



Practice Management Systems in Germany: Regional Differences in Usability and User Satisfaction

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Abstract

Background

Practice management systems (PMS) are central tools in medical practice and vary in their usability and user-friendliness. Based on a nationwide Zi survey in Germany regarding the usability and user satisfaction concerning 39 PMS, the report analyzes regional differences in the use of PMS at the level of Association of Statutory Health Insurance Physicians (KV) and districts. A spatial cluster analysis, along with correlations with regional structural characteristics, provides insights into possible causes of regional differences.

Methods

The study is based on billing data from contract physicians in 2024, which was used to identify the PMS utilized by each practice. This data was supplemented with usability (SUS) and user satisfaction scores (NPS) from a survey of 39 frequently used PMS. At the levels of KVs and districts, usage frequencies, mean values of SUS and NPS, as well as regional clusters were analyzed. Additionally, linear regression models were employed to explain regional differences, considering socioeconomic characteristics (GISD), physician structural features, and the East-West classification as predictors.

Results

The analyses included 104,282 practices that utilized one of the 39 evaluated PMS. Significant regional differences emerged: PMS with higher ratings were more frequently used in Hesse and Saxony-Anhalt, and less so in southern and eastern Germany. Cluster analyses identified hotspots of high usability and user satisfaction in certain regions of the former West German states, while cold spots were predominantly found in regions of the former East German states. Regression analyses revealed lower average usability and user satisfaction scores in East Germany, as well as in regions with a higher average age of physicians and a higher proportion of employed doctors.

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Discussion

The use of less user-friendly PMS in East Germany may be linked to structural disadvantages, higher workloads, and a shortage of skilled professionals. Time constraints and a lack of information make switching PMS more challenging in these regions. Additionally, a higher average age of physicians and a greater proportion of employed doctors correlate with lower PMS usability. Older physicians often rate their PMS more positively but may apply different standards and possibly place less emphasis on usability. Moreover, they may not want to introduce a new PMS shortly before retirement. Due to their professional mobility, employed doctors potentially have more opportunities for comparison, and frequently have less influence over system selection, so their perspectives should be more strongly incorporated into future decision-making processes.

Keywords

Practice Management Systems, Usability, User Satisfaction

Citation

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