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3M FileInspector
Toolbox for coding, casemix control and quality

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May 30, 2024

FileInspector / Stakeholders

Medical Controlling
- Quality of Coding of current and already discharged patients
- Development of individual coding proof rule sets
- Using 3M Reimbursement Rule Set
- Monthly reporting and analytics

Financial Controlling
- Monthly reporting
- Ad hoc analysis
- Case Mix management / anticipating hospital reform act and regulatory changes in reimbursement
- Budget negociations – automated filling of forms
- Cost comparisons according to InEK calculation and revenue allocation/split to service lines

Quality Management
- Using different quality indicator rule sets (G-IQI, PSI) which relate to the German MBDS
- Create individual quality indicators
- Frequent reportings

Solventum Benchmark projects
- Mass data processing (500+ hospitals)
- KPI calculation
- Quality indicators (GIQI, PSI)

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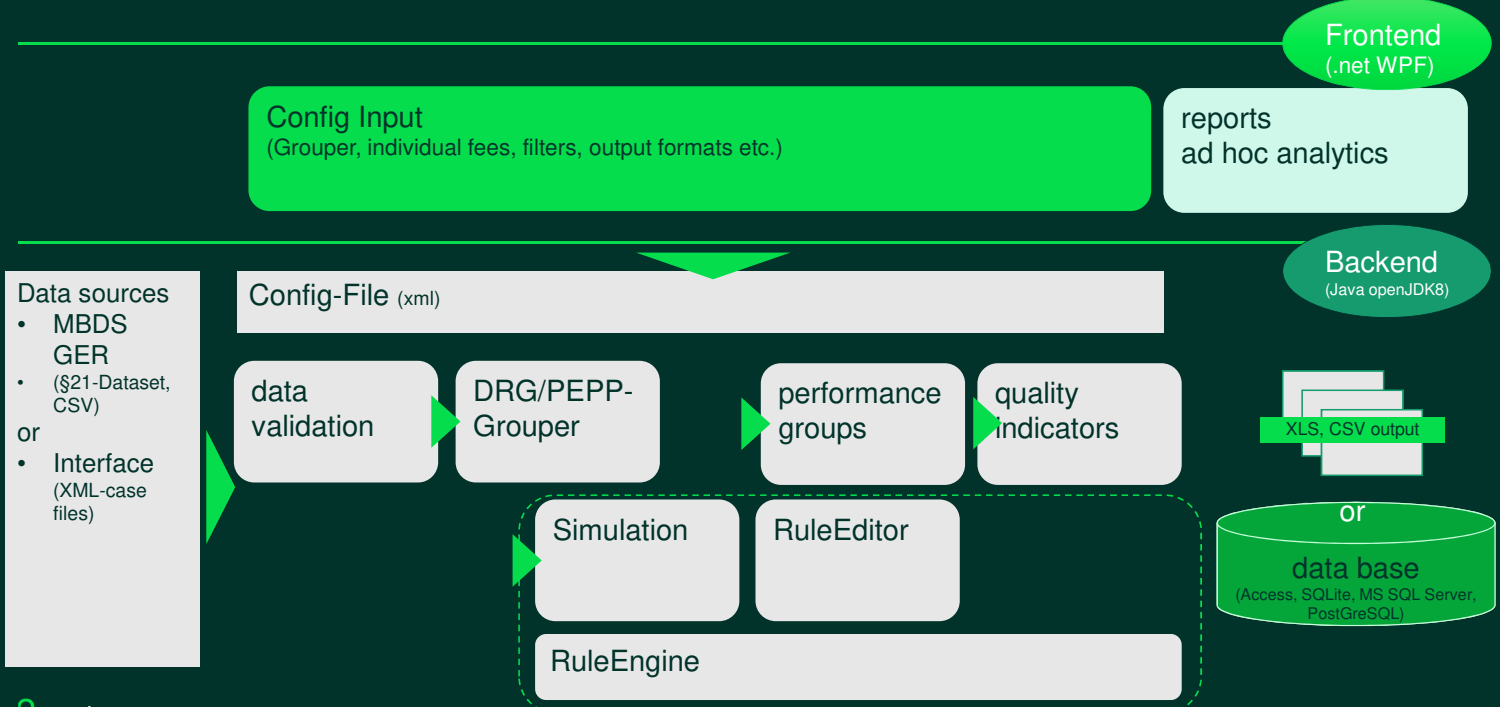# FileInspector

Functions

Workplace

- Grouper and transitional grouper versions
- hospital individual pricing agreements
- DRG, additional fees, CMI, CM, ALOS, ICD, OPS (procedures) and many more.
- Adjusted InEK reference cost
- Service line revenue distribution (DDMI method)
- AEB Forms (for budget negociation)
- Database or xls-/csv-output

Modules (optional)

- Potentially Outpatient Surgery (PPA)
- Simulation (large population) ⭐
- Simulation (single case)
- Asklepios Hospital Service Groups
- (NRW) Hospital Service Groups
- Coding Rules Checks
- Quality Indicators (G-IQI, PSI) ⭐
- Mental Health (PEPP-Grouper)
- Ad hoc Analytics

Technical overview

Frontend (.net WPF)

Config Input
(Grouper, individual fees, filters, output formats etc.)

reports
ad hoc analytics

Backend (Java openJDK8)

Data sources
- MBDS GER
  (§21-Dataset, CSV)
- or
- Interface
  (XML-case files)

Config-File (xml)

data validation → DRG/PEPP-Grouper → performance groups → quality indicators

Simulation   RuleEditor

RuleEngine

XLS, CSV output

or

data base
(Access, SQLite, MS SQL Server, PostGreSQL)
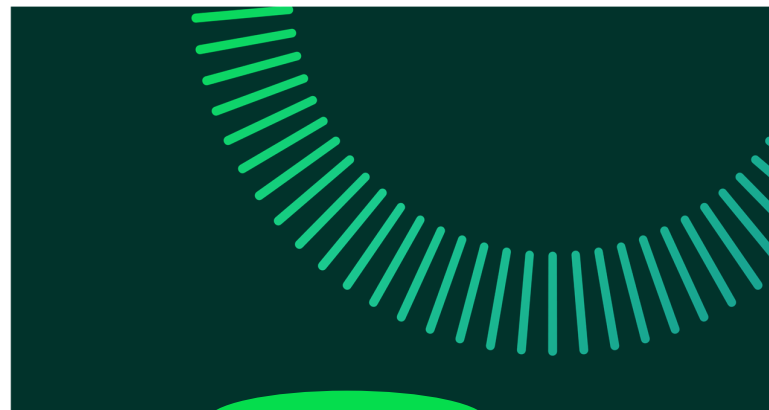
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Simulation

Why?

- Impact of grouper relevant items on large case populations

- Simulation of the impact of upcoming changes of the DRG system in next version

- Newly introduced diagnoses or procedures which are not represented in historical data

- Estimation of overall financial risk if diagnoses/procedure codes would not be accepted by insurance (reimbursement audits)

- Structural or processual changes
  - Planned facilities which allows application of additional codes to get into DRG specialties
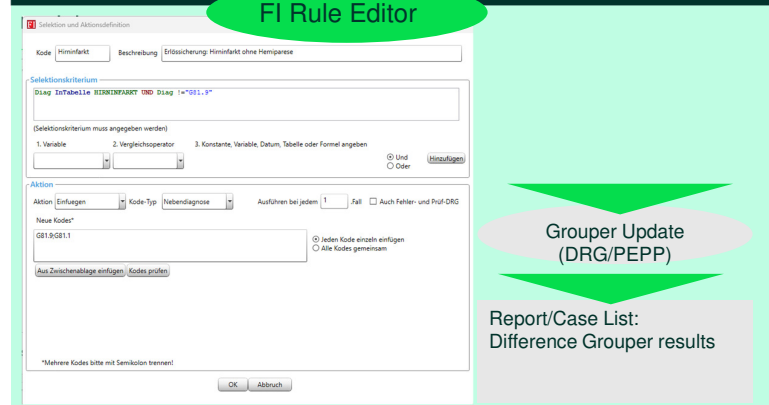 - shortage of billable LOS by insurance

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Simulation (batch mode)

- Easy-to-use
- Modification of grouper relevant items
  - Diagnoses (PDx, SDx)
  - Procedures
  - Admission weight (new bornes)
  - Length-of-Stay
  - Ventilation hours
  - Admission/discharge type
- Modification types
  - Add, change, delete
  - For numeric values also modifications with formulas possible
- Complex case selection criterias applicable
- Recalculation of billing amount and storage of simulation results

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FI Rule Editor

Grouper Update (DRG/PEPP)
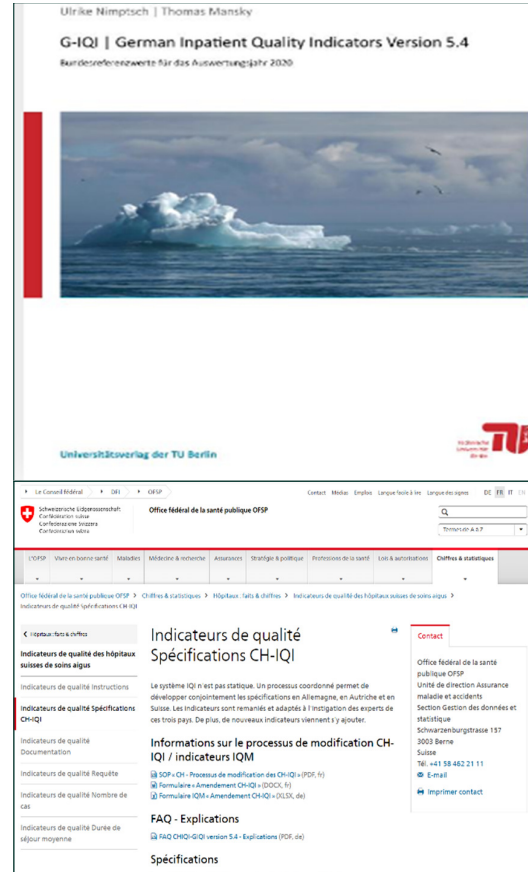
Report/Case List: Difference Grouper results

Simulation (batch) - Results

- Alternative simulation results (1:n) are attached but the original case record remains
- Individual developed sets of simulation rules can be created and applied simultaniously
- Optional Solventum rule set is available (>800 rules)
- Comparison of original and simulated grouper results or PCCL differences
- Ad hoc Simulation (application of simulation rules on „hand picked" selection of various cases via case list) – e.g. quick check of simulation rules

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Quality Indicators

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G-IQI German Inpatient Quality Indicators

- 400+ quality indicators which cover up to 60% of case population
  - Based on German MBDS data set
  - Expected rates (risk adjusted) and national rates in order to identify conspicious outcome
  - Useful for
    - Internal outcome goals
    - Education: regular internal mortality conferences
    - Improvements: Peer reviews with external advisers
- Continous maintenance of QI in colaboration with IQM (Initiative Qualitätsmedizin e.V. with more than 500 German and Swiss hospital) and Technische Universität Berlin
- Usage of QI in related software like FileInspector, ScorePortal and QS

Reference:
Doku_3M_GIQI_V54_2023_Deckblatt (initiative-qualitaetsmedizin.de)
G-IQI – German Inpatient Quality Indicators Version 5.4 (tu-berlin.de)
Qualitätsindikatoren der Schweizer Akutspitäler (admin.ch)

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Quality Indicator Results

- Nominator/denominator logic

- Highlight for positive and negative outcome in relation to
  - expected value (risk adjusted)
  - national values

- Case list
  - filter for numerator cases
  - case related expected value
  - diagnoses/procedures

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Summary

- 980 German hospital use FileInspector
- Usage on premise for single users
- Batch component in a BI infrastructure of Solventum or 3rd party
- regular updated as there are many changes due hospital reform in Germany and regulatory requirements

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Thank you

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