

**TITLE:** 3M FileInspector – a toolbox for coding, casemix control and quality

## **Introduction**

3M FileInspector is a software tool that is used in Germany by 980 institutions (hospitals, insurance companies) for casemix control, coding, batch grouping simulations in terms of coding changes and quality management.

## **Methods**

Based on the German Minimal Basic Data Set §21, the case-related information is processed with the certified German aGDRG grouper. The application which can be installed locally or in a server environment has extensive output options in the form of Excel and text files as well as databases of various formats (MS SQL, SQLite, PostgreSQL, MS Access). A RuleEngine is integrated, which is maintained on an ongoing basis via all relevant master data with regard to classifications and variables. An associated RuleEditor enables users to create and manage extensive sets of rules (versioning, turn of the year). Rule sets can be drawn up on topics such as the quality of coding, plausibility checks of basic data and quality of medical care. However, simulation rules for the deliberate manipulation of case data (e.g. replacement, deletion, addition of diagnoses and procedures as well as adjustment of the length of stay) can also be created for precisely definable patient cohorts.

## **Results**

Key performance indicators are case mix, other grouper flags such as PCCL as well as controlling-relevant process indicators, e.g. pre-/postoperative length of stay. These results are an essential part of regular reports for hospital management to manage operational processes and strategic planning, especially for prospective budgets. Coding quality metrics can be evaluated over time and regarding service lines and associated coding teams. It can also be used for monitoring document improvement purposes. The function of the simulation allows hospitals to identify individual areas for improvement in terms of coding and to measure their impact on the entire patient cohort.

The relatively high proportion of inpatient hospital treatment in Germany is being counteracted by new legal regulations. A set of rules is integrated into the 3M FileInspector that identifies potentially outpatient cases according to the official catalogs for outpatient procedures and treatments, but also allows other variables to be added by the user. Since all results are case-related, the results can be aggregated as desired (e.g. service lines) or linked to other topics such as quality indicators.

In projects with more than 500 hospitals in Germany and Switzerland, 3M HIS uses FileInspector to determine quality indicators. Regulations such as the G-IQI (German Inpatient Quality Indicators) and PSI (Patient Safety Indicators) are used. In this context, different risk adjustment methods are used to calculate expected values.

## **Discussion**

The 3M FileInspector is a software tool that continuously adapts to the changing requirements and legislation in the German healthcare sector. For this purpose, a very high

maintenance effort (3M regulations, current and historical G-DRG groupers, classifications) is carried out. With the prompt provision of new groupers and early mapping of new legal regulations for hospital financing, users are able to simulate the effects on their own organization.