

Dying at home or hospital: dependent on wealth, location & number of diseases

Key findings

Hospital deaths from respiratory diseases, COPD and IPD, fell by 3-6% in the 8 years following the introduction of the End of Life Care Strategy, reversing previous trends. However:

- People with more than 1 disease or disorder (multimorbidity) did not show a fall in hospital deaths.
- People with 3 or more different diseases as well as their COPD or IPD, were over a third more likely to die in hospital than those who did not.
- Deprivation also independently increased the chances of dying in hospital.
- Living in urban areas increased the chances of hospital death. London had the highest hospital deaths, and the South-West and South East Coast regions had lower hospital deaths than most other regions.

Surprisingly, for COPD patients, being single, widowed or divorced was associated with reduced chances of dying in hospital, perhaps suggesting the presence of family members increased the chance of patients being admitted to hospital. This may be because family members feel unsure what to do when breathlessness escalates.

Policy recommendations

- It is essential that future strategies for end of life and palliative care directly target those at highest risk, especially with multimorbidity, and in deprived areas and cities - this may require different approaches.
- The quality of palliative care is important in all places where people are cared for; home, hospital and hospices. Finding an alternative to hospital for people with multimorbidity may be especially difficult, and may require in-patient beds in hospices, palliative care beds in hospitals or different, more intensive support at home.

Why is this research important?

Where people die is often important to them and their families, as well as being important for planning health care services. Most people want to die at home, but instead most die in hospital. While the trends have been studied in cancer, other diseases, such as respiratory, are rarely looked at even though they are common and increasing causes of death.

Chronic Obstructive Pulmonary Disease (COPD) and Interstitial Pulmonary Diseases (IPD) are common respiratory conditions. Both conditions result in a high use of hospital services, especially among people in advanced stages.

This leads to high healthcare costs¹. In the UK in 2010, it is estimated that IPD costs £16.2 million per year in hospitalisations². The NHS spends more than £810 million annually managing COPD, with inpatient stays accounting for around £250 million annually.

Understanding which factors affect place of death is vital for planning services and improving care, especially given our ageing population, rising chronic diseases and the high costs of hospital admissions.

Strategies in many countries have sought to improve palliative care and reduce hospital deaths for non-cancer patients, but their effects are not evaluated.

What did we try to find out?

We aimed to determine the trends and factors associated with dying in hospital in IPD and COPD patients, and the impact of the National End of Life Care Strategy³ to reduce deaths in hospital.

What did we do?

This study analysed a national data set of all deaths for COPD and IPD, covering 380,232 people over 14 years.

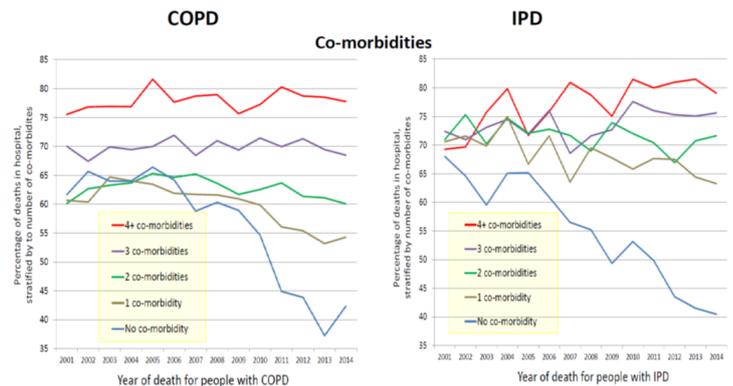
Research findings

- Over 14 years, 380,232 people died from COPD (334,520) or IPD (45,712). Deaths from COPD and IPD increased by 0.9% and 9.2% per annum, respectively. Death in hospital was most common: 67% COPD, 70% IPD. Dying in hospice was rare (0.9% COPD, 2.9% IPD). After a plateau in 2004-5, hospital deaths fell.
- Comorbidities and deprivation independently increased the chances of dying in hospital, with larger effects in IPD than COPD and dose response gradients. The impact of multimorbidity increased over time; hospital deaths did not fall for people with 2 or more co-morbidities in COPD, nor 1 or more in IPD.
- In IPD, increased age reduced the likelihood of hospital death; divergently in COPD, being aged 65-74 years was associated with increased hospital death.
- The independent effects of gender and marital status differed for COPD versus IPD; in COPD hospital death was associated with being married.

Conclusion

There was no fall in hospital deaths for people with multimorbidity, and that disparity widened over time. In the UK, the number of people with 3 or more long-term conditions is predicted to rise from 1.9 million in 2008 to 2.9 million in 2018, requiring a major increase in healthcare expenditure.

These results show that while the End of Life Care Strategy may have helped to move some deaths out of hospital for people with respiratory disease, it still misses important groups.



References

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Note: The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

Please reference as

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