



Public Health  
England

# **Metadata for the Clinical Commissioning Group Underlying cause of death End of Life Care Profile**

National End of Life Intelligence Network

# About Public Health England

We work with national and local government, industry and the NHS to protect and improve the nation's health and support healthier choices. We address inequalities by focusing on removing barriers to good health.

We were established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service.

Public Health England  
133-155 Waterloo Road  
Wellington House  
London SE1 8UG  
Tel: 020 7654 8000  
<http://www.gov.uk/phe>  
[@PHE\\_uk](#)

Prepared by: [this line can be deleted if not required]

For queries relating to this document, please contact: [this line can be deleted if not required]

© Crown Copyright 2013

Published Month 20XX

PHE gateway number: XXXXXX

This document is available in other formats on request. Please call 020 8327 7018 or email [publications@phe.gov.uk](mailto:publications@phe.gov.uk)

# Contents

About Public Health England	2
Contents	3
Reported statistics	4
Cohort definition	4
Underlying cause of death categories	4
Geographic categories	4
Description of calculations	5

## Reported statistics

The presented statistics are the number and proportion of people in each gender and age group whose underlying cause of death was cancer, respiratory disease, circulatory disease or 'something else'.

## Data source

Office for National Statistics (ONS) annual mortality extracts 2014.

## Cohort definition

The profiles include all deaths in England registered between 2011 and 2013 inclusive.

## Underlying cause of death categories

The 'underlying cause of death' is coded in the ONS data using ICD 10 codes (International Classification of Disease, Tenth Issue). These codes are used to categorise cause of death:

- **Cancer:** ICD10 codes: C00 to C97 – includes all malignant neoplasms.
- **Respiratory disease:** ICD10 codes: J00 to J99 – includes influenza, pneumonia, bronchitis, emphysema, asthma and other chronic obstructive pulmonary disease.
- **Circulatory disease:** ICD10 codes: I99 – includes rheumatic fever, rheumatic heart disease, hypertension, ischaemic heart disease, stroke.
- **Other:** a cause of death not included in the first three categories

## Geographic categories

The postcode of usual place of residence was used to place each individual in an area by Clinical Commissioning Group (CCG).

## Description of calculations

Within each CCG area and each age and sex combination, the number of deaths that had a particular underlying cause of death was calculated and reported as a proportion of the total number of deaths.

A 95% confidence interval was calculated for the reported proportion using the Wilson Score Method as described in Technical Briefing 3: Commonly used public health statistics and their confidence intervals (Association of Public Health Observatories, 2008).

A Z test was used to compare the proportion of deaths for each CCG with the value for England. The Z test depends on the value of:

$$Z = (PL - PE) / SE(PL - PE)$$

Where PL is the local proportion, PE is the proportion in England and SE(PL - PE) is the standard error in the difference of these two proportions given by

$$SE(PL - PE) = \text{SQRT}[ PL*(1 - PL)/NL + PE*(1 - PE)/NE ]$$

Where NL is the number of deaths locally and NE is the number of deaths in England.

In instances where Z is greater than 1.96 the local proportion is reported as higher than England. When Z is less than -1.96 the local proportion is reported as lower than England and when Z is between -1.96 and 1.96 the local proportion is reported as not significantly different from England.