



ORAL PRESENTATION

BPMN in practice. Experiences of business modeling in the Department of Pathology

Marcial García Rojo¹, Luis Calahorra², and Francisco Ruiz³

From: 22nd European Congress of Pathology European Society of Pathology (ESP) Working Group: Information Technology (IT) in Pathology Precongress Meeting

Florence, Italy. 4 September 2009

Background

Orientation to processes is one of the essential elements of Quality Management Systems, including those currently in use in healthcare. BPMN (Business Processes Modeling Notation) is a language designed specifically for modeling business processes (organizational). Without required special expertise, BPMN provides a graphical notation for expressing all aspects of the processes using a single type of diagram. We present our experience in modeling Anatomic Pathology processes within the Programmed Surgical Patient (PSP) process and the use of BPMS (Business Process Management System) tools in our hospital.

Methods

The applied research method was Action-Research (A-R). A-R is a collaborative research method aimed at joining theory and practice between researchers and practitioners by means of a process of a cyclical nature.

Results

Programmed Surgical Patient process includes both a high level abstraction and detailed description of the PSP process and the activities that are carried out when a patient is admitted into the hospital for the accomplishment of the surgical treatment of a disease that has been clinically diagnosed previously.

The modeling of the processes of Anatomic Pathology is presented through the notation BPMN. The presented subprocesses are those corresponding to the surgical pathology examination of specimens coming from operating theatre, including the frozen studies and the complete internal circuit in the Pathology department that results in the Pathology report and its submission to the corresponding clinical department.

Conclusions

The introduction of a software tool to support process modeling management with the BPMN notation promotes continuous improvement of the effectiveness and safety of processes in both healthcare and other applications (research, education) and increases patient and professional satisfaction.

Creating a multidisciplinary working group has been an efficient method to analyze the use of BPMN notation in real cases in healthcare.

The modeling of the programmed surgical patient process and its subprocesses has allowed to us the preparation of an understandable model for the involved health professionals and makes easier the communication of processes. Additionally, modeling allows early detection and correction of errors. This work is an essential previous step for further analysis and improvements in healthcare processes, including the adoption of information technology standards.

Acknowledgements

This work was supported in part by grant PI-2008/54 from the FISCAM (Fundación para la Investigación Sanitaria en Castilla-La Mancha) and COST Action IC0604 EURO-TELEPATH "Telepathology Network in Europe".

Author details

¹Pathology Department, Hospital General de Ciudad Real, Ciudad Real, Spain

²Urology Department. Hospital General de Ciudad Real, Ciudad Real, Spain

³Faculty of Computer Science. University of Castilla-La Mancha, Ciudad Real, Spain

Email: marcial@cim.es

Published: 9 April 2010

doi: 10.1186/1746-1596-5-S1-S4

Cite this abstract as: Marcial García Rojo, Luis Calahorra, and Francisco Ruiz: BPMN in practice. Experiences of business modeling in the Department of Pathology. *Diagnostic Pathology* 2010, 5(Suppl I):S4