ProHTA: Prospective health technology assessment

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Background
Innovations in health technology are necessary to achieve medical progress and to safeguard the prosperity of health technology man- ufacturers as a large, global operating economic branch. Successfully launching of innovations is time sensitive and requests strategic and future-oriented thinking. Often manufacturers fail at this task and loose millions of euros or dollars as existing methods of early detection and evaluation of all the aspects of a new technology fall too short. New methodological approaches are therefore necessary to estimate unmet needs within global health care systems and to assess the market potential of uprising health technologies.

Objectives
The primary goal of ProHTA is the evaluation of medical technologies in an early phase of the development process from the perspective of both the health system and the manufacturer and the identification of efficiency potentials and pitfalls in the health system.

Methods
These goals are supposed to be achieved by a combination of inter- disciplinary expertise (health technology assessment and public health, health economics, informatics, knowledge management, medical informatics,) from University of Erlangen-Nuremberg and two manufacturers (sepp.med GmbH and Siemens Healthcare) within a project supported by the German Federal Ministry of Education and Research (BMBF). Specific organisational levels of health care are implemented into a multi-modular, hierarchical conceptual model, building the basis for 'hybrid simulation' consisting of system dynamics models for macro-simulation and agent-based models for micro-simulation. The simulation is validated via different use case scenarios focusing acute cerebro-vascular disease as well as the concept of personalised medicine in oncology.

Results
In line with the project schedule the conceptual model will be finalized until the end of 2011. The simulation follows until the end of 2012. Conclusion
In times of financial crisis and severe budget constraints ProHTA offers an interesting approach with emphasis on strategic planning and development of health innovations and improving efficiency of health care delivery in different care settings.

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