

Summary

Abstract

Many healthcare organizations are being challenged to cure more people with fewer resources, while satisfying strict quality and safety regulations. The redesign of care processes has become one of the key mechanisms for coping with this challenge. Care processes typically include consultations, diagnostic tests, and treatments, as well as supporting steps, such as scheduling. A typical redesign project that targets these processes consists of describing the as-is process, conducting an analysis of the as-is to identify process weaknesses, generating process improvement ideas (i.e. rethinking the process), and implementing the new process. Whereas redesign teams often spend much time describing and analyzing the as-is situation systematically, process improvement ideas are typically generated in one or a few workshops using a highly intuitive approach. These sessions are often chaired by an external consultant who frequently raises the question: "Does anybody have an idea?" Such a highly intuitive approach does not include a safeguard to guarantee a systematic and complete exploration of the full range of redesign options. Consequently, the improvement potential of many redesign projects is not fulfilled. This leads us to ask the question: "Does anybody have an idea regarding a better approach to rethinking care processes?" In the first part of this research endeavor, we investigated the status-quo regarding methodological support for rethinking care processes. In this way, we gained insights into potential alternatives for the often-applied, highly intuitive approach. In the second part of this research endeavor, we focused on developing and evaluating a new technique for rethinking care processes. This technique, i.e. the Rethinking of Processes (RePro) technique, guides practitioners in applying 46 categorized process improvement principles. Lab experiments were conducted to compare the performance of the RePro technique and traditional brainstorming on several outcome measures, such as the diversity and the number of high-quality ideas generated. The experiments' results confirm the potential of using the RePro technique for rethinking care processes, but also suggest that the way the technique is used strongly affects its performance.

About the author

Rob Vanwersch received a BSc degree (cum laude) in Industrial Engineering & Management Sciences at Eindhoven University of Technology in 2005 and a MSc degree (cum laude) in Operations Management & Logistics at the same university in 2007. After finishing his studies, Rob started working at Maastricht University Medical Center. In 2010, he received a grant from Maastricht UMC for a six-year part-time PhD project on rethinking care processes. He conducted his PhD project within the group of Information Systems of the Department of Industrial Engineering and Innovation Sciences at Eindhoven University of Technology. The results of his PhD project are presented in this dissertation.