Abstract of parallel session: **11**

Title: Systematic selection of indicators for healthcare service utilization research with claims data: a model example of diabetes mellitus in Switzerland

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Abstract
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Introduction

The study aimed at developing a systematic approach to identify potential indicators of healthcare service utilization and its variation, suitable for research with administrative claims data. We focused on interventions recommended by clinical practice guidelines (CPG), and explored how these reflected different types of healthcare services. Diabetes mellitus (DM) in Switzerland was analyzed as a case model.

Methods

CPG for diabetes patients were retrieved from the website of the Swiss Endocrinology and Diabetes Society. The resulting set of CPG represented all sectors of diabetes care. Recommendation statements with a specific healthcare intervention for a defined sub-population of patients were translated into indicators of healthcare service utilization. Indicators were classified according to disease stage, healthcare service and intervention type. Administrative claims data from a large Swiss insurer included diagnosis and procedure codes for inpatient, and procedure and drug prescription information for outpatient services. We assessed for all indicators whether they could be used for analysis of the claims data.

Results

A total of 93 indicators were derived from 15 guidelines. For 63 indicators, the target population could not be identified from the claims data. For 67 indicators, the intervention could not be identified. Nine (10%) of all indicators were eligible for further plausibility checks for research with claims data (three addressed gestational diabetes and screening, five screening for complications, and one glucose measurement). Some types of healthcare services, e.g., management of risk factors, treatment of the disease and secondary prevention, lacked corresponding feasible indicators of utilization.

Conclusion

The systematic approach could identify a number of indicators of healthcare services utilization, feasible for diabetes mellitus research with Swiss claims data. Some healthcare service types were covered less well.