

## INTRODUCTION

Death in usual place of residence is used as a proxy measure of quality of end of life care<sup>1</sup>. This measure assumes all that deaths taking place in a care home occur in the usual place of residence. Many people are admitted into a care home for short periods either for respite, or after discharge from hospital and unable to return home immediately and some of these die in the care home after a short stay. These people are not permanent care home residents, rather temporary residents and their residential address as recorded on their death certificate is still their private home.

Between 2004 and 2013 the proportion of deaths occurring in care homes increased from 16.5% to 21.6%. The numbers of temporary resident care home deaths also increased, accounting for 33.5% of deaths in care homes. This study examines the underlying causes of death, age and gender for a cohort of, 283,876 temporary care home residents who died in care homes in England between 2004 and 2013.

## METHODS

Information on deaths was extracted from ONS Mortality Data and the following variables were used:

- Registration year 2004-2013
- Resident of care home – inferred from persons residential postcode
- Underlying cause of death
- Place of death
- Age at death
- Gender

Place of residence on death certificate was matched to care homes on the ONS Communal Establishment database. The residence category was inferred to be permanent if the postcode matched the database and temporary if it was not.

## RESULTS

- Between 2004 and 2013, numbers of care home deaths increased by 29.3% rising from 78,867 in 2004 to 101,991 in 2013. The numbers of temporary resident care home deaths increased by 24.3% rising from 26,536 deaths in 2004 to 34,798 deaths in 2013.
- The average age at death is 4 years lower for temporary care home residents compared to permanent residents who die in care homes (84 years compared to 88 years). There is a three year difference for males (82 compared to 85 years) and a four year difference in females (85 compared to 89 years). Age at death varies by cause of death (Figure 1).
- 42.2% of temporary care home residents are male and 57.8% female, the gender ratio for permanent care home residents is 26.5% (male) and 73.5% (female). Males account for over half of care home deaths in persons aged under 75 (Figure 2). In persons aged 75 and over the proportion of males compared to females is higher in temporary care home residents compared to care home residents. Temporary care home residents account for 44.6% of male deaths and 28.4% of female deaths in care homes.
- Temporary residents account for more than half of care home deaths for the age groups <50 (54.2%), 50-64 (54.5%) and 65-74 (51%). Permanent care home residents account for 57.6% of deaths in persons aged 75-84 and 72.4% of deaths in persons aged 85+ (Figure 3).
- Malignant cancer is the leading cause of death for temporary care home residents accounting for 30.2% of deaths. Among permanent care home residents malignant cancer accounts for 10.8% of deaths. Temporary care home residents account for 58% of all deaths from cancer in care homes; 75.3% of deaths from cancer of the eye brain nervous system, 64% of deaths from cancer of the trachea, bronchus and lung, 60% of deaths from cancer of the digestive organs and 59% of deaths from prostate and urinary cancers. Care home residents account for the majority care home deaths for the other leading causes (Figure 4).

Figure 1. Average age at death for permanent care home and temporary care home residents, England, 2004-2013.

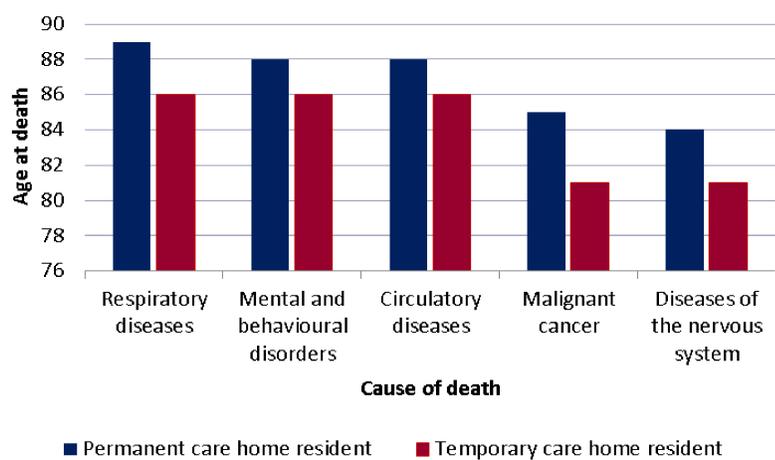


Figure 2. Gender ratio by age group for permanent care home and temporary care home residents, England, 2004-2013.

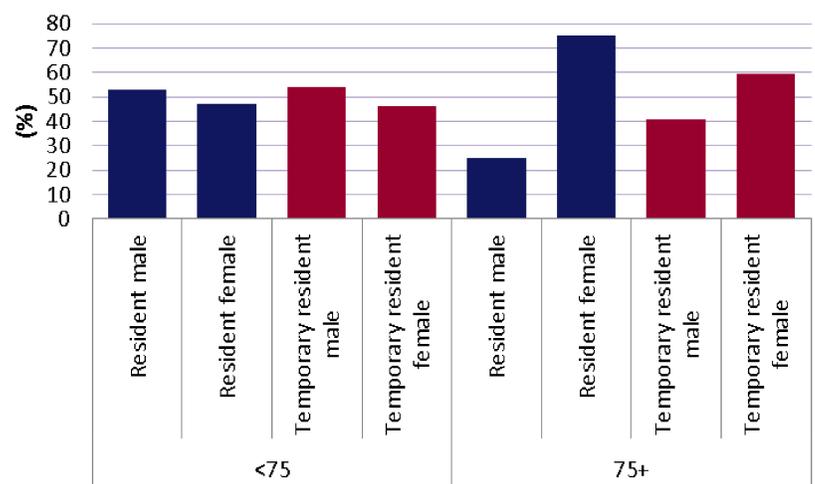


Figure 3. Care home deaths (%) by residential status and age, England 2004-2013.

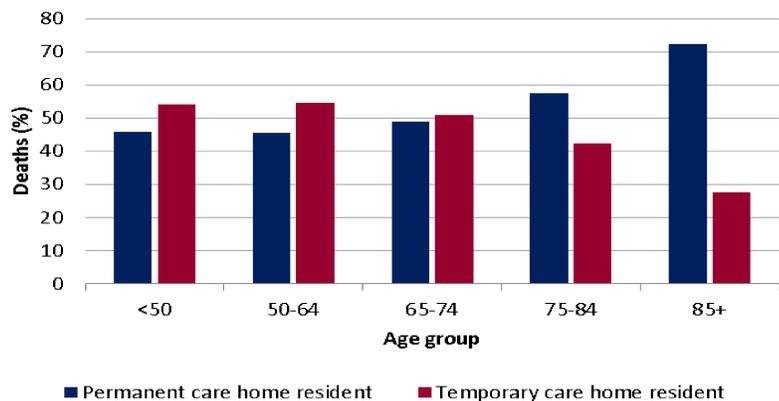
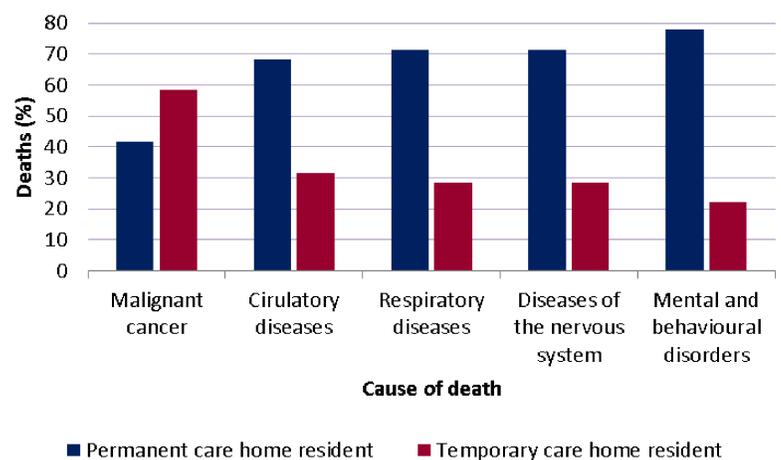


Figure 4. Deaths (%) by leading cause and residential status, England, 2004-2013.



## DISCUSSION

The proportion of deaths occurring in care homes (nursing or residential) is increasing; for both permanent residents and temporary residents. Temporary residents account for one third of care home deaths, 44.6% of male deaths and over half of deaths in persons aged under 75 in care homes. Cancer is the single most common cause of death for temporary residents dying in care homes.

If more and more people continue to be referred in to care homes towards the end of life, care homes need to be adequately resourced and skilled to care for a cohort characterised by having complex co-morbidities and for who a care home is not an anticipated or preferred place of care and death.

Surveys suggest that most people (63%) would prefer to be at home when they die,<sup>2</sup> but are we seeing in the data trends (for example the lower average age at death for temporary residents compared to permanent residents) that indicate that more people are living alone and cannot maintain themselves at home at the end of their lives (notably males).

Should resources be directed towards supporting people in a home environment towards the end of life or should they be allocated to care homes (as in the Dutch model of care). Important decisions especially at a time when care homes are struggling financially<sup>3</sup>.

## CONCLUSIONS

An increasing proportion of people die in a care home, many of whom are not long term residents. This has happened, at least in part, in response to the initiatives designed to reduce deaths in hospital. Further studies could examine differences between nursing and residential care homes as well as patterns of discharge from acute hospital trusts to determine if people are having a better quality of care through becoming temporary care home residents at the end of life.

## REFERENCES

1. [http://www.endoflifecare-intelligence.org.uk/data\\_sources/place\\_of\\_death](http://www.endoflifecare-intelligence.org.uk/data_sources/place_of_death)
2. [http://www.sueryder.org/About-us/Policies-and-campaigns/Our-campaigns/Dying-isnt-working/~/\\_media/Files/About-us/A-Time-and-a-Place-Sue-Ryder.ashx](http://www.sueryder.org/About-us/Policies-and-campaigns/Our-campaigns/Dying-isnt-working/~/_media/Files/About-us/A-Time-and-a-Place-Sue-Ryder.ashx)
3. <http://www.theguardian.com/business/2015/nov/02/uk-biggest-care-home-operator-risks-running-out-of-cash-four-seasons-health-carewww.england.nhs.uk/wp-content/.../07/clinical-senates-geography.ppt>