



**Abstract of parallel session: 17**

**Title:** Prescription patterns, polypharmacy and potentially inappropriate medication in Swiss nursing homes: A descriptive analysis based on claims data

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**Abstract**

**Background:** Polypharmacy and potentially inappropriate medication (PIM) are associated with an increased risk of adverse drug reactions, hospitalisations and mortality. Prior surveys suggest that nursing home residents are subject to polypharmacy and substantial prescribing of PIM. To date, comprehensive descriptive data on prescription patterns in Swiss nursing homes have not been available.

**Objectives:** To describe general medication utilisation and to assess the proportion of residents with polypharmacy and prescriptions of PIM in Swiss nursing homes.

**Methods:** We conducted a descriptive study based on administrative claims data from Helsana, a large provider of health insurance in Switzerland, covering the years 2013 - 2016. In Swiss nursing home residents aged  $\geq 65$  years with a minimum length of stay of 28 days, we estimated the number of prescribed medications, per capita medication costs per day, and the proportions of residents with polypharmacy ( $\geq 5$  claims of different drugs during the second quarter of the respective year) or with  $\geq 1$  PIM prescription according to the 2015 Beers criteria and the PRISCUS list. Long-term use of PIM (i.e.,  $\geq 3$  claims of the same PIM) was additionally assessed. We stratified our analyses by sex, age and calendar year, and we standardised the results to the Swiss population.

**Results:** On average, Swiss nursing home residents were prescribed 9.3 medications in parallel. The number of medication claims as well as per capita costs per day (CHF 8.55 on average) decreased with advanced age, indicating prioritisation of medication. The proportions of nursing home residents with polypharmacy and with  $\geq 1$  PIM were 85.5% and 79.1%, respectively, while 56.2% of residents had  $\geq 3$  claims of the same PIM.

**Conclusions:** While a certain degree of polypharmacy is expected in elderly populations with chronic diseases, the high prevalence of polypharmacy and prescribing of PIM in Swiss nursing homes indicates a need for further investigation.