

Place of care and place of death:

the frequency of hospital use prior to death and the increased importance of nursing homes in end of life care in Norway

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Background

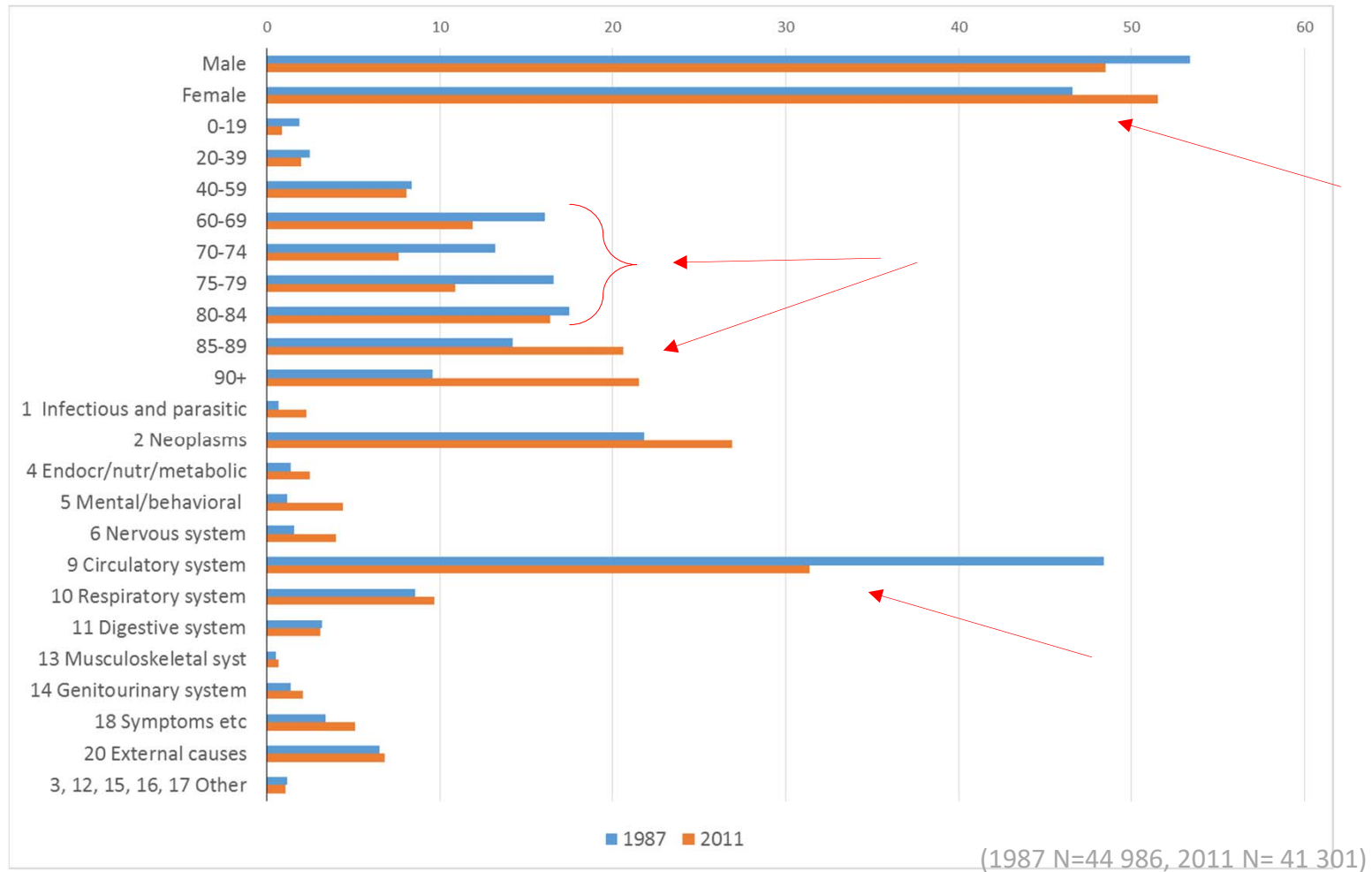
- A majority of deaths in hospital setting in most developed countries
- Trend towards death in hospital reversed in late 20th /early 21th century
 - Policy:
 - Other alternatives have emerged
 - Increasing awareness that
 - intensive hospital treatment may not be the best alternative
 - hospital care is expensive
 - change of care setting in last days of life can be disruptive and against preferences of patients and their relatives
 - Place of death (POD) used as indicator of quality of End-of-life (EOL) care
 - Epidemiological and demographic shifts in populations (population aging):
 - POD differ between patient groups according to cause of death, age and gender → POD trends

Objective

- I. **Study the trend in POD (hospital, nursing home, home, other) in Norway**
 - A. **Decompose trend 1987-2011: isolate the effect of changing decedents composition in terms of age, gender and cause of death**
 - B. **Analyse effects of hospital and long term care (LTC) capacity 2003-2011**

- II. **Hospitalisation in last days of life by POD (death in 2011)**

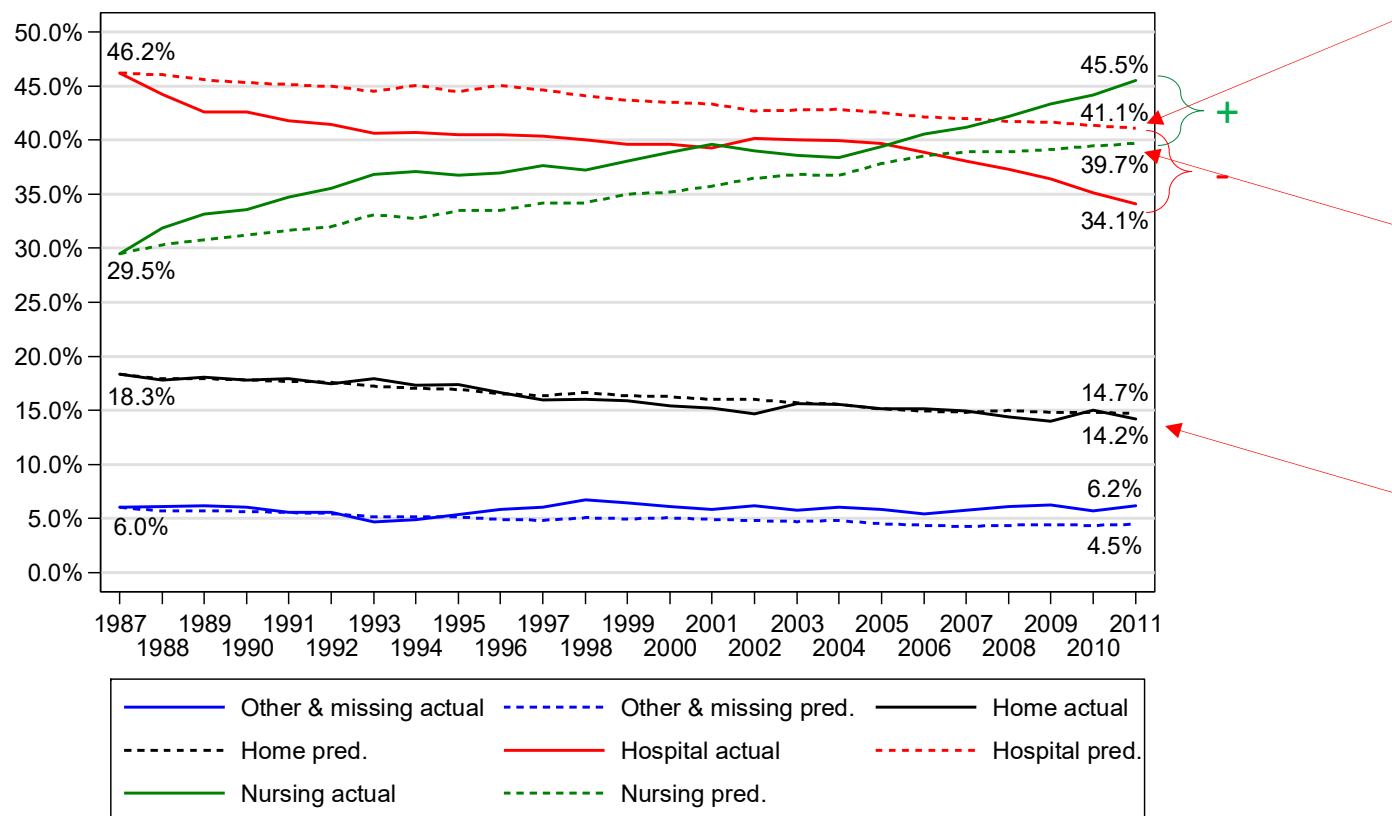
Change in decedent composition (%) 1987-2011



Data: Cause of death registry, all deaths 1987 - 2011

Actual and predicted place of death share, 1987-2011

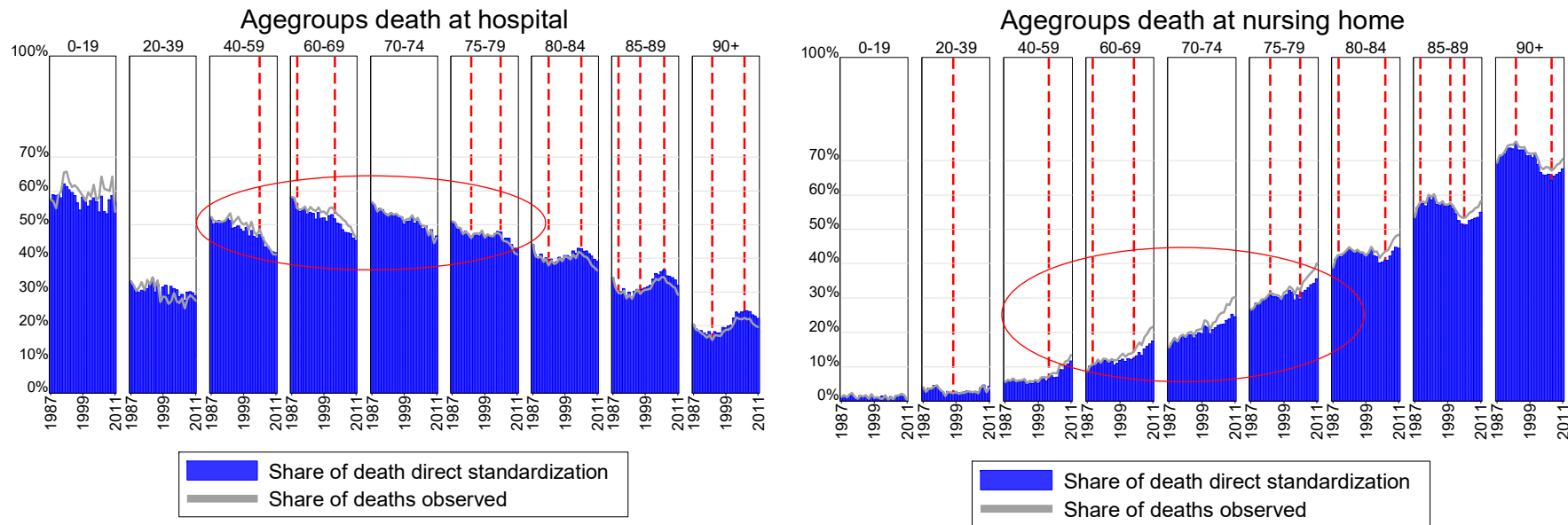
Predicted share: Holding share of POD within decedent groups constant in all years
(groups defined by age, gender, cause of death ICD10 Main chapter)



Data: Cause of death registry, all deaths 1987-2011

Actual and standardised place of death shares, by age groups, 1987-2011

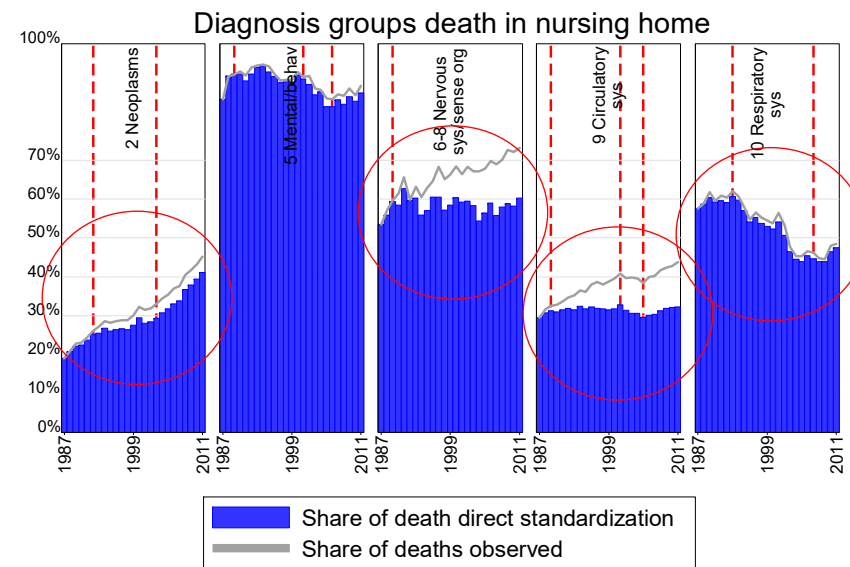
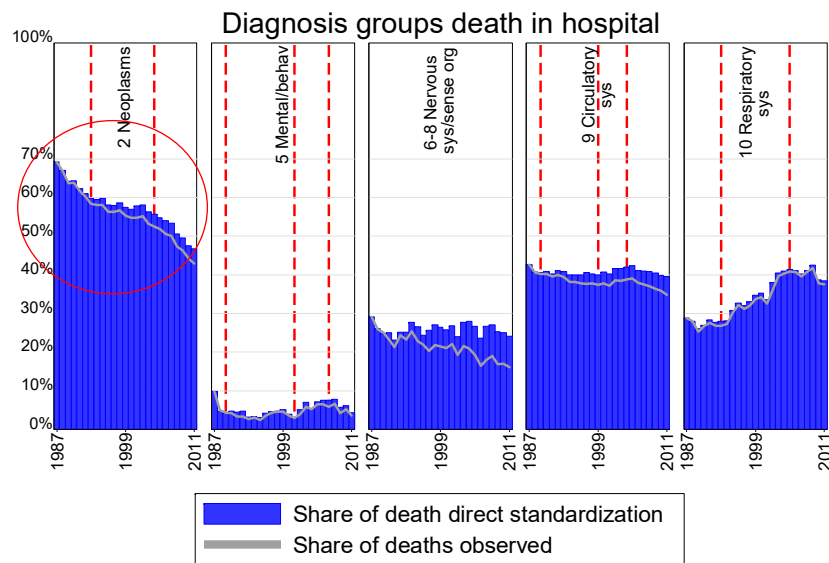
Standardised share: Holding decedents composition (gender, cause of death by ICD10 Main chapter) constant



Data: Cause of death registry, all deaths 1987-2011

Actual and standardised place of death shares, by selected death causes, 1987-2011

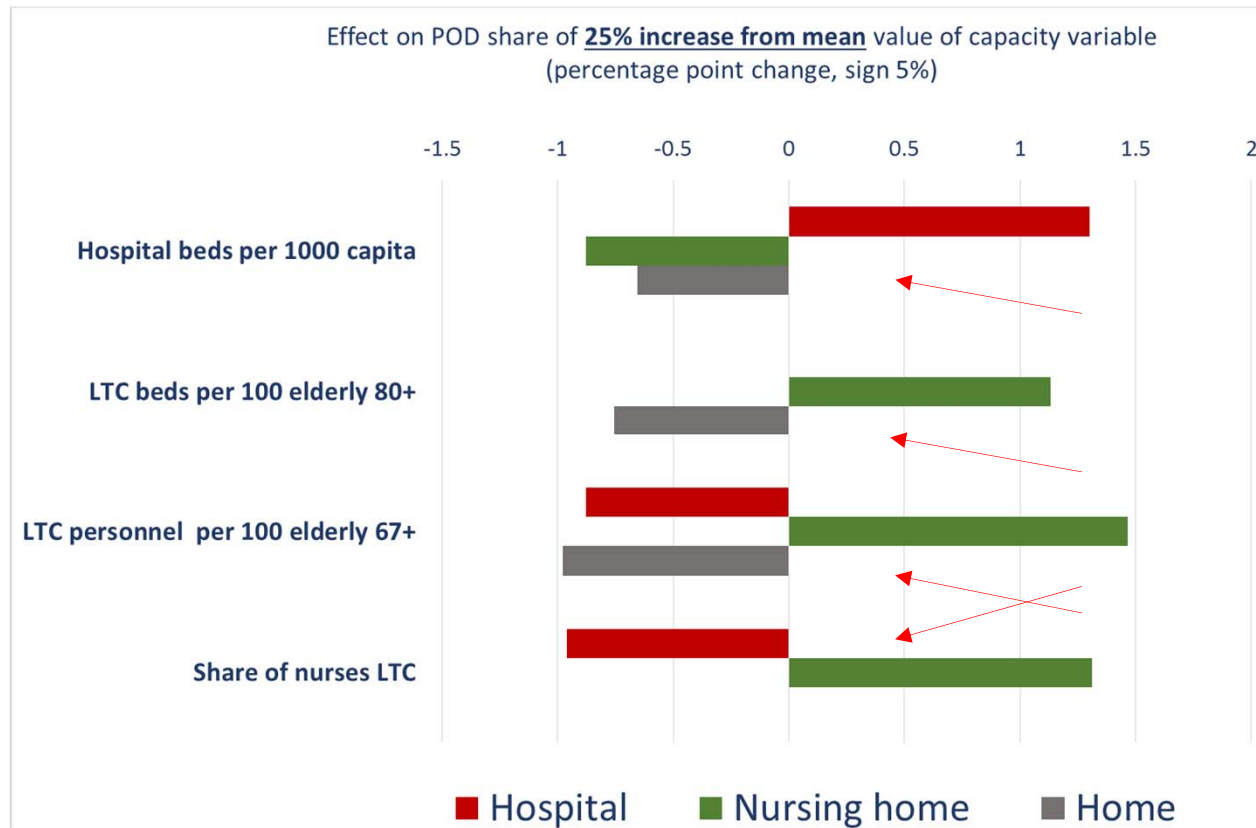
Standardised share: Holding decedents composition (age, gender) constant



Data: Cause of death registry, all deaths 1987-2011

Analysis of effects of hospital and LTC capacity 2003-2011

POD share at municipal level, Panel data regression, Fixed Effect-model, controlling for decedents composition and municipal demographics

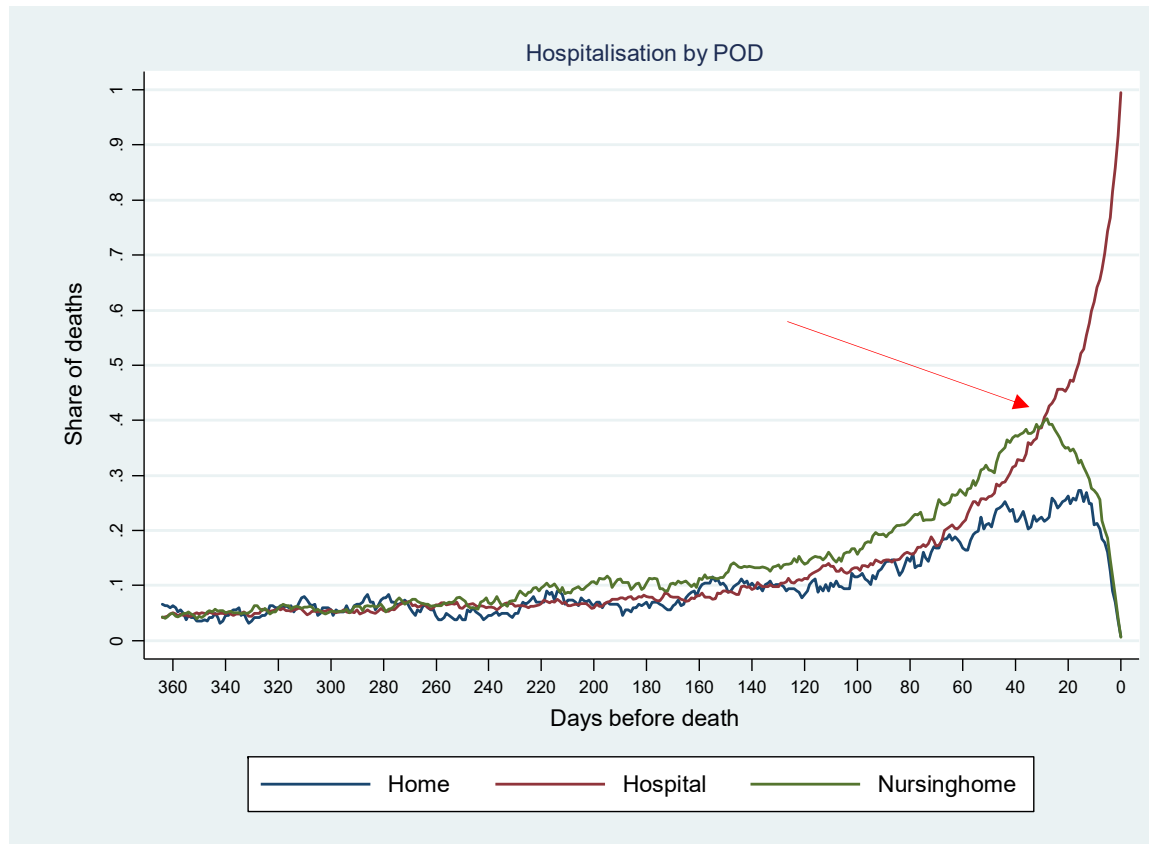


Data: Cause of death registry, all deaths 2003-2011, and Statistics Norway, data on capacity + other context

Hospital use in last year of life

Share of decedents in hospital at day 0-364 before death, by place of death

Cancer deaths, 60-69 years



Data: DÅR – deaths in 2011, Norwegian Patient Registry (NPR) – hospital admissions. Data linked using Unique Patient Identifier.

Conclusion

- The changing patterns in the place of death partly reflects both demographic shifts and changing service structures and policies.
- The more prominent role of nursing homes and other non-hospital local services in end of life care must be expected due to population ageing.
- Need to focus on quality of end of life care also in long term care settings.
- Many end of life care pathways involve transitions between service settings. Avoiding costly and unnecessary transfers and developing high quality and person-centered care pathways at end of life is an important research as well as policy question.