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Publication

Patient clusters and cost trajectories in the Swiss Atrial Fibrillation cohort.

Evidence on long-term costs of atrial fibrillation (AF) and associated factors is scarce. As part of the Swiss-AF prospective cohort study, we aimed to characterise AF costs and their development over time, and to assess specific patient clusters and their cost trajectories.; Swiss-AF enrolled 2415 patients with variable duration of AF between 2014 and 2017. Patient clusters were identified using hierarchical cluster analysis of baseline characteristics. Ongoing yearly follow-ups include health insurance clinical and claims data. An algorithm was developed to adjudicate costs to AF and related complications.; A subpopulation of 1024 Swiss-AF patients with available claims data was followed up for a median (IQR) of 3.24 (1.09) years. Average yearly AF-adjudicated costs amounted to SFr5679 (5163), remaining stable across the observation period. AF-adjudicated costs consisted mainly of inpatient and outpatient AF treatment costs (SFr4078; 3707), followed by costs of bleeding (SFr696; 633) and heart failure (SFr494; 449). Hierarchical analysis identified three patient clusters: cardiovascular (CV; N=253 with claims), isolated-symptomatic (IS; N=586) and severely morbid without cardiovascular disease (SM; N=185). The CV cluster and SM cluster depicted similarly high costs across all cost outcomes; IS patients accrued the lowest costs.; Our results highlight three well-defined patient clusters with specific costs that could be used for stratification in both clinical and economic studies. Patient characteristics associated with adjudicated costs as well as cost trajectories may enable an early understanding of the magnitude of upcoming AF-related healthcare costs.