

Improving planning for cross-sectoral health care provision using a needs-based population classification system (PopGrouper)

Introduction: In recent years, several high-level reports in Germany have recommended the re-orientation of planning of healthcare delivery structures in Germany towards an integrated needs-based approach including inpatient hospital care and ambulatory medical care, while incorporating population level morbidity metrics.

The newly developed PopGrouper is an instrument for determining morbidity, which can be used to measure (cross-sectoral) morbidity-based care needs based on claims data from the statutory health insurance system.

Methods: Based on the classification of more than 9 million insured persons into PopGroups, the average use in various care sectors (e.g. ambulatory medical care, inpatient care, day surgery) per capita in each PopGroup was first determined. To estimate healthcare needs for different types of services in selected regions, the average nationwide use per capita per PopGroup was multiplied by the number of individuals per PopGroup in the region and summed across all PopGroups. This expected use (based on the regional population's distribution into PopGroups) is compared to the actual observed utilization. Discrepancies between observed and expected use may indicate undersupply or oversupply in certain areas of care. For need-based healthcare provision planning, the required care capacities (e.g. doctors in ambulatory practices, hospital beds) can be derived based on the observed and expected utilization.

Results: Using an exemplary region, cross-sectoral results for selected care areas will be presented and discussed.

Discussion: The PopGrouper differs from existing approaches to measuring morbidity-oriented care needs, due to the high degree of morbidity differentiation. The aim of the application of the grouper presented here is to examine the extent to which PopGroups can contribute to improving the needs-based planning of health care provision structures in Germany.