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ECONOMIC BURDEN ASSOCIATED WITH SARCOPENIA: ESTIMATIONS FROM AN ENGLISH COHORT STUDY

R. Pinedo-Villanueva[1], H. E. Syddall[2], M. T. Sanchez-Santos[1], L. Westbury[2], E. M. Dennison[2], S. M. Robinson[1], C. Cooper[1]

[1]Musculoskeletal epidemiology. Botnar Research Centre. Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences. University of Oxford, Oxford, United Kingdom, [2]MRC Lifecourse Epidemiology Unit, University of Southampton, Southampton, United Kingdom

Objective

We aimed to estimate the excess economic burden associated with the provision of health and social care to people with sarcopenia.

Methods

We used data from 442 subjects who participated in a follow-up of the Hertfordshire Cohort Study in England during 2011, comprising men and women aged between 71 and 80 years. Individuals were identified as sarcopenic based on recorded maximum hand grip strength according to the FNIH definition (<27kg for men and <16kg for women). Costs associated with primary care consultations and visits, outpatient and inpatient secondary care, prescriptions, and formal (paid) as well as informal care for each subject were calculated. To do this, reported use of services was extrapolated to a 1-year period and multiplied by standard unit costs for England. Missing data was addressed by applying multiple and mean imputation techniques. Mean total costs per patient and their corresponding components were compared between groups to estimate excess economic burden associated with sarcopenia.

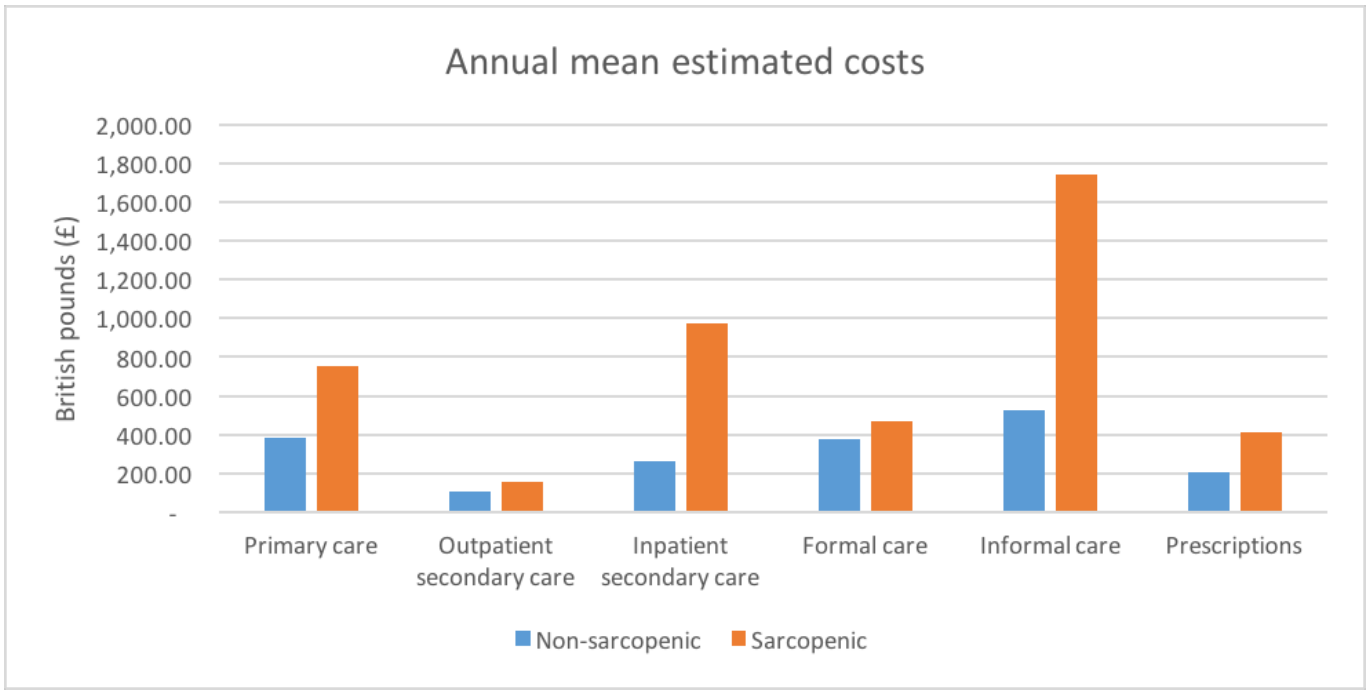
Results

Prevalence of sarcopenia in the sample was 12% (52 subjects), 56% of which were women compared to a 50/50 gender split in the entire sample. There was no statistically significant difference in age, BMI or number of comorbidities, but sarcopenic subjects were more likely to have a long-term illness (46% vs 23%) and lower health-related quality of life (0.68 EQ-5D score vs 0.82) compared to non-sarcopenic subjects.

Mean total costs for subjects with sarcopenia was £4,503 (CI £2,961-£6,045), with informal care, inpatient secondary care and formal care being responsible for 39%, 22% and 10% of total costs, respectively. For non-sarcopenic subjects, total costs were £1,857 (CI £1,508-£2,206) and their three highest cost categories were informal care (28%), primary care (21%) and formal care (20%). Total excess costs were £2,646 per year per subject, with prescriptions and informal care components reporting statistically significant differences and accounting for 46% of total excess costs.

Conclusion

In a sample of 442 elderly subjects from an English cohort, sarcopenia was associated with higher costs in primary and secondary care, prescriptions, formal and informal care, with excess total costs of £2,646 per year and informal care as the largest contributor to this difference.


Annual mean estimated costs
British pounds (£)
2,000.00
1,800.00
1,600.00
1,400.00
1,200.00
1,000.00
800.00
600.00
400.00
200.00
-
Primary care
Outpatient secondary care
Inpatient secondary care
Formal care
Informal care
Prescriptions
Non-sarcopenic
Sarcopenic