



# Regional comparison of self-reported outpatient physician contacts versus those documented in billing data in the year 2024

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## Abstract

### Background

The number of physician visits is an important healthcare metric for making statements about the utilization of outpatient services under contract with physicians. Information to quantify utilization can, on one hand, be determined from billing data under Section 295 of the German Social Code Book V (SGB V); on the other hand, individuals can also be asked directly how often they visit a doctor. However, both methods are subject to methodological limitations. The aim of this report is to capture the number of physician contacts using these two different data collection methods, and to compare the results from contract physician billing data with self-reported information. Furthermore, regional differences between the Associations of Statutory Health Insurance Physicians (Kassenärztliche Vereinigungen, KV) are to be calculated descriptively and presented visually.

### Methods

For the report, data from the Socio-Economic Panel (SOEP) of the German Institute for Economic Research (DIW) on the number of physician visits were compared with available information from physician billing data under contract. For this purpose, the SOEP data were first seasonally adjusted and then weighed at the population level. Afterwards, mean values were calculated for all federal states and the results were visually compared with treatment cases, physician-group cases, individual physician cases, and treatment days in the billing data. The dispersion of various metrics was graphically compared using the Bland–Altman method.

### Results

The visual comparison of the mean values per federal state revealed no systematic relationship between the data sources. The national average also varied across measurement methods. The extremal ratios, as a measure of regional variability, indicated a small variation span. The regional variability was greater for the treatment days and the self-reported data than for treatment cases, physician cases and physician-group cases.

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### Conclusion

There are regional variations among the individual federal states. The results obtained by the different methods of data collection also differ in some cases. To ensure the reliability of healthcare provision, the number of physician contacts represents an important indicator for identifying demand. When treatment days are taken into account, the self-reported data appear to underestimate the actual number of physician visits in a manner similar to that of treatment cases. Due to methodological limitations in both self-reporting (retrospective recall bias) and billing data (information aggregation), these measures still seem only an approximation of the true number of physician visits.

### Keywords

Physician contacts, physician-patient contacts, treatment cases, physician cases, days of treatment, billing data, Socio-economic Panel, SOEP, survey, care contacts, care processes, office-based physician utilization

### Citation

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