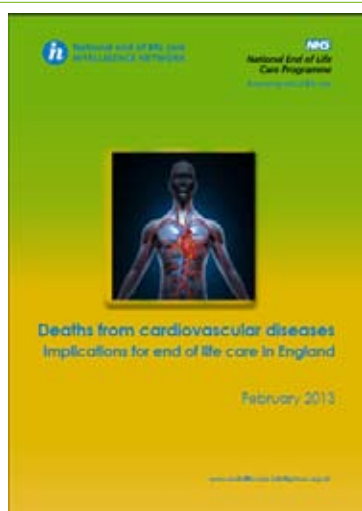


## Executive Summary

This summary presents the key findings, conclusions and recommendations from the report 'Deaths from cardiovascular diseases: Implications for end of life care in England'. The report is one in a series produced by the National End of Life Care Intelligence Network that explores the implications of variations in death for end of life care commissioning and planning of services.

### Deaths from cardiovascular diseases Implications for end of life care in England



#### Introduction

This report describes patterns in mortality from cardiovascular diseases in England, highlighting variation in place and cause of death by age, sex, socioeconomic deprivation and disease group. It complements earlier reports on end of life care published by the National End of Life Care Intelligence Network.

It was commissioned to support the development of a new national strategy for tackling cardiovascular diseases, which are the most common cause of death in England and stroke is the most significant cause of disability.

Included is analysis of mortality and hospital admissions data for cardiovascular diseases in England in the context of end of life care for the period 2004–11 (deaths) and 2004–08 (hospital admissions.)

The report will be of interest to commissioners and providers of end of life care focused on supporting and caring for patients with cardiovascular diseases, as well as the patients themselves, their carers and families.

#### Key findings

##### Variations by disease category

- The number of cardiovascular disease deaths has fallen: from 178,067 in 2004 to 130,192 in 2011.
- The proportion of deaths from circulatory diseases has also fallen, from 37.2% 2004 to 28.9% in 2011.
- The proportion of all cardiovascular disease deaths due to acute coronary heart disease has fallen, whilst the proportion due to chronic coronary heart conditions has risen over the same period.

##### Variations by age and sex

- After controlling for the age and sex of the population, there is some regional variation in cardiovascular disease mortality in England, with higher directly standardised mortality rates in the North of England (North West, North East and Yorkshire and the Humber) and lower rates in the South (South West and South East).
- More men than women die of acute and chronic coronary heart disease but considerably more women die of cerebrovascular diseases (including stroke) than men.
- The number of cardiovascular disease deaths increases with age. This is especially marked for cerebrovascular diseases. However, congenital heart disease has an inverse relationship with age, the largest proportion of deaths occurring in the youngest age band.

## Variations by place of death

- Between 2004 and 2011 a large proportion of cardiovascular disease deaths occurred in hospital (59%).
- Only 0.3% of all cardiovascular disease deaths in this period occurred in a hospice.
- The proportion of deaths in usual place of residence (DiUPR) for all cardiovascular diseases has increased from 37.4% in 2004 to 42.6% in 2011.

## Comorbidities

- The proportion of cardiovascular disease deaths with a hospital record of Type II diabetes has also risen, from 16% to 19%, between 2004 and 2008.
- Diabetes was most commonly mentioned on the hospital records of patients dying of acute or chronic coronary heart disease or vascular dementia.

## Conclusions and recommendations

- This report provides useful and descriptive overview of the current trends in mortality from cardiovascular diseases including circulatory diseases, congenital heart disease and vascular dementia. Based on the results of the analysis, this report concludes that:
- although deaths from cardiovascular diseases as a proportion of all deaths has decreased in recent years, this disease group remains a leading cause of death in England and the end of life care needs for this patient group is significant
- whilst the proportion of deaths in usual place of residence for cardiovascular diseases has increased, more work is required to ensure that cardiovascular disease patients are supported to die with dignity in their preferred place of death
- patients who die of cardiovascular diseases may also die with other comorbidities and may therefore have complex end of life care needs
- cardiovascular disease is difficult to classify into meaningful categories for analysis using the ICD-10 codes structure alone – the taxonomy developed for this report may be a useful frame of reference for future reports.

This report recommends that:

- the key findings from this report inform the development of national policy and strategy around cardiovascular diseases and end of life care
- the National End of Life Care Intelligence Network publishes further analyses of cardiovascular disease mortality statistics as they become available.

## About the National End of Life Care Intelligence Network

The Department of Health's National End of Life Care Strategy, published in 2008, pledged to commission a National End of Life Care Intelligence Network (NEoLCIN). The Network was launched in May 2010. It is tasked with collating existing data and information on end of life care for adults in England. This is with the aim of helping the NHS and its partners commission and deliver high quality end of life care, in a way that makes the most efficient use of resources and responds to the wishes of dying people and their families.

The South West Public Health Observatory is the lead public health observatory for end of life care and hosts the NEoLCIN website. The SWPHO has been commissioned to produce key outputs and analyses for the Network, including the national End of Life Care Profiles.

See [www.endoflifecare-intelligence.org.uk](http://www.endoflifecare-intelligence.org.uk) for more information about the Network and its partners.

## Further information

The report is available at:  
[www.endoflifecare-intelligence.org.uk](http://www.endoflifecare-intelligence.org.uk)

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