MANAGING CHANGES OF HEALTH INFORMATION SYSTEM BY A CONFLICT VIEWPOINT

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This research studies group conflicts within process of health information system (HIS) in terms of its development and implementation, aiming at managing changes through conflicts acquisition and representation with qualitative, quantitative and ontological methods.

Introduction: Change is a constant both in life and in informatics. Introduction of new HIS like Electronic Medical Record (EMR) brings up changes into health care context and affects process balance. The effect is changing over time and making complex circumstance even more complex and such changes may lack of visibility, measurability and predictability. To understand and management changes, the group conflict, as a visible path of observing and analyzing changes, could be a potential possible viewpoint.

Methods: Employing an ontological approach we propose to investigate conflicts at the group level among administrative, clinical and information technology staff surrounding EMR.

1. Transcribe conflict cases into scripts via group meeting and personal interviewing;
2. Extract keywords from scripts and build vocabulary table for conflict management;
3. Represent conflict categories (e.g. culture difference, perceptions, communication barriers) with cases, relative solutions and results using Protégé-OWL ontology editing tool;
4. Identify factors that might affect cases at different stages with quantitative scores.

Expected Results: The primary results of the research will enhance mutual understanding among stakeholder groups, benefit change management and group decisions on informatics implementation.