England & Wales mortality monitor – Q3 2026

Summary

At the end of Q3 2026, the cumulative standardised mortality rate for 2026 was 6.4% below the 2016-2025 average and 2.5% below 2025, the previous year.

The population estimates used in this monitor reflect the publication by the ONS in July 2026 of new population estimates published for 2025 and revised population estimates published for 2022, 2023 and 2024. Those changes were implemented in the summary monitor for week 31 and details on the impact can be found in this note.

Background

This is the latest in a series of quarterly updates monitoring mortality in England & Wales. It is based on provisional weekly deaths data published by the Office for National Statistics (ONS) up to 25 September 2026 (i.e. week 39 of 2026) on 7 October 2026. We intend to publish the next quarterly update, for data to the end of Q4 of 2026, in January 2027.

We are also publishing briefer monthly summaries, which include Charts D and E from the quarterly monitor, every four or five weeks.

All updates are publicly available from the CMI pages of the Institute and Faculty of Actuaries website: https://www.actuaries.org.uk/learn-and-develop/continuous-mortality-investigation/other-cmi-outputs/mortality-monitor. The same page has “beta” mortality monitor software, which is available to Authorised Users. This enables users to produce their own ad hoc updates to the results of this report.

Notes

We have used our standard approach in producing this report, basing it on data published by the Office for National Statistics.

Our calculations are based on the dates when deaths are registered rather than when they occurred. Therefore, results for individual weeks may not be consistent between years due to the timing of public holidays and changes in registration patterns.

We included analysis of the impact of using death registrations rather than occurrences in Appendix 2 of the monitor for Q1 of 2026. We have included a summary update in Appendix 2 of this monitor.

All of our analysis in this update is based on Standardised Mortality Rates (SMRs). These adjust the provisional weekly deaths data published by the Office for National Statistics to control for changes in the size and age and sex distribution of the population over time.

Contents

Charts A, B and C show centred averages of weekly SMRs. The annual averages smooth out seasonal variations. The quarterly averages smooth short-term variations but still show seasonal patterns, allowing the identification of, for example, winters with particularly heavy or light mortality.

Chart D shows cumulative standardised mortality (cSMR) for each year, relative to the average for 2016-2025, and Chart E shows cumulative standardised mortality improvements (cSMRI) for each year (i.e. the progression of annual mortality improvements over the course of each year). Charts D2 and E2 show the same information as charts D and E respectively in a different format and may be easier to interpret for those with colour vision deficiency.

Charts A to E show results for males and females combined, for ages 20-100. Charts F and G show variations in the cSMR and cSMRI by sex and age band.

Full details of the methods used are included in Working Paper 111.

The numerical results underlying the charts are provided in an accompanying spreadsheet, together with further results, including SMRs by sex and age band.

Use of this document

Please note that:

- The CMI disclaims any liability from use of or reliance on these calculations, including in relation to financial transactions such as longevity swaps; and
- The CMI does not guarantee that it will continue to publish quarterly updates.

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TAS compliance

This paper is intended to translate publicly available demographic information published by the Office for National Statistics and similar bodies into indicative mortality measures to illustrate recent mortality experience primarily in England & Wales. The paper is intended for use by actuaries and other parties interested in detailed mortality statistics and is for information only.

The paper complies with the principles in the Financial Reporting Council’s Technical Actuarial Standard “TAS 100: General Actuarial Standards”. Any person using this paper should exercise judgement over its suitability and relevance for their purpose.

Smoothed mortality at a point in time

Chart A shows quarterly (13-week) and annual (53-week) centred averages of SMRs, since weekly deaths data became available. Note that although we have used data to 25 September 2026, the quarterly and annual averages stop 6 and 26 weeks earlier.

The annual average SMR was fairly flat from 2010 to mid-2018, remaining within the range from 1.25% to 1.36%, but it reached a new low of 1.22% in late 2018 and early 2019. It rose rapidly because of the coronavirus pandemic, reaching 1.49% in September 2020, but has since fallen, with the latest value of 1.18% being a record low.

The quarterly average SMR shows that mortality typically peaks near the start of each year, other than during the pandemic. It reached a record low of 1.07% in the summer of 2026.

Chart A: Quarterly and annual centred average SMRs – whole period

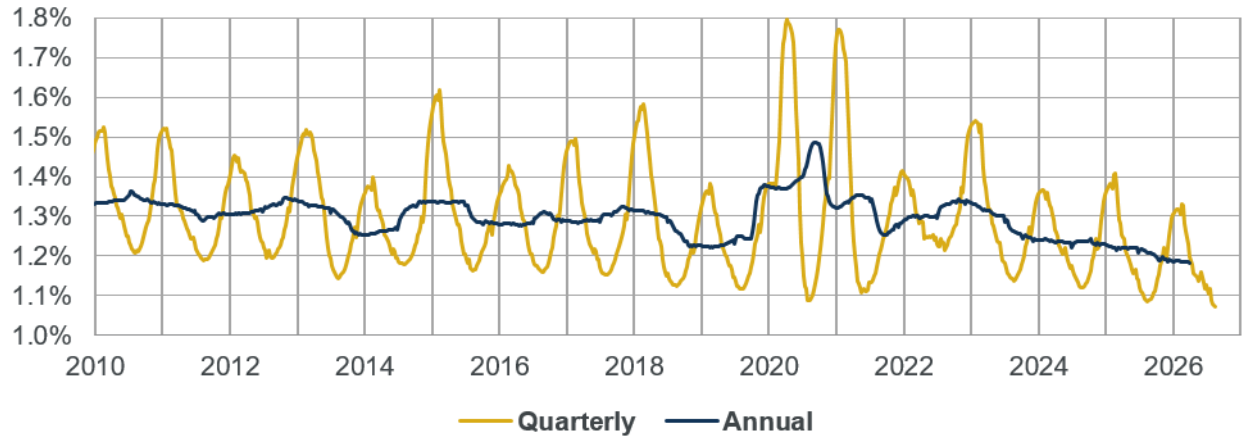


Chart B shows the same information as Chart A, magnified to show the current year and the previous five years more clearly.

Chart B: Quarterly and annual centred average SMRs – current and previous five years

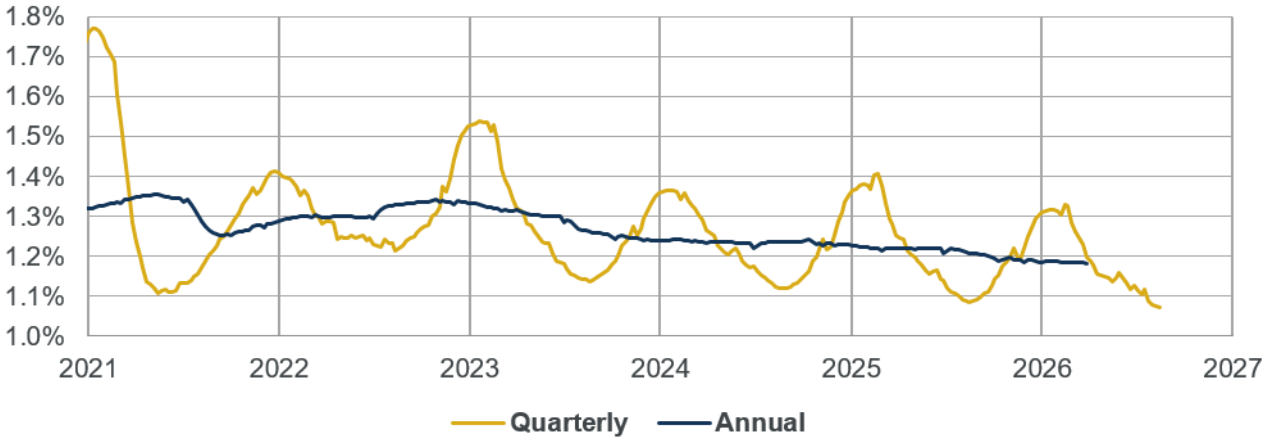
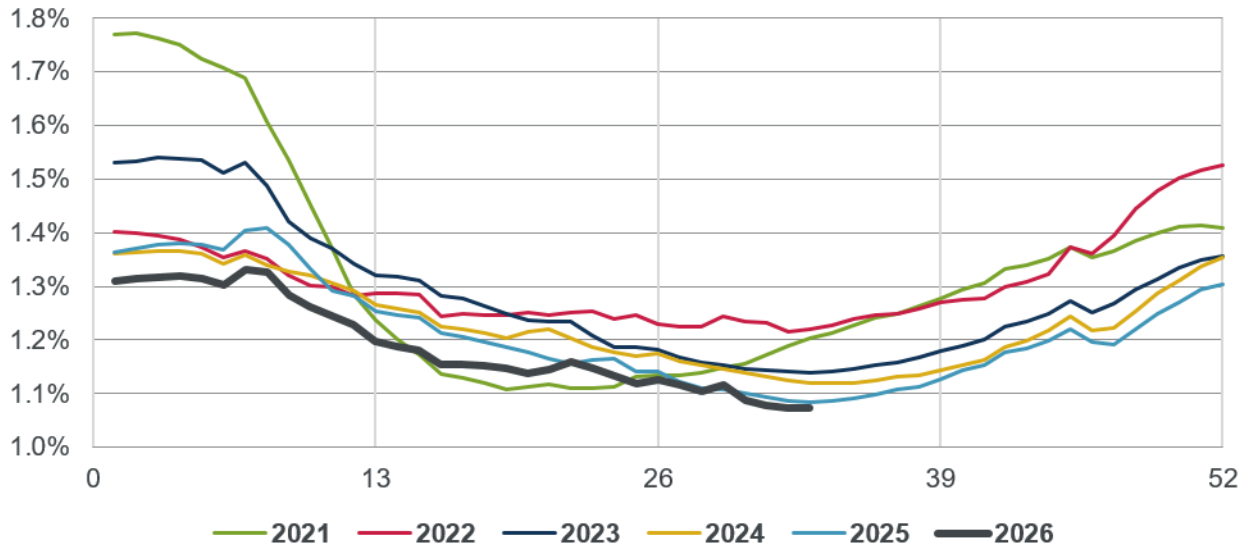


Chart C shows the quarterly average SMRs from Chart B for each year, with values plotted by week number to aid comparison. Although lines are labelled by calendar year, the quarterly averages for weeks towards the start and end of each year will be affected by mortality in earlier and later years respectively. Mortality in 2021 (and 2020, not shown) was strongly affected by the pandemic. The latest value is the lowest for any quarter.

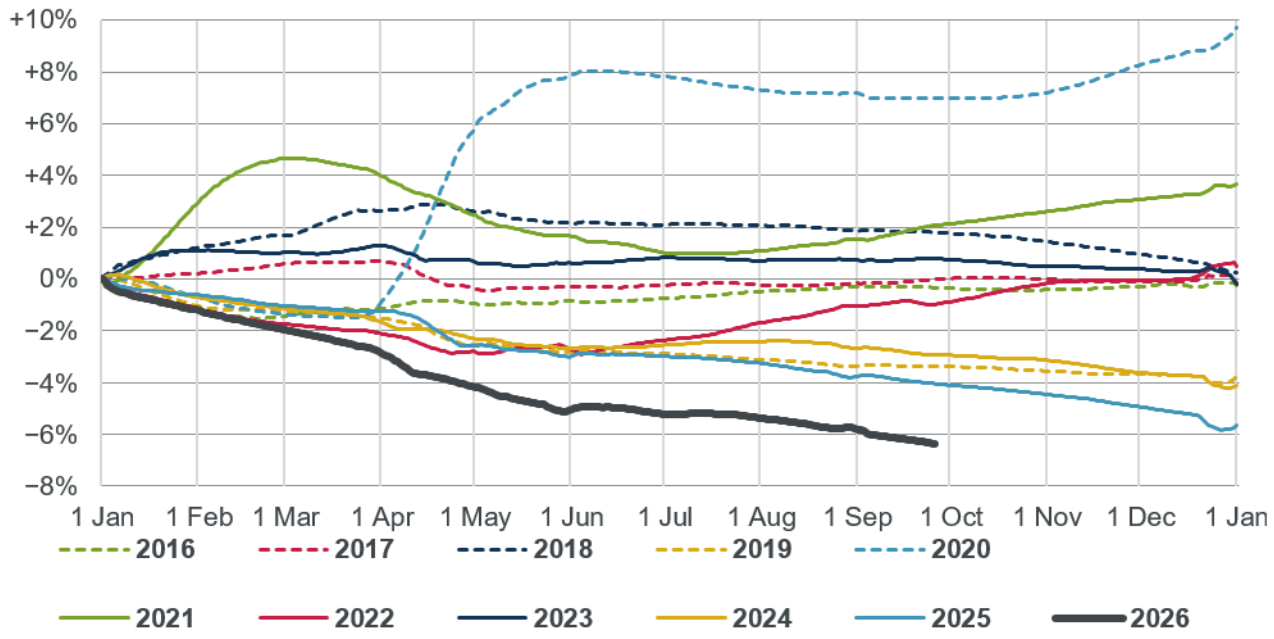
Chart C: Quarterly centred average SMRs, by week number



Cumulative mortality

Chart D shows cumulative standardised mortality rates for 2026 and the previous ten years compared to the 2016-2025 average. The calculation method is described in Section 4.2 of Working Paper 111. Chart D2 (in Appendix 1) shows the same information in a different format and may be easier for those with colour vision deficiency. The 2016-2025 average and individual years are affected by the timing of bank holidays.

Chart D: Cumulative standardised mortality rate (cSMR) compared to the 2016-2025 average



All years have a value of 0% at the start of the year, by definition, as there has been no mortality at that point of the year; the year-end values show how mortality for each year as a whole compares to the 2016-2025 average; and intermediate points show how mortality has developed during the year, relative to the average. If mortality improvements had been constant throughout the period considered then the lines for each year would form a "fan", with the end-year values decreasing steadily from year to year. While we saw a decrease of this sort in the years up to 2011 (not shown), there is no clear pattern to the end-year values for later years, as mortality has been volatile with low improvements. Mortality for complete calendar years was highest in 2020 (of the years shown) and lowest in 2025.

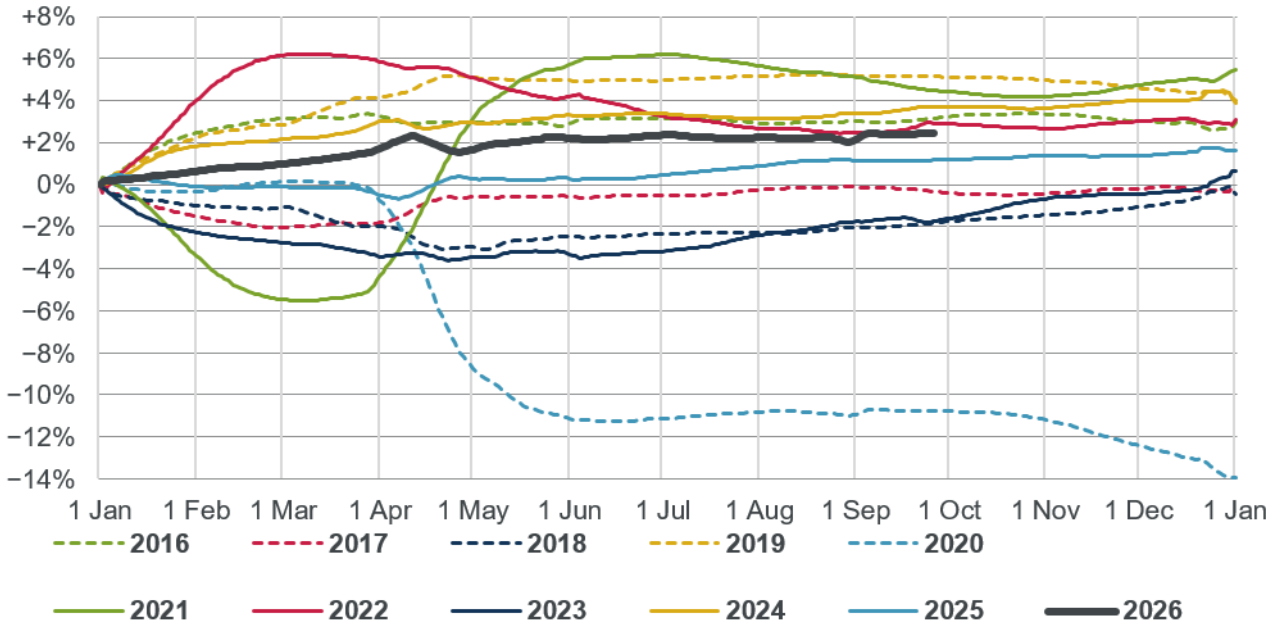
Chart D shows that cumulative standardised mortality to week 39 of 2026 was 6.4% lower than the ten-year average.

Chart E shows the cumulative annual standardised mortality improvement (also described in Section 4.2 of Working Paper 111) for 2024 and for the previous ten years. Chart E2 (in Appendix 1) shows the same information in a different format and may be easier for those with colour vision deficiency.

All years have a value of 0% at the start of the year, by definition, as there has been no mortality at that point of the year; the year-end values show how mortality for each year as a whole compares to the previous year; and intermediate points show how mortality improvements have developed during the year.

Note that Chart E shows mortality improvements, so a higher value represents a higher improvement and lower mortality; whereas in Chart D a higher value represents higher mortality.

Chart E: Cumulative annual standardised mortality improvement (cSMRI)



The cumulative mortality improvement to 25 September 2026, relative to 2025, is +2.5%.

Note that:

- The cumulative values at the end of the year in Charts D and E may not necessarily agree precisely with the corresponding values based on annual data. This is because some weeks span two years, requiring us to estimate in which year those deaths were registered.

- Mortality improvements vary by age (as shown later in this report) and the mortality improvements shown in Chart E are sensitive to the age distribution of the chosen standard population.

Variation by sex and age

Charts F and G shows how cSMR and cSMRI have varied by sex and age band. Tables 1 and 2 show the values at 25 September 2026.

We note that results by age should currently be treated with particular caution as delays in registrations versus occurrences could have impacted different age ranges to different degrees.

Table 1: Cumulative standardised mortality rate (cSMR) compared to the 2016-2025 average, by sex and age-band, at 25 September 2026

	0-64	65-84	85+	20-100	20-44	45-64	65-74	75-84
Male	-4.3%	-8.4%	-4.6%	**-6.3%**	-4.5%	-4.5%	-7.6%	-8.9%
Female	-6.6%	-7.6%	-5.2%	**-6.5%**	-6.8%	-7.1%	-6.6%	-8.1%
Combined	-5.1%	-8.1%	-4.9%	**-6.4%**	-5.3%	-5.5%	-7.2%	-8.6%

Table 2: Cumulative annual standardised mortality improvement (cSMRI), by sex and age–band, at 25 September 2026

	0–64	65–84	85+	20–100	20–44	45–64	65–74	75–84
Male	+2.9%	+3.1%	+2.2%	**+2.7%**	+1.0%	+3.5%	+3.4%	+2.9%
Female	+3.1%	+2.5%	+1.5%	**+2.2%**	+4.4%	+3.1%	+2.6%	+2.5%
Combined	+3.0%	+2.9%	+1.9%	**+2.5%**	+2.2%	+3.3%	+3.1%	+2.7%

In 2026 to date:

- Mortality was well below the 2016-2025 average for all groups shown.
- Mortality improvements were positive for all groups shown. We note that improvements are least certain for ages 20-44 due to higher levels of net migration.

Implication for CMI_2026

The analysis in this section shows possible outcomes from CMI_2026 for a range of scenarios for mortality in 2026, if we follow a business-as-usual approach for CMI_2026 that retains the current methods and only updates the calibration data.

Mortality data is only available for the first three quarters of 2026, and the annual improvement in 2026 will likely change as new data emerges in the final quarter of the year. Eventual results from CMI_2026 could also differ if the method changes.

Table 3 shows how life expectancy might change between CMI_2025 and hypothetical versions of CMI_2026, for mortality improvements of 0% to +5% in 2026 (not varying by age or sex) and assuming no change in method. The table is based on Tables 7.1 and 7.2 of Working Paper 211 (which has further detail of the methods used) but reflects updates to population estimates published by the ONS in July 2026.

The “headline” mortality improvement figure of +2.5% for ages 20-100 (using data to week 39 of 2026) would imply an increase in life expectancy between CMI_2025 and a business-as-usual version of CMI_2026 of around 1% for females and over 1% for males at age 65. While Table 2 shows some variation in mortality improvements by age, improvements are between +1.5% and +3.5% at all pensioner ages, which most affect life expectancy.

A change in life expectancy at age 65 greater than 0.5% triggers a review as set out in our Model review policy. The Mortality Projections Committee has considered this and intends to consult on its plans for CMI_2026 later this month and confirm its plans later this year.

Table 3: Percentage difference in life expectancy between CMI_2025 Core and illustrative CMI_2026 for different mortality improvements in 2026 – allowing for updates to population estimates published by the ONS in July 2026

Improvement in 2026	Male 25	Male 45	Male 65	Male 85	Female 25	Female 45	Female 65	Female 85
+5%	+0.9%	+1.5%	**+2.3%**	+1.5%	+0.8%	+1.3%	**+2.0%**	+1.9%
+4%	+0.7%	+1.2%	**+1.8%**	+0.9%	+0.6%	+1.0%	**+1.6%**	+1.4%
+3%	+0.5%	+0.9%	**+1.4%**	+0.4%	+0.5%	+0.8%	**+1.2%**	+0.9%
+2%	+0.3%	+0.6%	**+1.0%**	-0.1%	+0.3%	+0.5%	**+0.8%**	+0.4%
+1%	+0.1%	+0.3%	**+0.6%**	-0.6%	+0.1%	+0.3%	**+0.4%**	-0.0%
0%	-0.0%	+0.0%	**+0.1%**	-1.1%	-0.0%	+0.0%	**+0.0%**	-0.5%

Chart F: Cumulative standardised mortality rate (cSMR) compared to the 2016-2025 average, by sex and age-band

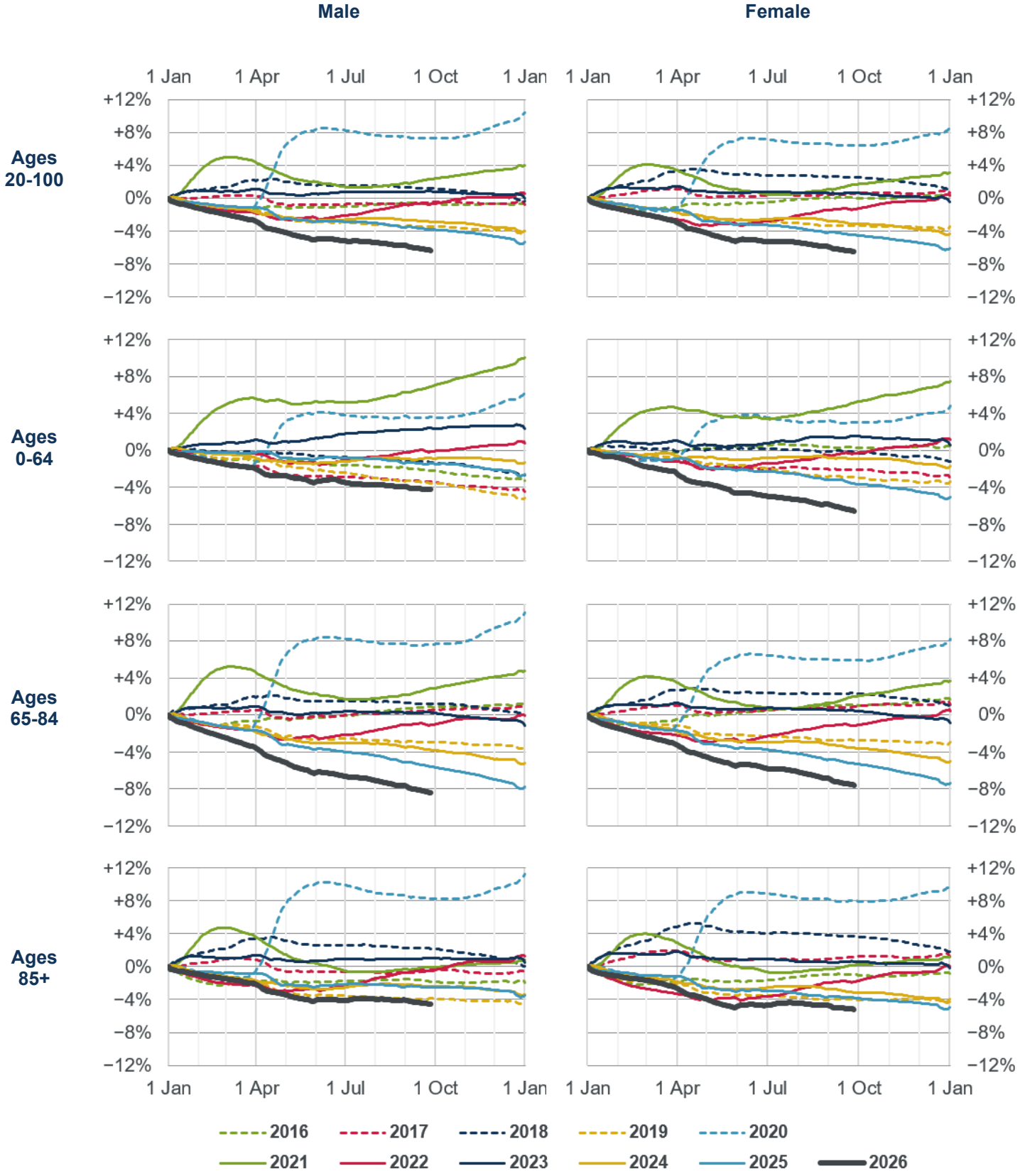


Chart F (cont): Cumulative standardised mortality rate (cSMR) compared to the 2016-2025 average, by sex and age-band

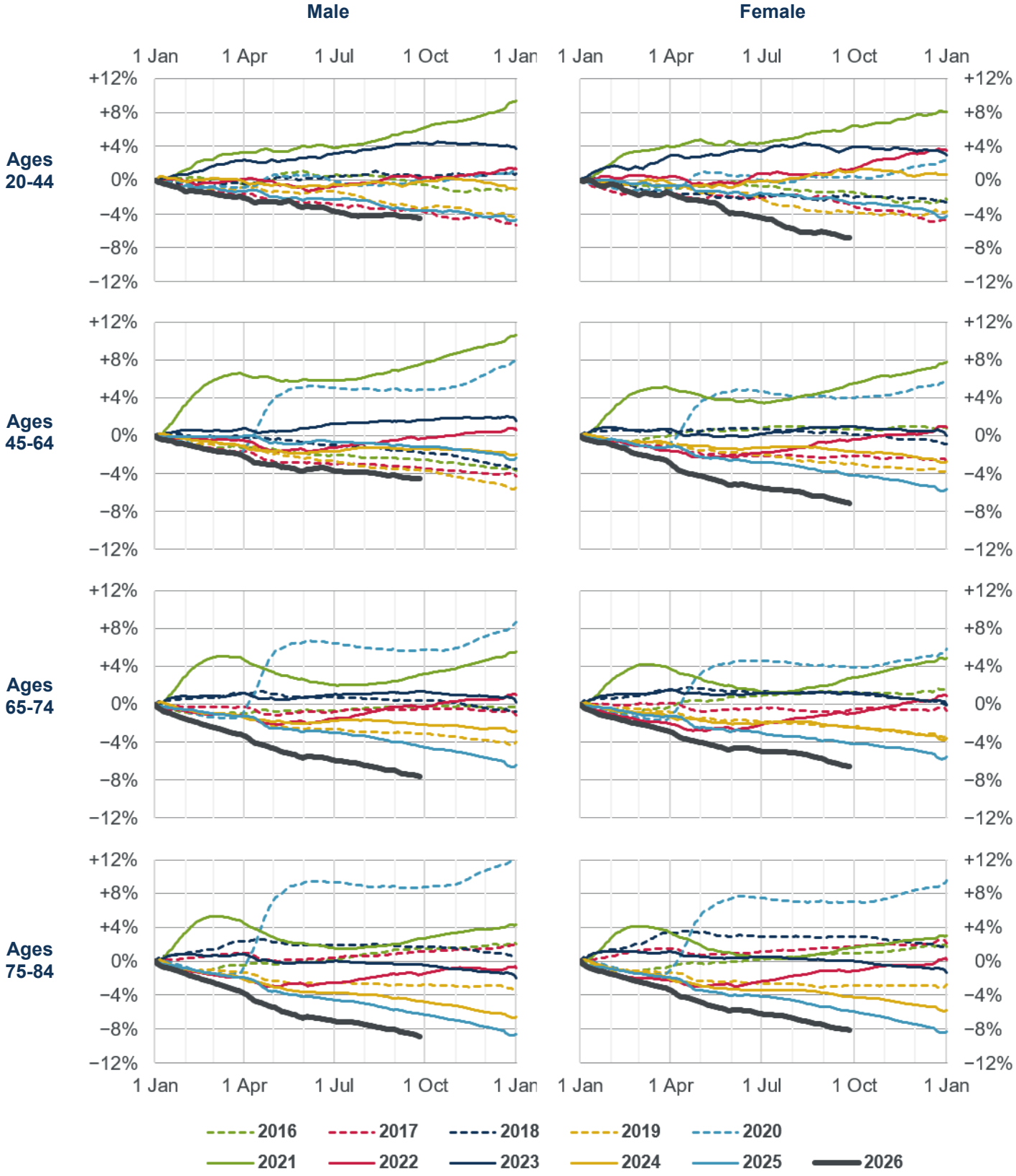


Chart G: Cumulative annual standardised mortality improvement (cSMRI), by sex and age band

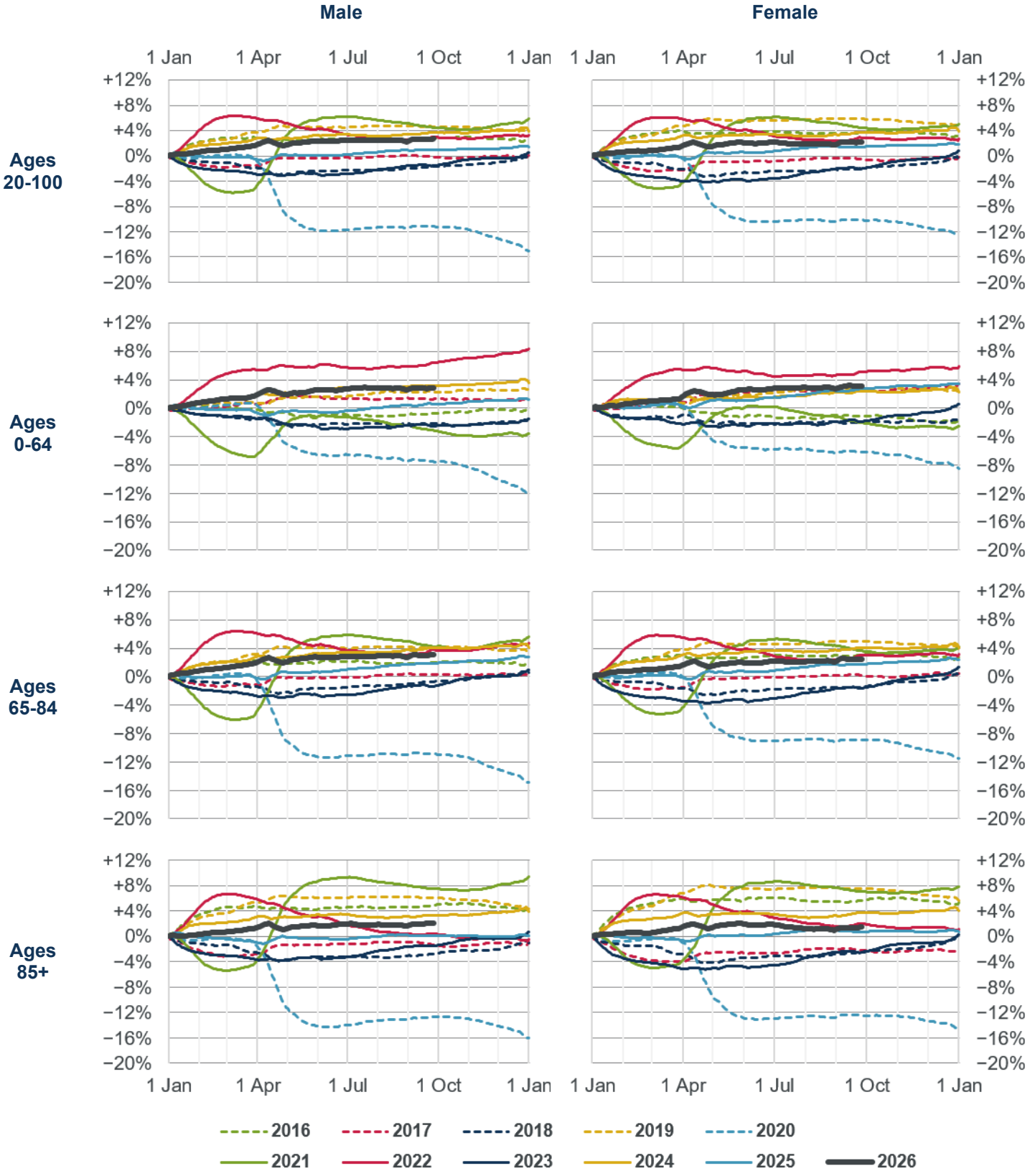
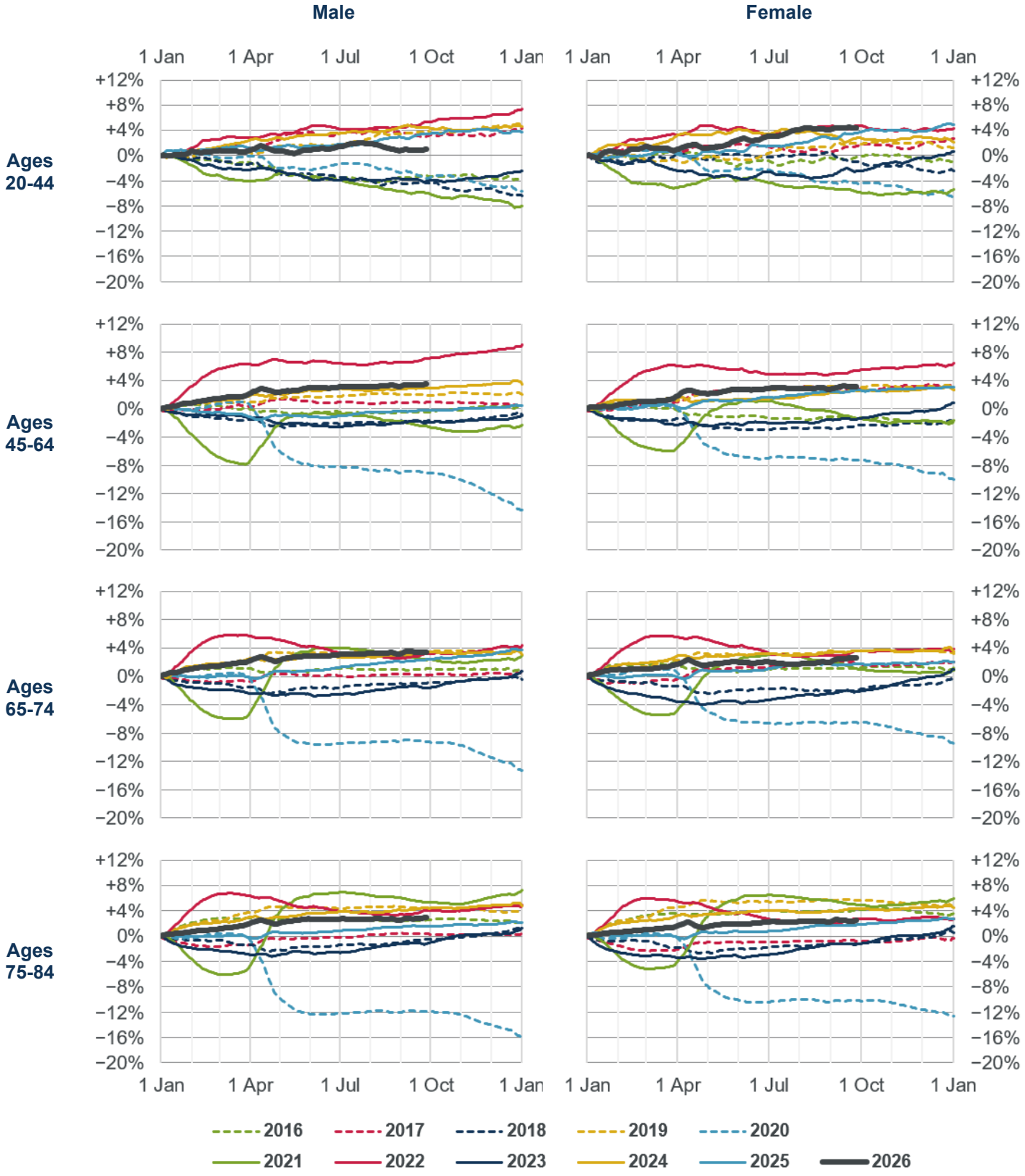


Chart G (cont): Cumulative annual standardised mortality improvement (cSMRI), by sex and age band



Appendix 1 – Accessible versions of charts D and E

Chart D2: Cumulative standardised mortality rate (cSMR) compared to the 2016-2025 average, showing 2016-2026 and highlighting individual years

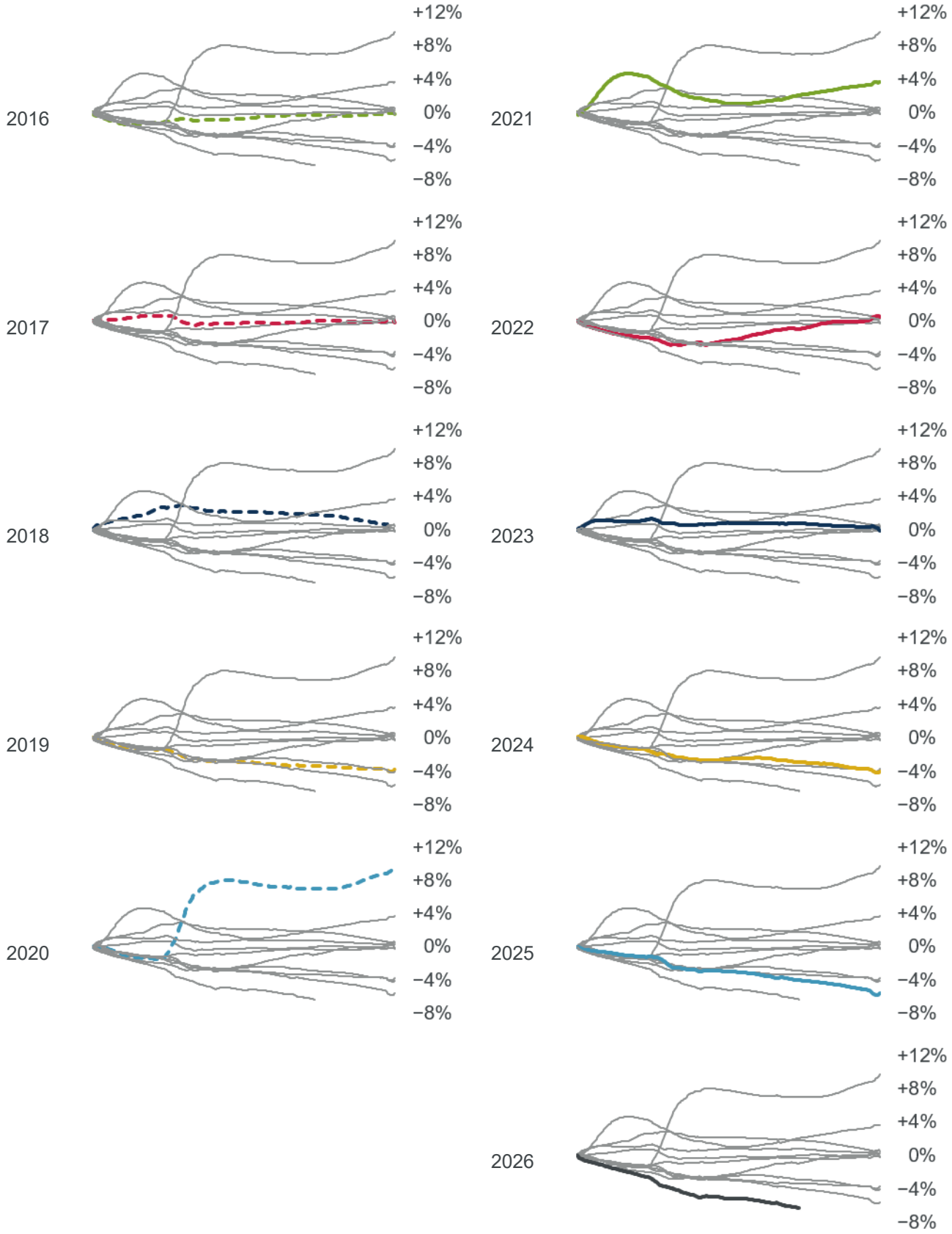
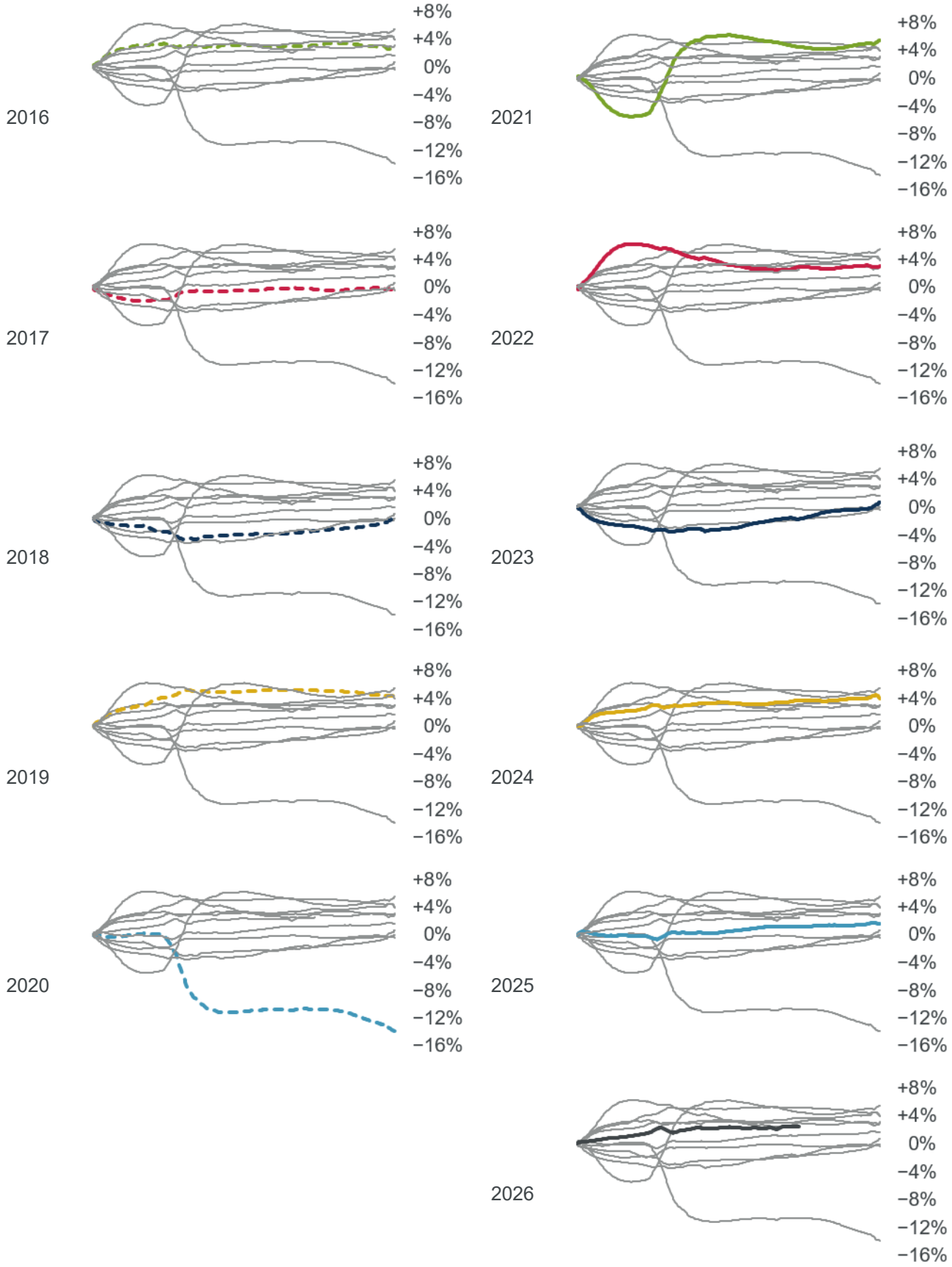


Chart E2: Cumulative annual standardised mortality improvement (cSMRI) for 2016-2026, highlighting individual years



Appendix 2 – Registrations and occurrences

The ONS publishes mortality statistics on both an occurrence basis (based on when each death occurred) and a registration basis (based on when each death was registered). Statistics on an occurrence basis are incomplete, particularly for recent periods, as not all deaths will have been registered by the time the statistics are produced

We have used registration data in this and previous mortality monitors.

Changing registration delays

To illustrate changes in registration delays over time, Charts H and I show various "proportion of cumulative death" measures, with different y-axis scales to show detail. These are updated versions of the corresponding charts in the monitor for Q1 of 2026.

For each week w, we show the ratio, labelled as $n{:}\,26$, of:

- deaths registered in the first n possible weeks (i.e. weeks w to $w+n-1$) to
- deaths registered in the first 26 possible weeks (i.e. weeks w to $w+25$).

In charts H and I:

- $1{:}\,26$ shows downward spikes corresponding to bank holidays, which are particularly noticeable at year ends and Easter. It has little discernible trend before the pandemic, but falls between 2021 and 2022, plateaus, and then falls further after the September 2024 death certification reforms.
- $2{:}\,26$ shows a similar broad pattern, with the downward spike at the end of 2024 being noticeable, with a slower recovery than has been seen in previous years.
- $4{:}\,26$ shows a particularly noticeable downward spike at the end of 2022.
- $8{:}\,26$ and $13{:}\,26$ show less of a trend over time and are less affected by bank holidays.
- There are peaks around April 2020 and January 2021, suggesting that deaths were registered more quickly than usual during these waves of the COVID-19 pandemic. This likely reflects a high proportion of deaths quickly attributed to COVID-19 at those times, shortening the average delay to registration.
- The latest results shown are broadly consistent with the results from the mortality monitor for Q1 of 2026.

Chart H: Proportion of cumulative death measures – all ages

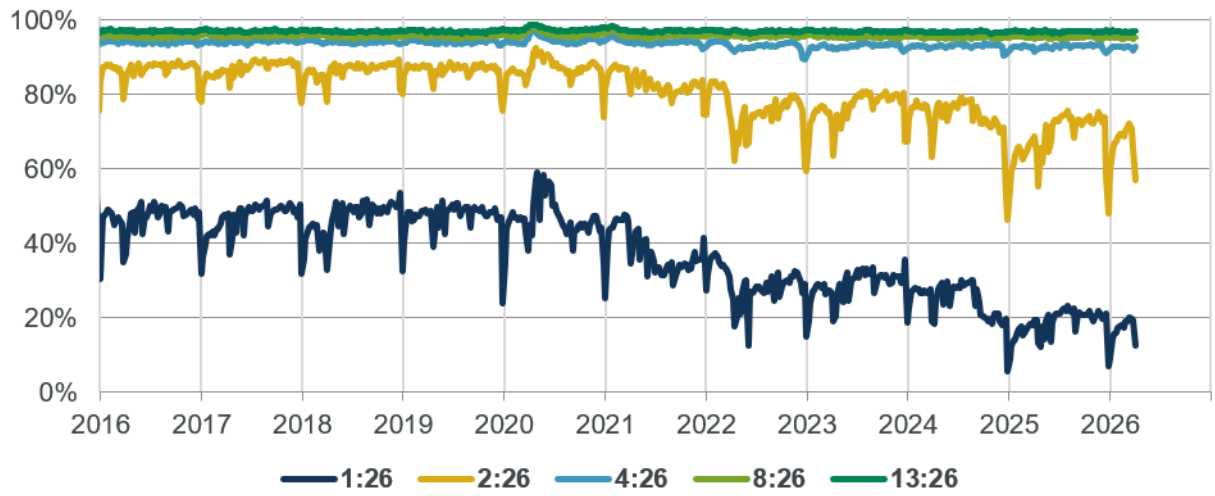
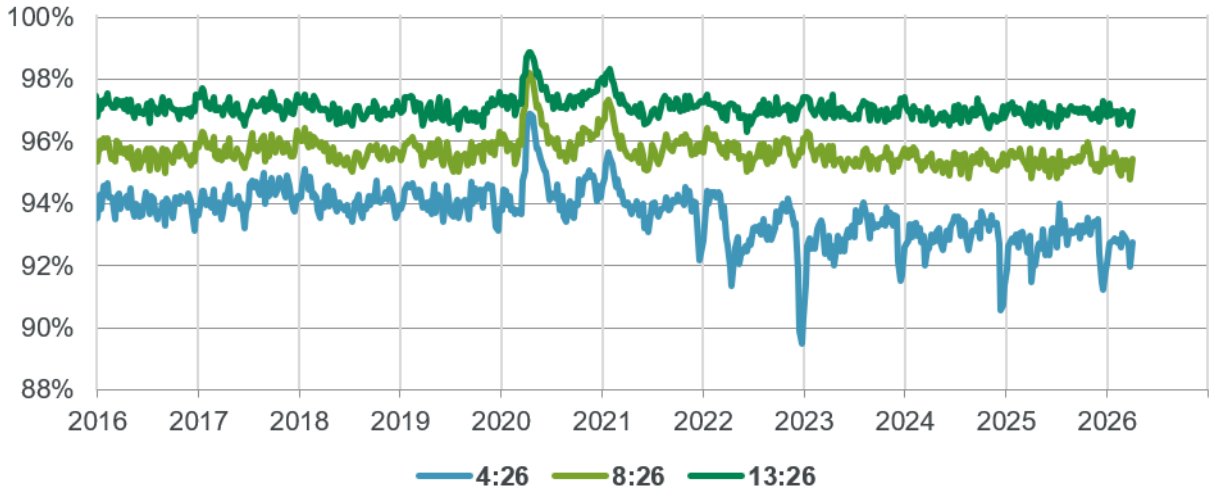


Chart I: Proportion of cumulative death measures – all ages - detail for larger n



Impact on ASMRs, mortality improvements, and life expectancies.

Appendix 2 of the monitor for Q1 of 2026 considered how key results from the mortality monitor might have differed if we had used deaths on an occurrence basis, making an estimate of deaths that have occurred but not been registered yet. We intend to update that analysis annually, in each Q1 monitor.

Appendix 8 Working Paper 211 has similar analysis focussed on the results of the latest version of the CMI Mortality Projections Model, CMI_2025. Appendix 9 of that paper has details of the methods used.

Reliances and limitations

The purpose of the mortality monitor is to provide regular updates on standardised mortality in England & Wales, adjusting ONS data to allowing for changes in the size and age of the population. This can be used to inform a view on the outcome of the next version of the CMI Model, in the absence of any change in method.

The CMI aims to produce high-quality outputs and takes considerable care to ensure that the mortality monitor and the accompanying spreadsheet of results are accurate. However:

- We cannot guarantee their accuracy (see the Disclaimer).
- There is a reliance on the underlying data, published by the ONS and described as provisional.
- We have also applied judgement and assumptions in deciding on the calculation methods, including the choice of standard population, and the presentation of results.
- Anyone using the results of the mortality monitor should ensure that it is appropriate for their particular use and note that care is needed when estimating full year experience from partial year experience. This is particularly true during the coronavirus pandemic.
- Population estimates for the latest years reflect our own estimates and are less certain than published ONS figures for earlier years.

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