



Implementation of the notation BPMN (business process modelling notation) in the modelling of pathology subprocesses

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Abstract

Background: Process orientation is one of the essential elements of quality management systems, including those in use in healthcare. Business processes in hospitals are very complex and variable. BPMN (Business Process Modelling Notation) is a user-oriented language specifically designed for the modelling of business (organizational) processes. Previous experiences of the use of this notation in the processes modelling within the Pathology in Spain or another country are not known. We present our experience in the elaboration of the conceptual models of Pathology processes, as part of a global programmed surgical patient process, using BPMN.

Methods: With the objective of analyzing the use of BPMN notation in real cases, a multidisciplinary work group was created, including software engineers from the Dep. of Technologies and Information Systems from the University of Castilla-La Mancha and health professionals and administrative staff from the Hospital General de Ciudad Real. The work in collaboration was carried out in six phases: informative meetings, intensive training, process selection, definition of the work method, process describing by hospital experts, and process modelling.

Results: The modelling of the processes of Anatomic Pathology is presented using BPMN. The presented subprocesses are those corresponding to the surgical pathology examination of the samples coming from operating theatre, including the planning and realization of frozen studies.

Conclusions: The modelling of Anatomic Pathology subprocesses has allowed us the creation of an understandable graphical model, where management and improvements are easier to be implemented by health professionals.

Keywords: Pathology, BPMN, Business Process Modelling Notation, Surgical patient.

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