Do train drivers define time tables? Enabling workflows in anaesthesia and intensive care by strategic information management for hospitals and regional health care

Alfred Winter, Birgit Brigl, Thomas Wendt;

Institute for Medical Informatics, Statistics and Epidemiology, Leipzig University, Leipzig, Germany

Introduction:

Conferences like ESCTAIC show that anaesthesists are quite offen dedicated to develop and introduce modern tools for supporting information processing workflows in anaesthesia and intensive care. Workflows (not only) in this disciplines are part of hospital wide or even regional wide workflows concernig patient care. Focussing only on anaesthesia and intensive care may face a serious loss of integration and quality of care.

Methods and Results:

Since its information systems are constituent part of the respective hospital or the regional health care system, enterprise architecture planning is needed to construct integrated information systems [1]. The 3-layer-graph-based-meta-model (3LGM²)[2] and the corresponding modelling tool (3LGM²-tool)[3] supports this planning process by a means for modelling hospital's functions, supporting application systems, computers, and their relationships. A practical guideline for preparing strategic information management plans [4] guides through the planning process.

Conclusions:

Using the methods proposed clearly shows interdependencies between workflows in anaesthesia and intensive care on the one hand and hospital or region wide workflows. Integration strategies and interfaces can be derived from this analysis. The need for a central information management and for strategic information management plans in hospitals becomes evident.

References

- 1. Spewak, S.H.Hill, S.C. (1992). Enterprise Architecture Planning: Developing a blueprint for Data, Applications and Technology. New York: John Wiley & Sons.
- 2. Winter, A., Brigl, B., Wendt, T. (2003). Modeling Hospital Information Systems (Part 1): The Revised Three-Layer Graph-Based Meta Model 3LGM². *Methods Inf Med*, **43**(5): S. 544-51.
- 3. Wendt, T., Häber, A., Brigl, B., Winter, A. (2004). Modeling Hospital Information Systems (Part 2): Using the 3LGM2 Tool for Modeling Patient Record Management. *Methods Inf Med*, **43**(3): S. 256-67.
- 4. Brigl, B., Ammenwerth, E., Dujat, C., Graber, S., Gro[ss]e, A., Haber, A., Jostes, C., Winter, A. (2005). Preparing strategic information management plans for hospitals: a practical guideline: SIM plans for hospitals: a guideline. *International Journal of Medical Informatics*, **74**(1): S. 51-65.