Main predictors of Length of Care in Portuguese Social Care

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Using data from the Portuguese National Network for Long-Term Integrated Care, we use GLM to identify the main predictors and estimate patients' length of care (LOC) in the official national LTC system, considering two settings of care: Home and Community-based Services (HCBS) and three Nursing Homes (NH) units with different characteristics.

The explanatory variables include patients' characteristics - age, gender, family/neighbour support, dependency levels for locomotion, cognitive and ADL - and external factors - referral entity, number of beds/treatment places per 1,000 inhabitants aged 65 or over, maturity and occupancy rate of the institution.

By creating a model that allows estimating the expected LOC for a new individual entering the LTC Portuguese system, policymakers may estimate future costs and optimise resources.

References

[1] GAUGLER, JE; DUVAL, S; ANDERSON, KA; KANE, RL, *Predicting nursing home admission in the U.S: a meta-analysis*, BMC Geriatrics, 7(1), 1 - 13 (2007).

[2] HÄCKER, J; HACKMANN, T, *Los(t) in long-term care: empirical evidence from German data 2000-2009* , Health Economics, 21(12), 1427–1443 (2012).

[3] LOPES, H; GUERREIRO, G; ESQUIVEL, M; MATEUS, C, *Identifying the main predictors of length of care in social care in Portugal* , Portuguese Journal of Public Health, to appear, doi: 10.1159/000516141 (2021).

[4] LOPES, H; MATEUS, C; HERNÁNDEZ-QUEVEDO, C, *Ten Years since the 2006 Creation of the Portuguese National Network for Long-Term Care: Achievements and Challenges* , Health Policy, 122(3), 210–216 (2018).

[5] LOPES, H; MATEUS, C; ROSATI, N, *Impact of long term care and mortality risk in community care and nursing homes populations* , Archives of Gerontology and Geriatrics, 76 , 160–168 (2018).

[6] LUPPA, M; LUCK, T; WEYERER, S; KONIG, H-H; BRAHLER, E; RIEDEL-HELLER, SG, *Prediction of institutionalization in the elderly: A systematic review* , Age Ageing , 39(1), 313–8 (2010).

[7] NEWCOMER, RJ; KO, M; KANG, T; HARRINGTON, C; HULETT, D; BINDMAN, AB, *Health Care Expenditures After Initiating Long-term Services and Supports in the Community Versus in a Nursing Facility* , Med Care , 54(3) , 221–8 (2016).

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