The composition of a linked database on administrative healthcare and employment data in Austria

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Introduction

In Austria, healthcare and employment services are organized by different public entities. Therefore, administrative data are dispersed but share a common individual identifier. We present a linked dataset, matching individual information from both administrative ambits for Austria’s second largest province Lower Austria.

Methods

The linkage procedure is based on a previously published proof of concept [Endel et al. 2016, European Journal of Epidemiology 31, p. S49, DOI:10.1007/s10654-016-0183-1], which is applied on a larger scale for the first time. Utilizing the established link, selected variables are extracted from the respective sources and are merged on a shared infrastructure per project, thus preserving a high level of data protection and privacy.

Results

The linked databases cover employment records from 2002 to 2016, including information on, e.g., earnings and education as well as claims data from the health insurance system for 2006 to 2011, including outpatient contacts, inpatient episodes, prescriptions and leaves of absence. Data quality analysis and an in-depth documentation of major characteristics such as diagnoses and medication are prepared.

Conclusion

The resulting matched database provides the foundation for studying the coherence of burden of disease, healthcare services, employment, and earnings for a large population for several years.

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