

# Publication Report



## Percentage of End of Life Spent at Home or in a Community Setting

Financial years ending 31<sup>st</sup> March 2010 to 2014

25 August 2015

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## Introduction

The [NHS Healthcare Quality Strategy](#) was launched in May 2010 by the Scottish Government with the aim of delivering high quality healthcare services to the people of Scotland. A direct action identified by the Quality Strategy was to develop a [Quality Measurement Framework](#) supporting a number of Quality Outcome Measures (QOMs). These measures cover a range of healthcare topics including; care experience, healthcare acquired infections, hospital mortality rates and end of life care.

This Information Services Division publication presents analysis and findings in support of the action plan "[Living and Dying Well: A National Action Plan for Palliative and End of Life Care in Scotland](#)" which has as one of its objectives to "produce achievable and measurable changes which will ensure quality improvement and enhance patient and carer experience".

Ideally, the measure would relate directly to the patient's preferred place of care at the end of their life. However, there is no national and systematic data recorded on a person's preferred place of care at end of life and so this publication uses instead the following surrogate measure: "*Percentage of last six months spent in home or a community setting*". Although this is not a direct measure of compliance with people's preferred place of death, it can serve to provide a broad indication of progress in the implementation of the national action plan.

## Methodology

This publication includes data from financial years 2009/10 to 2013/14 at Scotland, NHS Board and Council Area level.

For the purpose of this publication, hospitals have been classified as either an acute or community hospital. The *percentage of last six months spent in home or a community setting* is calculated by determining the number of days a person has not spent in an acute hospital setting. The list of hospitals categorised as "acute" can be found in the [data tables](#). In broad terms, time spent in a community hospital represents a step closer to primary/community health care.

The measure currently includes people of all ages, however it is recognised that older people are more likely to require palliative care services.

The measure excludes deaths due to external causes (e.g. unintentional injuries) as these are unlikely to be related to the palliative care agenda. It should be noted however, that deaths where a fall is recorded on the death record are included as national falls prevention strategies specifically target elderly people with the aim of reducing the need for stays in hospital and thereby improving patient outcomes.

A more detailed description of the methodology is provided in [Appendix 3](#).

## Key points

- Of the approximately 50,000 Scottish residents who died in 2013/14, 91% of their last 6 months of life was spent at home or in the community and the remaining 9% of time spent in an acute hospital. This is similar to the previous year.
- There is some variation between NHS Boards, with the percentage ranging from 89% to 93%, in part reflecting the provision of community hospitals in different parts of the country.
- There is little variation in the percentage between those living in the most deprived areas and those living in the least deprived areas (90% compared to 91%).
- People living in the more rural areas of Scotland spent a greater percentage of their last 6 months of life at home or in the community than those living in large urban areas (94% compared to 90%).

## Results and Commentary

For the 50,347 residents of Scotland who died in 2013/14, more than 90% of their last six months were spent either at home or in the community (Table 1), which is similar to the previous four years. This is equivalent to each resident spending an average of 17 days in an acute hospital in the 6 months prior to their death (Table 1 in the [data tables](#)).

**Table 1: Percentage of last six months of life spent at home or in a community setting in 2013/14; by Health Board of residence**

Health Board of Residence	No. Deaths	% of time spent at home/in the community
Ayrshire & Arran	4,245	90.7
Borders	1,118	91.2
Dumfries & Galloway	1,792	93.3
Fife	3,430	90.6
Forth Valley	2,779	91.0
Grampian	4,997	93.4
Greater Glasgow & Clyde	11,085	88.7
Highland	3,029	92.7
Lanarkshire	6,172	89.9
Lothian	6,944	91.0
Orkney	216	90.5
Shetland	194	92.5
Tayside	4,064	92.2
Western Isles	282	90.9
Scotland	50,347	90.8

1. The health board of residence is the usual place of residence prior to death.
2. Health boards are based on the new NHS Board boundaries which came into effect 1<sup>st</sup> April 2014.

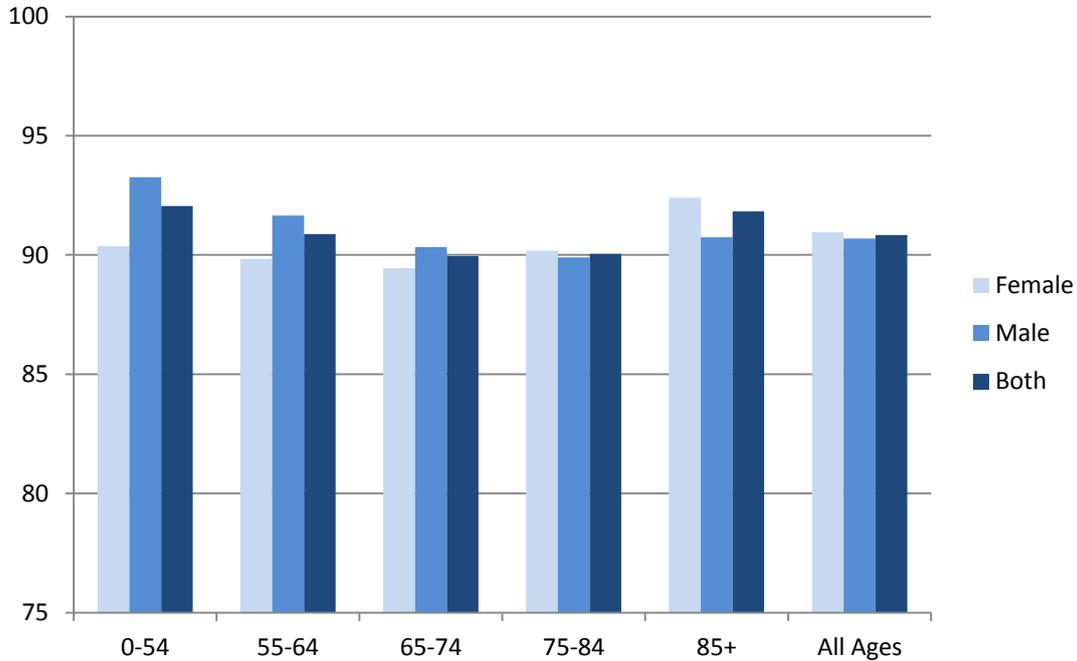
There is some variation between health boards with the figures ranging from 89% (NHS Greater & Glasgow & Clyde) through to 93% (NHS Grampian and NHS Dumfries & Galloway), possibly associated in part with the rurality of different areas and the local use of community hospitals. The trend over the past 5 years is presented in graphical format in Figure A1.1 (see [List of Figures](#) or [Appendix A1](#)) and the corresponding data can be found in Table 1 in the [data tables](#). The NHS boards show a broadly consistent pattern over this 5 year period with no discernible increase or decrease in the figures.

Information is also provided for each of the council areas in Scotland and is available in Table 2 of the [data tables](#). Again the variation in values will be influenced by rurality and the provision of community hospitals.

**Age and Gender**

Figure 1 below shows the percentage of time spent at home or in the community in the last 6 months by different age groups and gender (Table 3 in the [data tables](#)).

**Figure 1: Percentage of last six months of life spent at home or in a community setting in 2013/14; by age and gender.**



1. Please note that the y-axis does not start at zero.

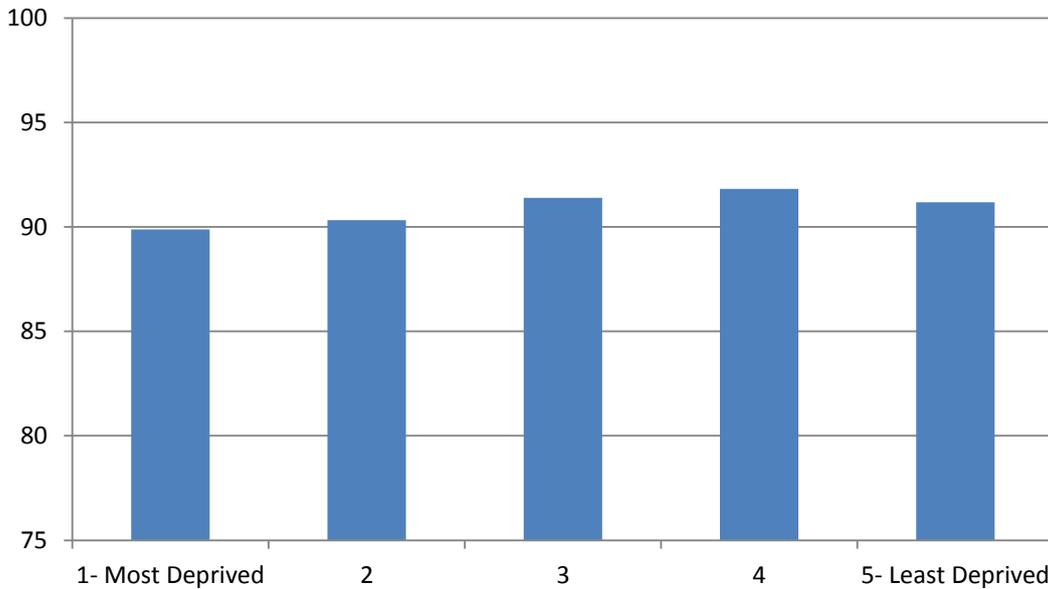
Overall, there is slight variation between the age groups or between males and females in the amount of time spent at home or in the community in the last six months of life.

There is a slightly higher percentage of time spent at home or in the community in the six months prior to death in the youngest age group (92%) as well as the older age group (92%). This may reflect the different causes of death experienced in these age groups.

**Deprivation**

The percentage of time spent in home or a community setting in the last 6 months of life by deprivation is shown in Figure 2 (Table 4 in the [data tables](#)). The Scottish Index of Multiple Deprivation (SIMD) 2012 has been used in this publication. See the [Glossary](#) for further information on SIMD.

**Figure 2: Percentage of last six months of life spent at home or in a community setting in 2013/14; by SIMD Quintile 2012.**



1. Please note that the y-axis does not start at zero.

Although the differences are not large, there is some variation between the different deprivation categories, with those from less deprived areas more likely to spend, on average, less time in an acute hospital setting in the last 6 months of life compared to those from more deprived areas (Figure 2; Table 4 in [data tables](#)).

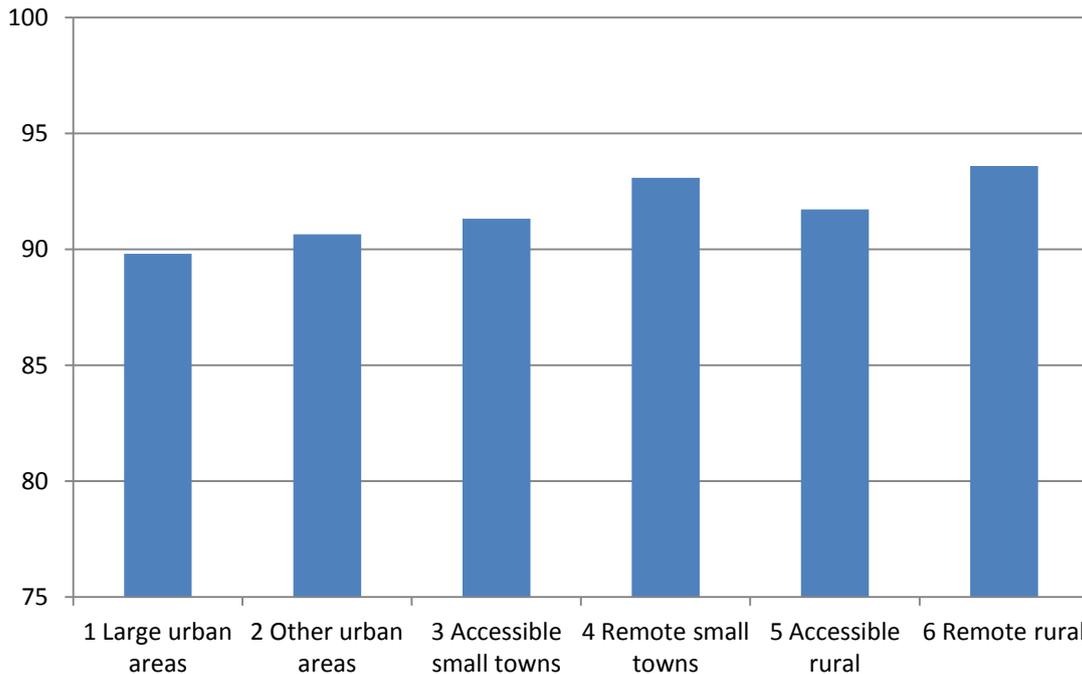
The trend over time by deprivation category is presented in Figure A1.2 (see [List of Figures](#) or [Appendix A1](#)). No significant change over time has been detected in any of the categories.

**Urban/Rural**

To investigate whether living in a more urban or rural area may impact on the likelihood of spending more time either at home or in a community setting, the Scottish Government 6-fold [urban rural classification](#) has been used.

Figure 3 below shows the percentage of time spent at home or in the community in the last 6 months of life by urban rural classification.

**Figure 3: Percentage of last six months of life spent at home or in a community setting by Urban/Rural classification in 2013/14.**



1. Please note that the y-axis does not start at zero.

The percentage of the last six months of life spent at home or in the community ranged from 90% for residents in large urban areas to 94% for residents from remote rural areas (Figure 3; Table 5 in [data tables](#)). This difference is likely to be influenced by the configuration of, and access to, local services, including the use of community hospitals which, for the purpose of this analysis, are deemed to be a “community setting”.

Trend data on the percentage of the last six months of life spent at home or in a community setting by Urban/Rural classification are presented in Figure A1.3 (see [List of Figures](#) or [Appendix A1](#)).

## Glossary

Palliative Care	Palliative care is an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness. This is achieved through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other physical, psychosocial and spiritual problems.
Bed day	Unit of measurement relating to an overnight stay in an inpatient hospital bed.
Acute Hospital	Acute hospitals are those intended for short-term medical and/or surgical treatment and care. In the context of this measure the definition excludes dental, psychiatric and obstetric hospitals.
Community Hospital	A local hospital, unit or centre providing an appropriate range and format of accessible health care facilities and resources.
Community setting	Any residential setting outside of acute hospitals e.g. home, care home, hospice, community hospital.
SIMD	Scottish Index of Multiple Deprivation Data in this report are analysed by the 'Scotland level' SIMD population weighted quintiles. Each quintile consists of approximately 20% of the population living in Scotland, with deprivation quintile 1 indicating the population living in the most deprived areas.
Urban/Rural classification	The Scottish Government Urban/Rural classification can be used to classify geographies as urban, rural or remote. Each data zone is assigned to an urban rural category based upon the location of its population weighted centroid. Further information can be found on the <a href="#">SG website</a> .

## List of Tables

Table No.	Name	Time period	File & size
1	<a href="#">Percentage of last six months of life spent at home or in a community setting by:</a> <ul style="list-style-type: none"><li>• Health Board</li><li>• Local Authority</li><li>• Age &amp; Gender</li><li>• Deprivation (SIMD)</li><li>• Urban / Rural Classification</li></ul>	2009/10- 2013/14	Excel [156kb]

## List of Figures

Figure No.	Name	Time period	File & size
1	<a href="#">Percentage of last six months of life spent at home or in a community setting by age and gender.</a>	2013/14	Excel [41kb]
2	<a href="#">Percentage of last six months of life spent at home or in a community setting by deprivation (SIMD)</a>	2013/14	Excel [41kb]
3	<a href="#">Percentage of last six months of life spent at home or in a community setting by Urban/Rural classification</a>	2013/14	Excel [41kb]
A1.1	<a href="#">Percentage of end of life spent at home or in a community setting by financial year for each NHS Health Board of residence</a>	2009/10-2013/14	Excel [91kb]
A1.2	<a href="#">Percentage of end of life spent at home or in a community setting by financial year for each SIMD quintile</a>	2009/10-2013/14	Excel [54kb]
A1.3	<a href="#">Percentage of end of life spent at home or in a community setting by financial year for each Urban/Rural classification</a>	2009/10-2013/14	Excel [57kb]

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## Further Information

Further details on End of Life Care can be found on the [End of Life Care](#) section of the ISD website.

Further information can be found on the [ISD website](#)

## Rate this publication

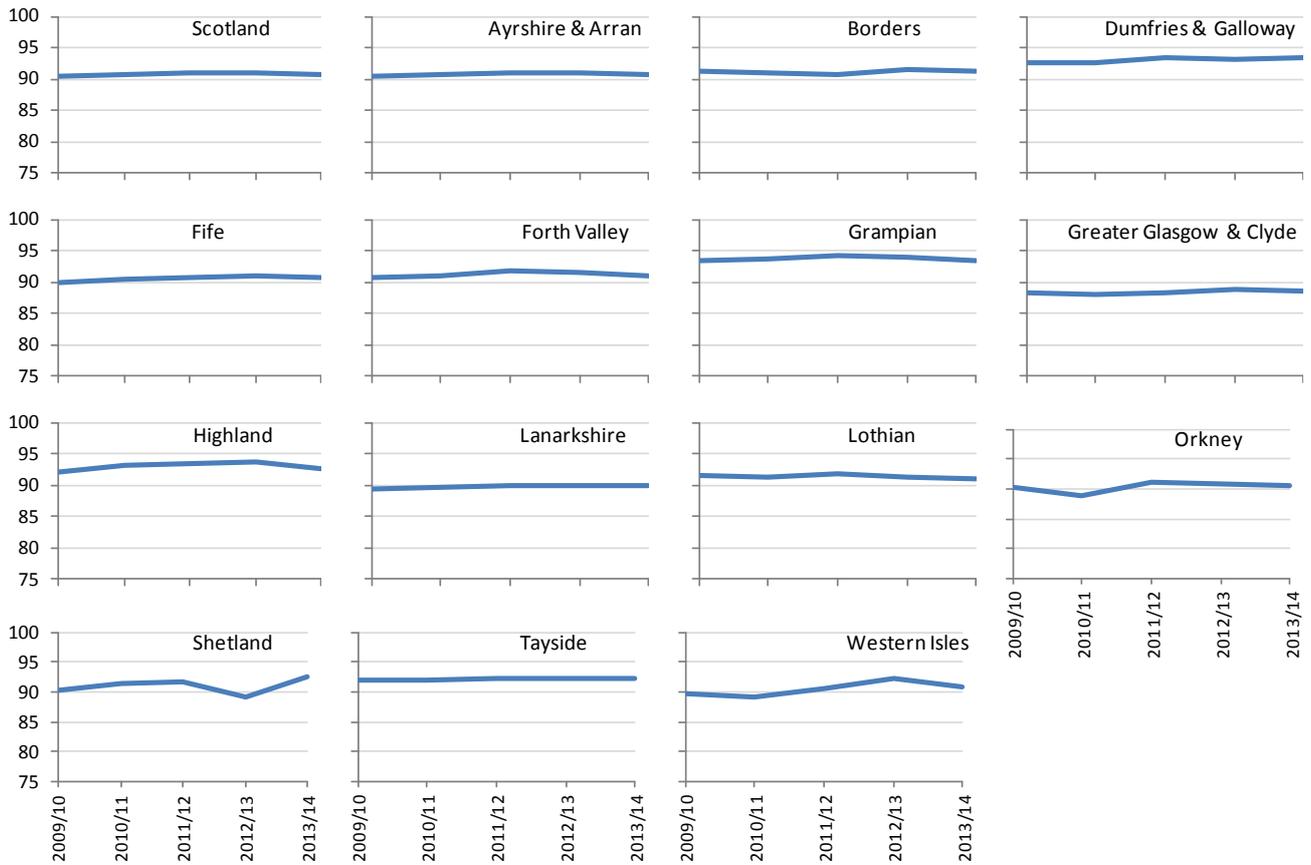
Please [provide feedback](#) on this publication to help us improve our services.

## Appendix

### A1 – Trend Data

#### Percentage of end of life spent at home or in a community setting by NHS Health Board of Residence.

**Figure A1.1:** Percentage of end of life spent at home or in a community setting by financial year for each NHS Health Board of residence.

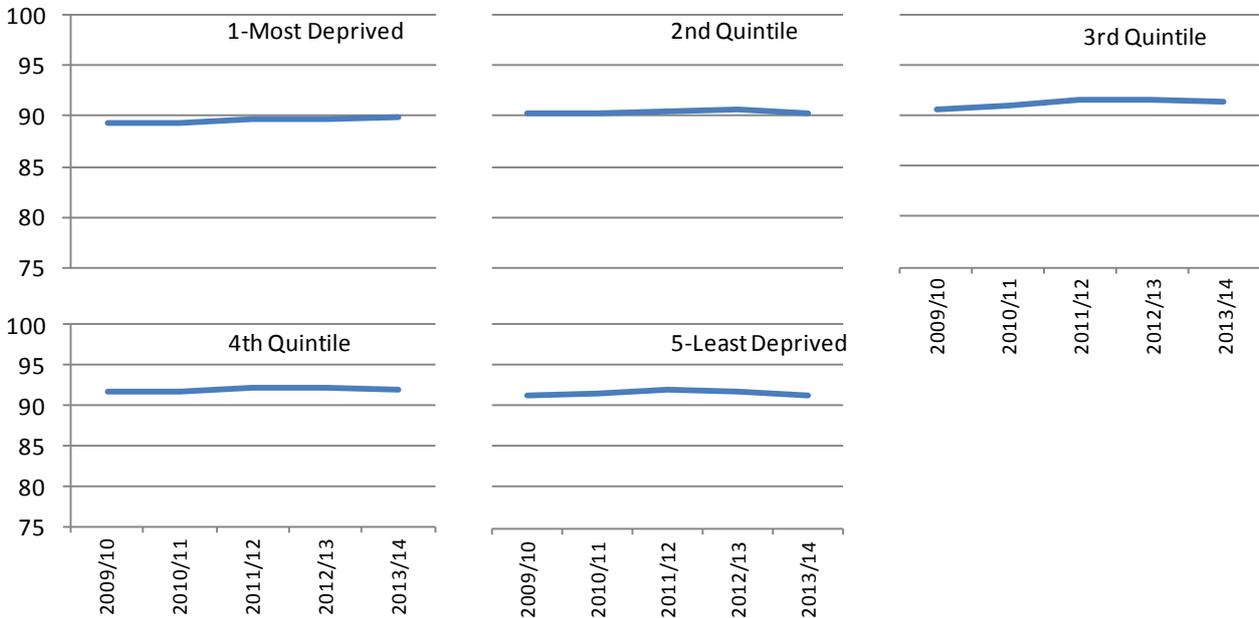


1. Please note that the y-axis does not start at zero.

*Caution should be used when comparing health board data due to different uses of community hospitals in urban and rural areas.*

### Percentage of end of life spent at home or in a community setting by Scottish Index of Multiple Deprivation.

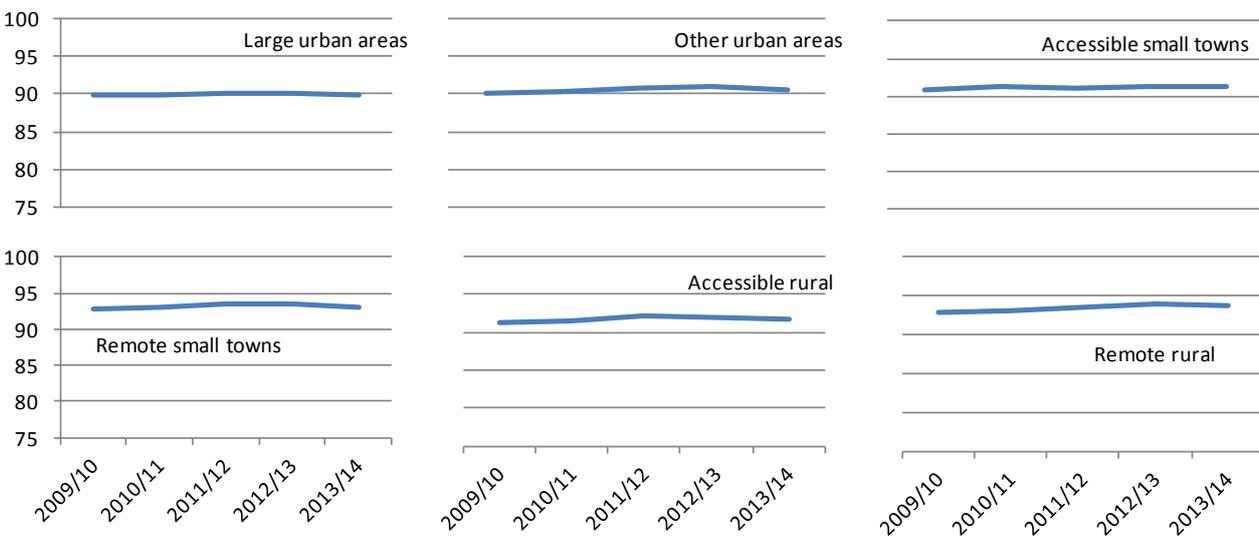
**Figure A1.2:** Percentage of end of life spent at home or in a community setting by financial year for each SIMD quintile.



1. Please note that the y-axis does not start at zero.

### Percentage of end of life spent at home or in a community setting by Urban/Rural Classification.

**Figure A1.3:** Percentage of end of life spent at home or in a community setting by financial year for each Urban/Rural classification.



1. Please note that the y-axis does not start at zero.

## A2 – Background Information

End of life care (palliative care) is an important, integral aspect of the health care provided to those living with and dying from any advanced or progressive and life-threatening condition. It is now possible to predict the progress of many of these conditions, enabling a planned approach to end of life care in ways which reflect, as far as possible, the needs and wishes of patients, carers and their families.

[Living and Dying Well: A National Action Plan for Palliative and End of Life Care in Scotland](#) was published in 2008 with the aim to provide focus and momentum to improve palliative and end of life care for everyone in Scotland who requires it, regardless of their geographic or demographic circumstances, and to encourage efficient collaborative practice across health care, social care and voluntary sectors.

More recently, in May 2010, the [NHS Healthcare Quality Strategy](#) was launched with the aim of delivering high quality healthcare services to people in Scotland. A direct action identified by the Quality Strategy was to develop a [Quality Measurement Framework](#) supporting a number of Quality Outcome Measures (QOMs). These measures cover a range of healthcare topics including; care experience, healthcare acquired infections, hospital mortality rates and end of life care.

ISD have been working in support of the Quality Measurement Framework to develop Quality Outcome Measure 10: *'The percentage of last six months of life spent at home or in a community setting'*.

The proportion of time spent at home or in a community setting towards the end of life provides a high level indication of progress in the implementation of the national action plan. This is inferred by measuring the amount of time spent in an acute setting during the last months of life (using hospital admissions data) and from this estimating the time spent at home or in a community setting.

It is envisaged that an increase in this measure will reflect both quality and value through more effective, person centred and efficient end of life care with people being better able to be cared for at home or closer to home with a planned approach to end of life care resulting in less time in an acute setting.

Over time, an increase in the proportion of time spent at home / in a community setting at the end of life would indicate an improvement in the quality and efficiency of palliative care. This increase would be expected in the medium to long term as a result of an increase in the use of anticipatory care plans and electronic palliative care summaries.

This measure is based on SMR01 returns covering non-obstetric, non-psychiatric hospitals in Scotland. Information on SMR data completeness can be found on the [ISD Data Monitoring Service webpage](#).

### A3 – Methodology

This publication includes data from financial years 2009/10 to 2013/14 at Scotland, Health Board and Council Area level.

Using date of death, Scottish residents who died between 2009/10 and 2013/14 are identified using data sourced from NRS death records and the possible number of bed days that could have been spent in an acute hospital in a six month period is calculated by multiplying the total number of deaths by 182.5. Patients who died where an external cause of death is recorded on the death record have been excluded from the analysis; however patients who died where a fall is recorded are included.

The deaths data are linked to hospital discharge data (SMR01) and the actual number of bed days spent in an acute hospital in Scotland in the six months prior to the death of each patient is calculated and added together for all patients. A list of acute hospitals included in the analysis can be found in Table 1 in the [data tables](#).

The percentage of time spent in an acute hospital in the last six months of life is therefore arrived at by dividing the actual number of bed days by the possible number of bed days and this is subtracted from 100% to obtain the percentage of time spent at home or in a community setting.

For each financial year from 2009/10 to 2013/14 this report presents the percentage of the last six months of life which was spent at home or in a community setting for patients who died within each financial year. A summary of how the measure is calculated can be found below.

<u>Calculation of Measure</u>	
Actual bed days	= Total bed days in an acute hospital in the 6 months prior to death for those people who died within specific year
Possible bed days	= Total number of deaths in specified period x 182.5
% of time in an acute hospital in last 6 months of life	= (Actual bed days/ possible bed days) x 100
% of time in a community setting in last 6 months of life	= 100 – % time in acute hospital in last 6 months before death

The measure is under development and the definitions are subject to change in light of stakeholder feedback. This may result in future revisions to the published data in accordance with ISD's revisions policy.

## A4 – Publication Metadata

Metadata Indicator	Description
Publication title	Percentage of end of life spent at home or in a community setting
Description	Percentage of time in the last six months of life that is spent outside of an acute hospital setting. Figures are presented at health board and council area level with further demographic breaks on Gender, Age, Deprivation and Rurality.
Theme	Health and Social Care
Topic	Health and Social Care
Format	PDF publication report Excel tables
Data source(s)	SMR01/NRS deaths
Date that data are acquired	July 2015
Release date	25 August 2015
Frequency	Annual
Timeframe of data and timeliness	Years ending 31 <sup>st</sup> March 2010 - 2014
Continuity of data	Reports include annual data up to 2013/14
Revisions statement	This measure is subject to review in future as feedback is received. Revisions to the published data may be necessary.
Revisions relevant to this publication	N/A
Concepts and definitions	Policy concepts; <a href="http://www.gov.scot/Topics/Health/Policy/Quality-Strategy/Quality-Measurement-Framework">http://www.gov.scot/Topics/Health/Policy/Quality-Strategy/Quality-Measurement-Framework</a>  Methodology; <a href="#">Appendix 2 – Background Information</a>
Relevance and key uses of the statistics	Making information publicly available; Allowing assessment of implementation/impact of policies or targets
Accuracy	SMR01 standard validation processes
Completeness	SMR01 considered more than 99% complete for 2013/14 <a href="http://www.isdscotland.org/Products-and-Services/Hospital-">http://www.isdscotland.org/Products-and-Services/Hospital-</a>

	<a href="#">Records-Data-Monitoring/SMR-Completeness/</a>
Comparability	N/A
Accessibility	It is the policy of ISD Scotland to make its web sites and products accessible according to <a href="#">published guidelines</a> .
Coherence and clarity	Plain English; Glossary included
Value type and unit of measurement	Proportion expressed as a percentage.
Disclosure	The <a href="#">ISD protocol on Statistical Disclosure Protocol</a> is followed.
Official Statistics designation	Official Statistics
UK Statistics Authority Assessment	Not currently put forward for assessment
Last published	26/08/2014
Next published	25/08/2015
Date of first publication	30/08/2011
Help email	<a href="mailto:r.farquharson@nhs.net">r.farquharson@nhs.net</a> ; <a href="mailto:s.mckay4@nhs.net">s.mckay4@nhs.net</a> ; <a href="mailto:nss.isdSCT@nhs.net">nss.isdSCT@nhs.net</a>
Date form completed	05/08/2015

## **A5 – Early Access details (including Pre-Release Access)**

### **Pre-Release Access**

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD are obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

### **Standard Pre-Release Access:**

- Scottish Government Health Department
- NHS Board Chief Executives
- NHS Board Communication leads

## A6 – ISD and Official Statistics

### About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

**Purpose:** To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

**Mission:** Better Information, Better Decisions, Better Health

**Vision:** To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

### Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD's statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#).

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.