

Healthcare Chain Workflow Management by Use of IT

Ton AM Spil

Roel W Schuring

Patient visits various organizations or units within organizations to get proper diagnosis and treatment. The role of *healthcare workflow-management by use of IT* is to adjust the contributions of those organizations or units in terms of timing, quality and functionality. Some of these difficulties can be traced back to the heterogeneous nature of healthcare organizations. Professionals require a certain degree of autonomy, whilst workflow management requires a certain degree of standardization. Organizations or units need goals that fit to their specific practice, workflow management requires cooperative goals, or at least, goals that do not conflict. Also, standardization is needed to make full mutual adjustment of organizations possible, even though such standardization may unnecessarily complicate the way of working. As a result, a dedicated business transformation may be necessary. Healthcare organizations have to rethink their boundaries and have to make strategic alliances to be able to cope with the changes in the environment.

Developing, implementing and using information technology in organisations is a complex social activity. It is often characterised by ill-defined problems or vague goals, conflicts and disruptions that result from organisational change. Successfully implementing information systems in healthcare organisations appears to be a difficult task. Information Technology is seen as an enabler of change in healthcare organisations but (information) technology adoption decisions in healthcare are complex because of the uncertainty of benefits and the rate of change of technology. Relevance and micro-relevance are seen as important determinants for IS success. The (lack of) adoption of IT traditionally found it's reasons in resistance of the professionals in healthcare organisations but this is clearly changing in healthcare today. When implementing an information system in healthcare it is wise to focus on the success determinants relevance, resistance, requirements and resources.

The institutional mind of healthcare organisations should change from intramural to extramural. Before the healthcare organisations can change their vision to the environment they have to restructure internally. Process management can help with the restructuring. Process management tries to identify the most important processes of the organisation and integrate them by means of information interaction. In stead of suboptimisation of functions in the organisation there is a chance of optimising the overall process. The process management literature has grown from the business process reengineering thoughts but also stems from process oriented development methods. The first group described radical change of the processes of organisation but this is nowadays seen more evolutionary. The second group thoroughly described the processes of the organisation but only made small changes. Process management can be best of both worlds and can be used to transform the healthcare chain.

We think Internet will be the medium to link the institutional healthcare bodies to the environment. In five papers in this book, the Internet technologies take an enabling role to revitalise the healthcare community. To reach this revitalisation it is necessary that on standardisation level global agreements have to be made to accelerate the developments. Last but not least we are back in this chapter where the spirit of healthcare organisations has to be renewed by building strategies for healthcare information systems. Renewal deals with the people side of transformation and therefore information systems should be seen as sociological interactive systems in stead of computer systems. With the renewal we also arrive at knowledge management because it involves the rapid dissemination of knowledge inside the firm.

This minitrack showed to be a difficult one for the researchers involved because the building of a generic model of workflow in healthcare is a complex task. Still we think that the future of e-health beholds in the solution of these integration problems. We will show strategies for workflow systems and look at alternative ways of organizing the healthcare communication for instance with a call center. We also take it a level deeper to see what technological problems underlie these organizational problems.