

The Robson Classification for Caesarean Section: Administrative Data and Reimbursement SwissDRG

Degree programme: MAS Digital Health

The Robson 10-group classification for Caesarean Section: Usability of routinely collected health data, degree of information, resource consumption, case related costs, DRGs, outcome and benchmark

Management summary

With an increasing rate of caesarean sections (CS) as well as rising numbers of multiple pregnancies, valid classifications for outcome analysis, reimbursement and benchmarking are needed. The Robson classification provides a verified method to group cases with CS.

We evaluated different methods of classification with regard to costs and outcome (the Robson classification, the Swiss classification of procedures Schweizerische Operationsklassifikation and the Swiss Diagnosis Related Groups (inpatient payments).

We hypothesize first that insufficient classifications result in variable case related costs and second a correlation of case related costs of mother and newborn. The study was conducted at the Inselspital, University hospital of Berne, Switzerland. The study population contained inpatient cases from 2014 until 2017. The data were extracted from the Clinical Data Warehouse. Cases were classified by a programmed code. Descriptive statistic and comparison of the groups and analysis of costs were conducted.

The Robson classes could be associated to outcome parameters. A correlation of case related costs of mother and child could be shown for distinct groups, but also negative correlation occurred. The impact on

the distribution of case related costs using the three classifications could be demonstrated, but no additional value could be gained from applying Robson classes to SwissDRGs. The results of this study will enhance the discussion to adopt the classification in Switzerland. Analysis of cost and outcome data might influence quality monitoring.

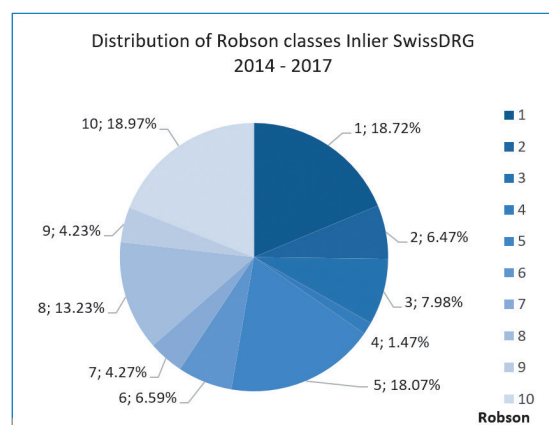
With this study it could be shown, that a complex query on routinely collected health data could serve for medical classification, benchmarking, business analysis and monitoring of quality and outcome of inpatient cases.



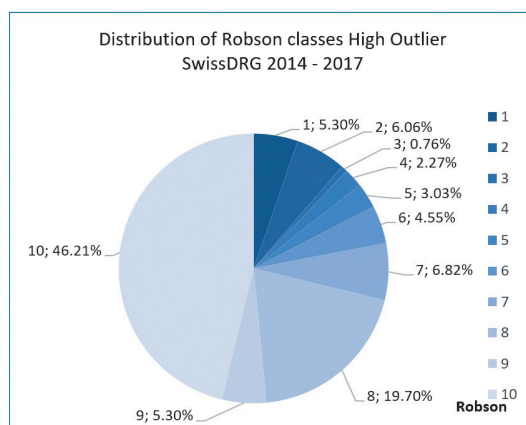
Karen Triep
karen.triep@insel.ch

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Distribution of Robson classes Inlier SwissDRG mother cases 2014 – 2017



Distribution of Robson classes High Outlier SwissDRG mother cases 2014 – 2017