

# Trends in the place of death for people with cardiovascular disease in Sweden 2013-2019 - a registry study

Nyblom S<sup>1,2</sup>, Öhlén J<sup>1,3,4</sup>, Larsdotter C<sup>5</sup>, Ozanne A<sup>3,6</sup>, Fürst CJ<sup>7,8</sup>, Hedman R<sup>5</sup>

<sup>1</sup> Palliative Centre, Sahlgrenska University Hospital, Gothenburg, <sup>2</sup> Institute of Medicine, Sahlgrenska Academy, University of Gothenburg, <sup>3</sup> Institute of Health and Care Sciences, Sahlgrenska Academy, University of Gothenburg, <sup>4</sup> Centre for Person-centred Care (GPCC), Sahlgrenska Academy, University of Gothenburg, <sup>5</sup> Department of Nursing Science, Sophiahemmet University, Stockholm, <sup>6</sup> Department of Neurology, Sahlgrenska University Hospital, Gothenburg, <sup>7</sup> Faculty of Medicine, Department of Clinical Sciences, Lund, Sweden, <sup>8</sup> The Institute for Palliative Care, Respiratory Medicine, Allergology, and Palliative Medicine, Lund University, Lund (all in Sweden)

## Aim

The aim was to examine trends in place of death, among the total population of adults with cardiovascular disease (CVD), after the first Swedish national guidelines for palliative care were introduced 2013, and examine potential associations to sociodemographics, healthcare service and utilisation.

## Background

CVD is the leading cause of death world-wide, as in Sweden, often with high symptom burden. Despite this, palliative care is underutilised. A marker for the quality of end-of-life palliative care in a country is globally accepted to be death in the preferred place, considered by many to be their own home. This quality indicator could be indirectly affected by emerging policies that shape health care services.

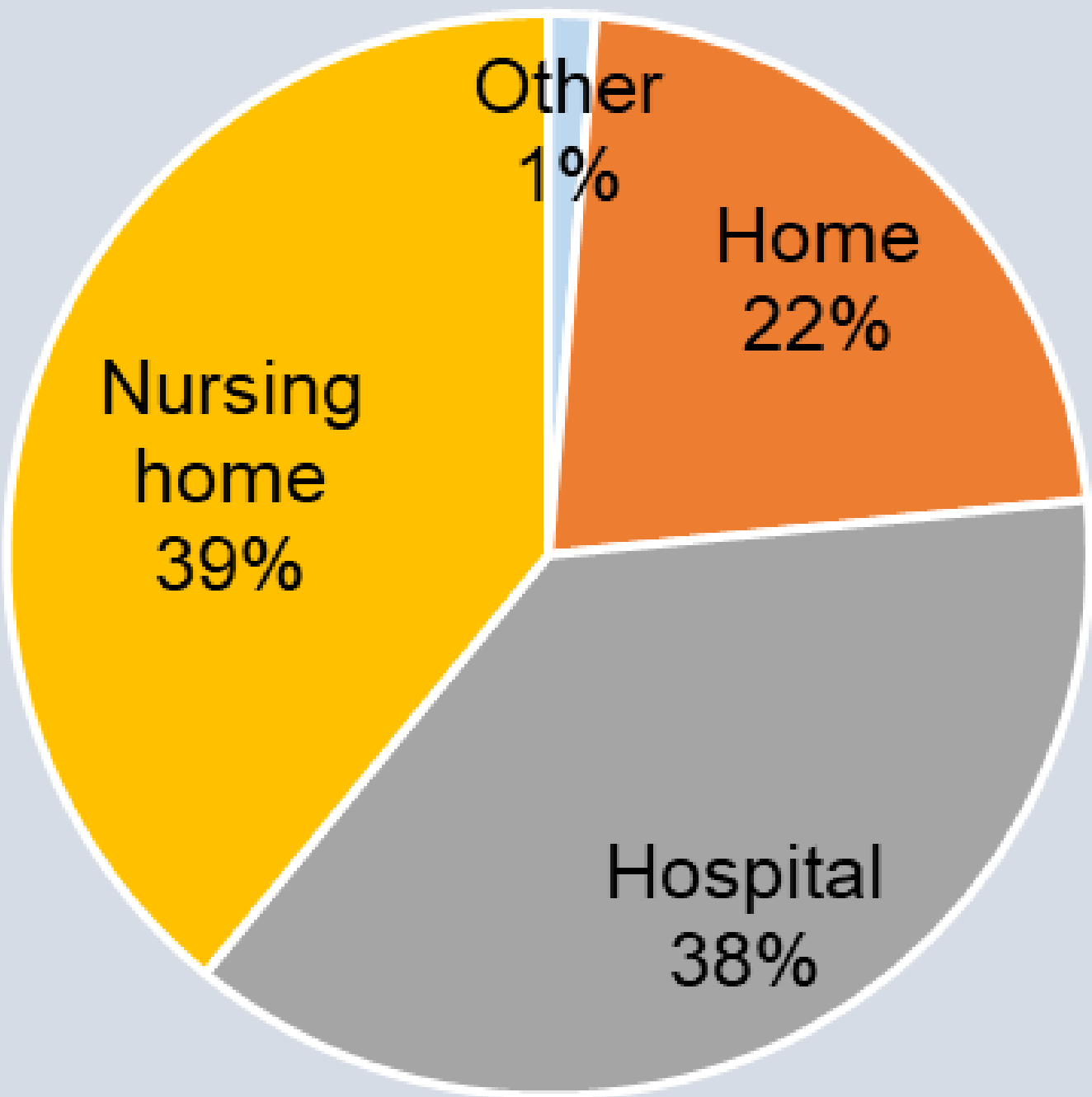
## Methods

A population-level registry study examined the place of death among adults who died due to CVD in Sweden. Data was retrieved from the Swedish National board of Health and Welfare (NBHW), the Swedish Register of Palliative Care (SRCP), and Statistics Sweden (SCB). Descriptive statistics and linear regression analyses were performed.

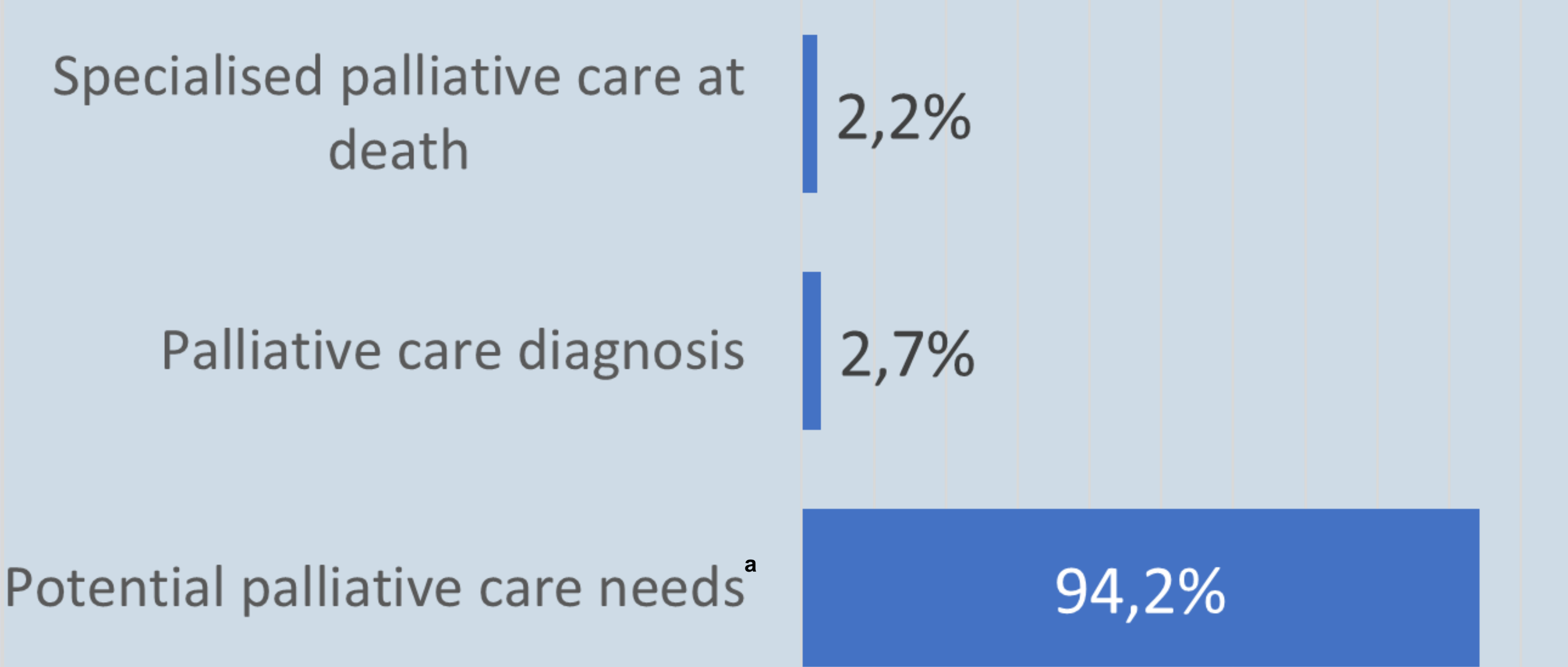
## Results - over the study period:

- 209 671 adults died of CVD (51.5% female). Most common causes of death were ischaemic heart disease, other forms of heart diseases, and cerebrovascular diseases.
- The predominant place of death was nursing home (39,1%) and hospital (37,6%), followed by home (22,0%).
- A weak but significant overall downward trend in hospital deaths was found, with regional variations.
- The proportion of home deaths increased by 2.8 % and hospital deaths decreased by 3.0 %. Nursing home deaths was unchanged.
- An increase in the number of home deaths was seen in all individual CVD types, and a decrease in hospital deaths in all but Cerebrovascular disease.
- Only 2.7 % had the ICD-code Z51.5 for palliative care, while the majority were estimated<sup>a</sup> to have potential palliative care needs.
- 2.1 % utilised specialist palliative services at death with a regional variation from 5.1 % to 0.9 %.

Place of death, CVD-population 2013-2019



Total CVD population 2013-2019



<sup>a</sup> Murtagh et al., How many people need palliative care? A study developing and comparing methods for population-based estimates, Palliat. Med. 28 (1) (2014) 49–58.

## Conclusion

Although a small overall increase in the proportion dying at home in all healthcare regions and for all CVD types, still only just over a fifth died in their own home. Regional variations in place of death and low and varied utilisation of specialised palliative care indicate inequity in access to palliative care and a need for stronger policy orientation towards earlier implementation of palliative care, non-specialised as well as specialised, to strengthen the care for the CVD population along the whole disease trajectory.

Nyblom et al. Registry study of cardiovascular death in Sweden 2013–2019: Home as place of death and specialized palliative care are the preserve of a minority. *International Journal of Cardiology Cardiovascular Risk and Prevention* 2024; 23: 200328. DOI: <https://doi.org/10.1016/j.ijcrp.2024.200328>.



There are no conflicts of interest

