Inter-Institutional Care Process: Scenarios to Capture Demands for Workflow Support

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Abstract. Care processes across hospitals challenge healthcare information systems. Shared care scenarios ensure the insight from different perspectives on detailed demands for workflow support in a changing clinical practice.

Keywords. workflow support, clinical process, cardiovascular

The aim of this study is to elaborate the needs for workflow support in an inter-hospital care process. Our case addresses the innovative surgical treatment of Endovascular Aneurism Repair (EVAR), which is mainly practiced at university hospitals. Because the EVAR technique undergoes incremental improvements, outcomes are monitored by enrolling the patients into a life-long follow-up program [1]. The related workflow involves several actors, creating an increased flow of images and patient information between the community hospitals and the university hospital. However, existing information systems do not support inter-institutional care processes, reflecting the need for a solution to support feedback loops in the information flow across hospital boundaries.

Based on collected data and previous studies [1, 2] we developed scenarios of the EVAR follow-up workflows by including activities, resources and information entities. Using the scenarios as input, we conducted two focus group interviews with health personnel participating in the EVAR treatment. We performed a content analysis on the transcribed data, organizing the coded content into categories.

The present workflow has some major drawbacks: 1) Patients lost in the follow-up loop for reasons not documented, 2) Delayed transfer of patient information entities across hospital boundaries, 3) Time-consuming workarounds, and 4) Lack of coherence across the different actors’ patient lists.

Our multi-step approach with development of scenarios to be shared with domain stakeholders contributes to confirmation of the scenarios, hence giving more detailed insight of the problem statement with additional variance. Next, these results will be used as input for further requirements elicitation.


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