



Support of Clinical Core Processes

Area of Competence at FH Upper Austria Steyr Campus

Research Topics

- » Transparency in outcome and process quality of clinical core processes (hospital benchmarking)
- » Risk-adjusted comparisons of key figures in the hospital sector
- » Ontology-based data processing
- » Data governance

The aim is to provide comprehensive services that ensure a seamless patient care process. The focus of research activities is the risk-adjusted comparison (benchmarking) of clinical outcome, processes and costs. This forms the basis for standardization efforts in the context of process management. Analyses of this newly developed data base using data mining methods to support the clinical departments complete the research spectrum. A platform of hospitals in Upper Austria – specifically gespag, Klinikum Wels-Grieskirchen and Kepler-Universitätsklinikum – develops this research area together with the FH Upper Austria study course "Process Management and Business Intelligence".

Flagship Projects

LeiVMed: Performance Comparison Medicine – A Benchmarking Program for Hospitals

LeiVMed is a benchmarking program that enables participating hospitals to compare their clinical core processes. The focus is on the risk-adjusted comparison (benchmarking) of clinical outcome, processes and costs. These data form the basis for standardization efforts in the context of process management. Based on this, the medical departments will be able to increase the medical / nursing quality while simultaneously reducing costs.

Hospital costs are rising all the time, so further efforts to control costs seem unavoidable. There is also a growing need for even better medical quality in the treatment of patients. The main task of medical check-ups is to ensure that medical services are provided effectively and efficiently. However, it is difficult to compare the variable costs in the provision of medical services such as surgeries. Likewise, the case-based assessment of whether the treating physicians and nurses have chosen the "best" route to diagnosis / therapy as well as the most economically feasible one is also very complex. LeiVMed enables the measurement and comparison of the quality of the medical results quality and the variable costs within a web application.



LeiVMed: Implementation

- » Collection and / or preparation of data with a focus on data quality
- » Mapping of hospital data to international catalogues (SNOMED)
- » Regular reporting with key figures on medical quality, business outcome and processes
- » Fair comparison of departments by risk adjustment (patient characteristics)
- » Support with analysis and consecutive adaptation of clinical processes

Kliniksuche.at

This is the analysis and provision of general information about the performance status of Austrian hospitals for the broad clinic-seeking population. The resulting website "kliniksuche.at" provides quality-assured information and transparent criteria for hospital stays. With this project, quality-assured, neutral information was provided for the first time concerning which hospitals offer certain hospital treatments how frequently and under which conditions. The aim is to support the population in their decision making when they are preparing for a hospital stay via a neutral platform which provides intelligently prepared information.



ReSSL: Research Group Surgical Simulators Linz

The ReSSL research group is concerned with the development and further development of hybrid surgical simulators. The focus is on artificial anatomical structures, smart surgical instruments, simulated imaging and simulator validation. The research team "Support of Clinical Core Processes" participates in this project – conducted by the colleagues at FH Upper Austria Linz Campus.



Check this out:
forschung.fh-ooe.at/en/research-center-steyr



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Take a look at ...



Dr. Gerhard Halmerbauer
talking about Support of Clinical
Core Processes: www.youtube.com

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