

**Impact of long term care and mortality risk in community care and nursing homes  
populations**

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Nothing to declare.

## **ABSTRACT**

**Background:** The Portuguese long-term care sector is organized in Home and Community-Based Services (HCBS) and three nursing home (NH) types of units of care. We aimed to identify the survival time and the mortality risk factors in each setting and to identify the individuals' characteristics associated with cognitive and physical status at discharge.

**Methods:** We analysed 20,984 individuals admitted and discharged in 2015. The Kaplan-Meier survival analysis and the Cox Proportional Hazards Models were used to study the mortality risk. The Wilcoxon signed-rank test was used to identify the number of individuals with cognitive and physical changes between admission and discharge and two cumulative odds ordinal logistic regressions to study the effect of several variables, with the ability to predict the cognitive and physical dependence levels at discharge.

**Results:** The mortality rate at HCBS was 30%, and 17% at the NH, with a median survival time of 173 and 200 days, respectively. The main factors associated with higher mortality were older age, male gender, family/neighbour support, neoplasms and cognitive/physical dependence at admission. In NH/HCBS, 26%/18% of individuals improve their cognitive status, while in physical status, the proportion was 38%/27%, respectively. Finally, older age, being illiterate and being classified at the lowest cognitive and physical status at admission decrease the likelihood of achieving a higher level of cognitive and physical independence at discharge.

**Conclusions:** The adoption of a robust and complete assessment tool, the definition of guidelines to enable a periodical assessment of individuals' autonomy and the adoption of benchmark metrics allowing the comparison of results between similar units are some of the main goals to be taken into account for future developments of this care in Portugal.

**Keywords:** Nursing Homes; Home and Community-Based Services; Mortality risk; Outcomes assessment.