaths in people over 75 years by age bands 75+, 85+ and 90+ years.



Source: PCMD

It is clear from the chart above that for females the trend in deaths in the 85+ age groups are increasing and although small increases can be seen in males across all the age groups represented in the chart, there is a clear indication that the proportion of male deaths in the Over 75s age groups have started to decline. This will have a knock on effect for life expectancy and healthy life expectancy at birth for males, as the higher the proportion of deaths in the older age group categories the higher the life expectancy estimates will be. However from the chart above it is also clear that for females aged 75 years plus the proportion of deaths in this age group is actually lower now than it was in 2006, dipping to its lowest level in 2014 (2006 = 48% of all deaths versus 2016 = 44%). Whereas males, although showing a decline between 2015 and 2016, the proportion of male deaths in the over 75s category is higher than it was 10 years ago.

For those reaching 100 years plus in Tameside, the inequalities between males and females is significant with only 18 males in ten years reaching the 100 years mark or above compared to 157 females. And this inequality between males and females is persistent across all the older age groups.

Causes of Death in males and females under 65 years and over 75 years (T&G)

The table below highlights the main causes of death in people under 65 years as a proportion of all deaths by year.

- It illustrates that for males CVD mortality has reduced for males but stayed fairly static for females.
- The proportion of people dying from cancer has stayed fairly static for males and females and is the biggest cause of death in this age group
- Deaths from respiratory disease is higher now than it was 10 years ago but again as remained fairly static

The biggest rise in mortality is from digestive conditions including alcohol related liver disease, this increase as a proportion of all deaths is 21% higher in 2016 for males than in 2006 and 37% higher for females.

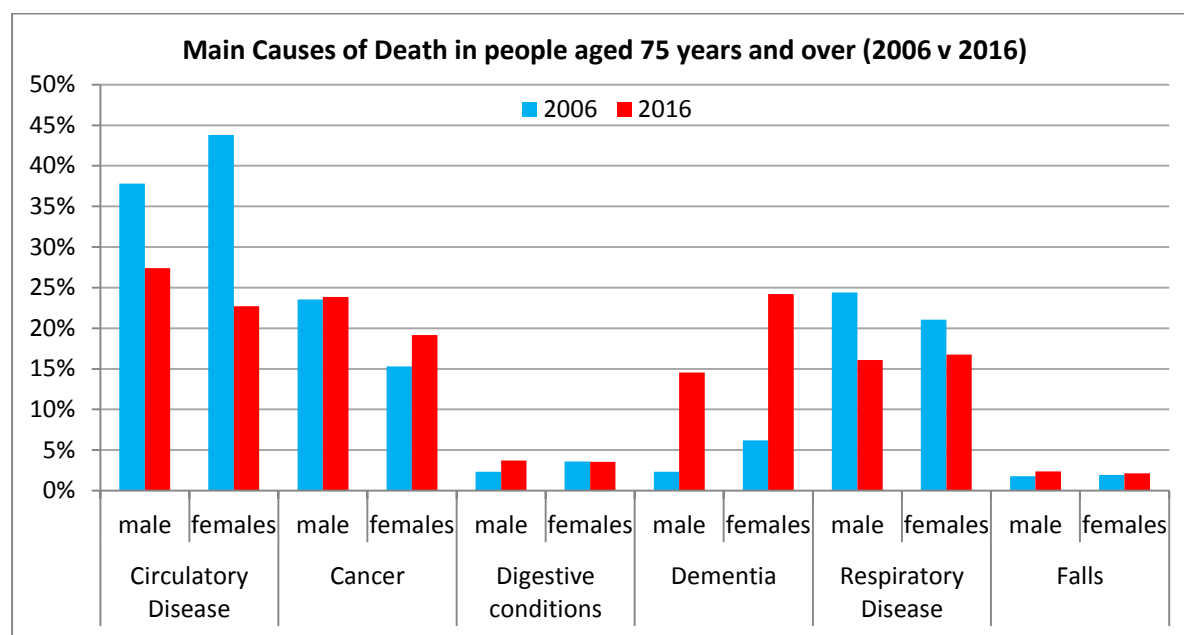
| Year | Circulatory Disease | | Cancer | | Digestive conditions | | Suicide and injuries undetermined intent | | Respiratory Disease | | Other | |
|------|---------------------|---------|--------|---------|----------------------|---------|--|---------|---------------------|---------|-------|---------|
| | male | females | male | females | male | females | male | females | male | females | male | females |
| 2006 | 31% | 19% | 29% | 45% | 8% | 9% | 9% | 4% | 6% | 8% | 17% | 16% |
| 2007 | 30% | 23% | 35% | 42% | 7% | 9% | 3% | 2% | 9% | 7% | 17% | 17% |
| 2008 | 33% | 19% | 25% | 38% | 8% | 9% | 9% | 5% | 6% | 12% | 20% | 18% |
| 2009 | 27% | 15% | 25% | 44% | 11% | 12% | 7% | 2% | 8% | 9% | 21% | 17% |
| 2010 | 29% | 17% | 30% | 45% | 10% | 9% | 5% | 2% | 6% | 9% | 20% | 18% |
| 2011 | 25% | 10% | 31% | 43% | 11% | 13% | 7% | 4% | 6% | 7% | 20% | 23% |
| 2012 | 24% | 22% | 31% | 46% | 11% | 10% | 6% | 1% | 5% | 6% | 24% | 15% |
| 2013 | 28% | 24% | 33% | 41% | 11% | 10% | 6% | 1% | 7% | 8% | 14% | 16% |
| 2014 | 28% | 16% | 29% | 47% | 10% | 13% | 6% | 1% | 5% | 7% | 22% | 15% |
| 2015 | 26% | 12% | 31% | 42% | 16% | 11% | 9% | 2% | 5% | 9% | 14% | 22% |
| 2016 | 26% | 19% | 30% | 34% | 10% | 15% | 7% | 4% | 8% | 10% | 18% | 18% |

Source: PCMD

- Circulatory disease, cancer, digestive conditions and respiratory conditions account for 75% (males) and 79% (females) of all deaths in 2016 compared to 74% and 81% respectively in 2006.

A full break down of causes of death in Tameside and Glossop (2016) can be seen in Appendix 1.

In the older age groups (75yrs+), the main causes of death can be seen in the chart below. These deaths account for 88% of deaths in males and 89% in females (2016).



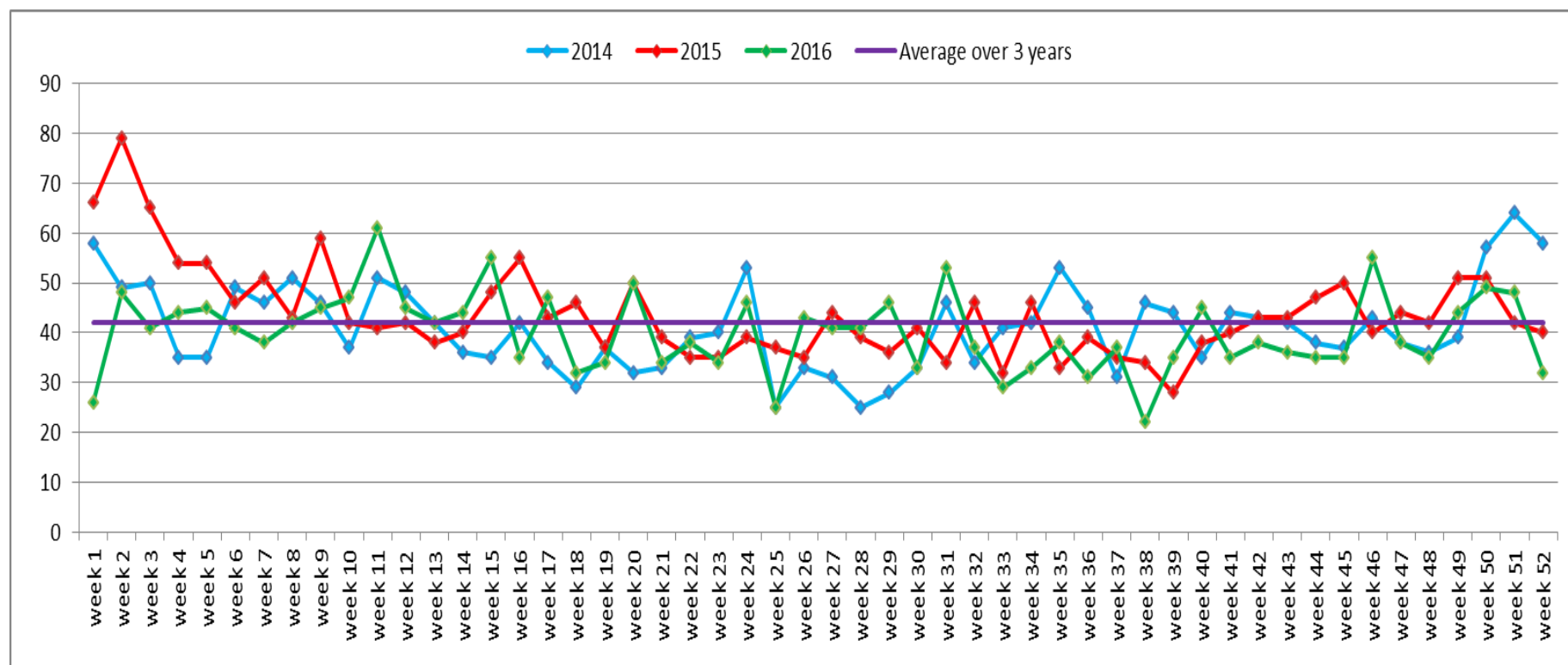
Source: PCMD

It is clear from the chart above that circulatory disease has significantly reduced as the main cause of death since 2006. Although for males it still is the major cause of death. The proportion of deaths from cancer in this age group as remained fairly static for males but has increased somewhat in females. The biggest increase in the deaths is for dementia which now accounts for around 39% of all deaths in 2016 compared to 8% in 2006. However, pre 2010 the coding of dementia was not always consistent, so these figures need to be treated with caution. However, large increases in deaths and the prevalence of dementia are seen nationally.

Changes in patterns of mortality by weeks (2014.2015.2016)

When analysing deaths statistics on a weekly or monthly basis, it is important to use the date of death, as this gives a more accurate picture of changes and fluctuations. During the twentieth century, mortality rates have declined quite rapidly in the United Kingdom. This is due to the reduction of cardiovascular disease in the elderly and the prevention of death in infancy. But deaths fluctuate week on week month on month and there are many reasons for this. The chart below shows the fluctuation in Tameside and Glossop during 2014, 2015 and 2016.

Weekly Mortality Statistics for Tameside and Glossop

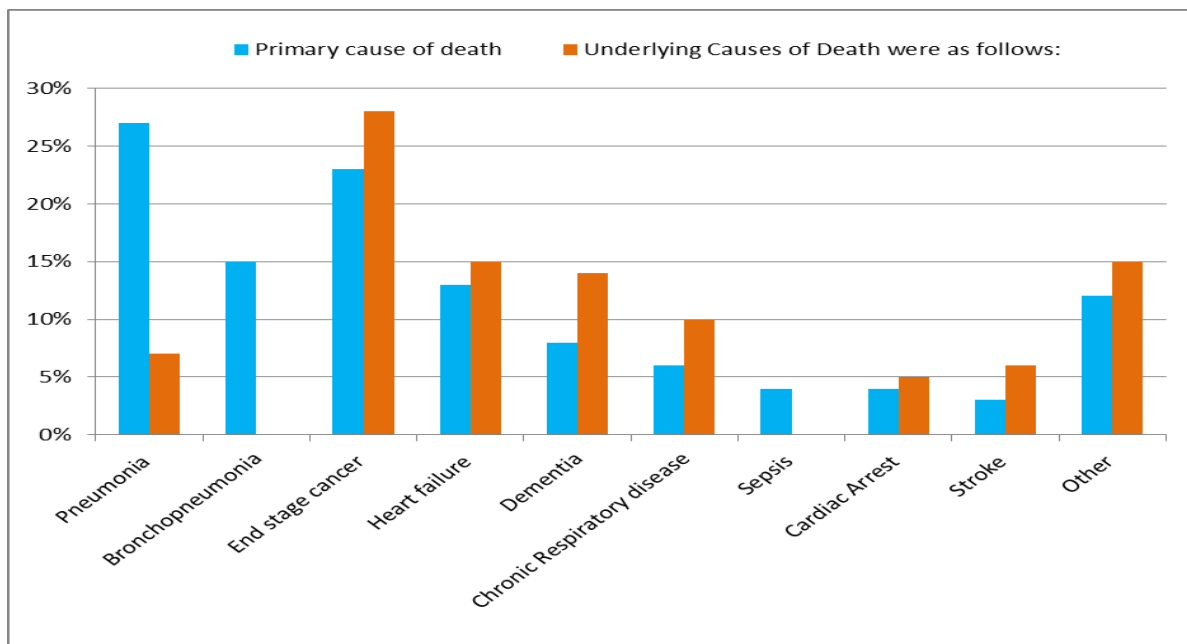


Source: PCMD

The high weekly mortality statistics that can be seen in weeks 1 to 4 and weeks 49 to 52 (2014/15) could be due to a number of external issues ranging from excess winter deaths of which Tameside is similar to the England average. Natural fluctuations in population mortality rates (more people reaching old age), harsher winters, infectious diseases and system failure. Looking at what was going on across the health and social system over the 6 weeks of December 9th to January 19th 2014/15.

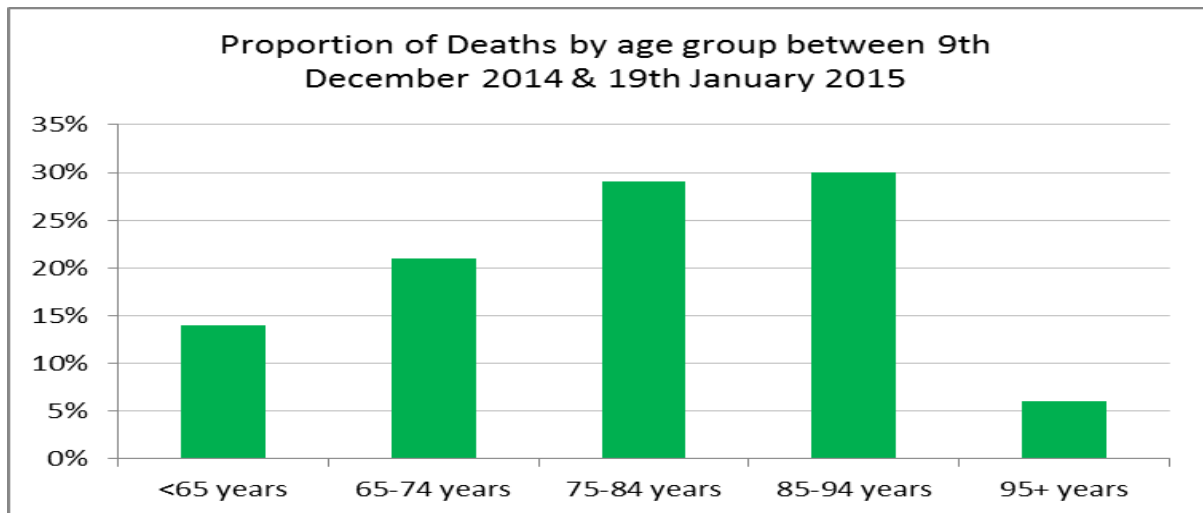
- On average there were 22 deaths more per week than would be seen across the year. 64 deaths per week compared to the annual average of 42 per week.

- The average number of A&E attendances over this 6 week period was similar to the annual weekly number.
- Average proportion the were seen in A&E before 4 hours was 88% over the 6 week period 9th December 2014 to 19th January 2015. Compared to the annual average of 94%.
- However; the proportion of people waiting between 4 and 12 hours during this 6 week period was 10, compared to the annual average of 3 people. (70% higher than normal)
- Delayed transfer of care averaged 15 per day over this 6 week period compared to the annual daily average of 2. (87% higher)
- The winter weather over this week period was average for the time of year with no significant low temperatures. (Average temperature between December 2014 and February 2015 was 4.2°C). However there was some snow fall over this period and an amber level cold weather warning was issued on the 27th December 2014 which could have had some impact on mortality rates.
- The main primary and underlying causes of death can be seen in the chart below



Source: PCMD

- Of the deaths occurring over the 6 week peak, 55% occurred in hospital, 14% in a care home, 10% in a hospice and 20% at usual address (home)
- By age, the majority of deaths were in people aged over 75 years (74%)



Source: PCMD

- The proportion of deaths by gender was males (49%), females (51%)
- People registered with 11 GP practices accounted for just over half of all the deaths in this 6 week period. (51%), with 3 of these practices accounting for nearly 20% of all the deaths over the same time frame.

Sicker patients with more complex conditions are the main reason for worsening performance in A&E departments, according to the King's Fund.

80% of NHS finance directors who responded to a survey identified higher numbers of patients with severe illnesses and complex health needs as a key reason for the pressures on A&E units, while 70% cited delays in discharging patients from hospital. This contrasts with 27% who pointed to poor access to GPs and 20% to shortages of clinical staff as key factors.

Responding to the challenge

The rise in preventable mortality can be reversed if appropriate action such as improved surveillance, prevention programmes, and community based interventions, health care reform and use of fiscal and taxation policies to encourage health lifestyles and services are implemented.

Right Care: is a programme committed to improving people's health and outcomes. It makes sure that the right person has the right care, in the right place, at the right time, making the best use of available resources.

NHS Right Care is all about:

- Intelligence – using data and evidence to shine a light on unwarranted variation to support an improvement in quality
- Innovation – working in partnership with a wide range of organisations, national programmes and patient groups to develop and test new concepts and influence policy

- Implementation and improvement – supporting local health economies to carry out sustainable change.
- make the best use of resources – offering better value for patients, the population and the tax payer
- understand how they are doing – by identifying unwarranted variation between demographically similar populations
- get talking about the same stuff – about healthcare rather than organisations
- focus on the areas of greatest opportunity by identifying priority programmes which offer the best chances to improve healthcare for populations
- use tried and tested processes to make sustainable improvement to care to reduce unwarranted variation

The areas of Right Care that Tameside and Glossop have prioritised are 4 priorities from our main ‘transformation’ priorities for NHS Right Care, and link with the integration and local transformation programme:

- Circulation
- Respiratory
- MSK
- Trauma and Injuries

These priorities link with what the mortality statistics are telling us and the following NHS RightCare priorities will be further analysed and addressed through existing opportunities and programmes of work:

- Cancer
- GI
- Mental Health
- Endocrine

Prevention and Early Intervention: To increase life expectancy and reduce premature mortality we need to prevent our local population from getting health problems in the first place and to ensure that when diagnosed they are diagnosed at the earliest possible stage so that individuals are able to manage their conditions effectively and to ensure a high quality of life is sustained for as long as possible.

Screening and vaccinations programmes have a strong evidence base and are proven to save lives and be cost effective. Therefore it is important to maximise vaccination and screening across the population where possible in order to detect and vaccinate against potential life threatening conditions.

Areas for improvement in Tameside and Glossop include finding the missing thousands of people with undiagnosed conditions through health checks, ensuring all eligible people attend screening such as breast and bowel cancer screening and ensuring the eligible population are vaccinated for influenza and pneumococcal infections. The latter being one of Tameside and Glossop’s biggest main causes of death in older people with long term conditions.

Quality Outcomes Framework (Disease Registers)

QOF registers were constructed to underpin quality of care. Ensuring our residents with a condition are on the relevant QOF register is an important part of patients understanding and managing their condition effectively. Currently the number of people on a disease register does not correspond with the expected number for the following conditions.

| Heart Failure | | CHD | | AF | | Hypertension | | CKD | | COPD | | Stroke | |
|-------------------|----------------|--------|----------------|-------|----------------|--------------|----------------|--------|----------------|--------|----------------|--------|----------------|
| QOF | Number Missing | QOF | Number Missing | QOF | Number Missing | QOF | Number Missing | QOF | Number Missing | QOF | Number Missing | QOF | Number Missing |
| 3,563 | 1,534 | 11,361 | 1,570 | 5,570 | 1,556 | 61,071 | 23,684 | 17,365 | 11,480 | 10,378 | 3,693 | 4,791 | -160 |
| Exceptions | 2,361 | | 2,081 | | 281 | | 1,061 | | 123 | | 3,612 | | 1,170 |

For the conditions above, the table illustrates that there are around 43,358 people with a potential long term condition that are currently not being managed through the QOF process. The QOF process includes annual checks on disease/condition progress and self-management such as appropriate medicine management. For more information on the QOF process the technical guidance can be found here [QOF Technical Guidance](#).

Although QOF is voluntary for General Practice to partake in, QOF is a good indicator of disease prevalence in an area and the management of long term conditions through primary care. For those currently on a QOF disease register, so known to have a long term condition around 10,689 of these patients were deemed exceptions. Exception reporting means that 10,689 did not receive the intervention appropriate to their condition, such as an annual health check, medicine review, or intervention such as the flu vaccination. However these patients may still be managed by the GP by a different method. Unmanaged and unchecked disease can lead to unplanned hospital admissions and early death.

Patients can be exception-reported from individual indicators for various reasons, for example if they are newly diagnosed or newly registered with a practice, if they do not attend appointments or where the treatment is judged to be inappropriate by the GP (such as medication cannot be prescribed due to side-effects). They can also be exception-reported if they decline treatment or investigations.

The overarching principles that should be followed in deciding to exception a patient are that:

- The duty of care remains for all patients, irrespective of exception reporting arrangements
- It is good practice for clinicians to review patients from time to time to ensure the patient is managing their condition or the condition has not worsened
- The decision to except report must be based on clinical judgement with clear reasons why they are exception reporting.
- There should never be any blanket exception reporting

Conclusion

It is clear from the evidence throughout this report that Healthy Life Expectancy and Life expectancy for both males and females are improving somewhat. However the new methodology for calculating life expectancies has had an impact of life expectancy figures for Tameside and Glossop and indeed the rest of the country.

It is clear that moving the age limit from 85 years to 90 as had a significant impact for Tameside & Glossop and this is due to the fact that people in Tameside and Glossop die young and therefore the proportion of people reaching 90 years is significantly lower than the England average.

Main causes of death are similar to what they have been for the last 10 years, CVD, respiratory disease, vascular dementia, cancer and digestive conditions. However there has been marked improvement in the number of people dying from CVD related conditions.

The report highlights also that a peak death rate in the winter of 2014/15 was significant. What contributed could be a multitude of things happening over this particular 6 week period. However, there did seem to be a short lived system failure at the local hospital trust during this time that would have had an impact on outcomes for patients who were admitted. We need to ensure that this is prevented from happening in the future.

It is also pertinent to note that the inequalities gap between Tameside and Glossop and England for life expectancy in people over 65 years is similar to the England average in all age groups 65 years+, 75 years+ and 85 years+. So when our residents do reach 65 years their life chances are similar to the rest of the country.

It is clear from the evidence in the report that the age group 15 years to 64 years contribute the most to the low healthy life expectancy. Conditions such as alcoholic liver disease, self-harm, cardiac arrest, strokes, accidents, cancer and some respiratory conditions are the biggest contributors to deaths in people under 65 years.

Responding to the challenge of ensuring our residents reach the same age as the rest of the country and that once older their life is of good quality is achievable, but maybe not in the time scales that have been set.

However, the life expectancy projections do not take into consideration the new models of care that are coming to fruition of the Care Together programme of work. Therefore we

should recalculate the projects on an annual basis to understand the impact the changes in the system will have on outcomes for our patients.

Recommendations

It is clear that there is a lot of work happening across the health and social care system in Tameside & Glossop to improve the outcomes of our residents. This will help to improve healthy life expectancy. However we need to also incorporate the following into the plans to help accelerate and realise the ambition laid out in our locality plan.

These include:

1. Reducing deaths in people aged 15 years to 64 years; this means a reduction in male deaths of at least 51 each year and 21 less deaths for females.
2. Targeting females in particular around life style issues
3. Finding the missing thousands from the disease registers. People with a condition will then get the appropriate care and interventions that will help them live longer and manage their condition better.
4. Using risk stratification data to ensure that people in the risk groups 20% to 69% have access to the relevant services and interventions that allows them to improve their outcomes.
5. Investigate further, death rates at GP practice level, to see if higher rates are due to positioning of the practices, the age profile of the practice or clinical practice/care. This will enable the wider system to support those practices improve patient outcomes.
6. There needs to be an accelerated programme of work to prevent our population from getting long term and life impacting conditions in the first place. This would be the best and most effective way of ensuring that patterns in mortality and life expectancy change completely.
7. When people do get a long term condition it is important to ensure their condition is monitored on a regular basis and that they are enabled to better care for themselves. Reducing exception reporting in QOF is therefore a must do, along with self-care interventions.

APPENDIX 1

Main Causes of Death in Tameside & Glossop 2016

Source: PCMD (Numbers included are based on primary cause of death)

