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## An Automated Business Process Management for Smart Medical Records

Authors: K. Malak, A. Nourah, S.Liyakathunisa

**Abstract:** Nowadays, healthcare services are facing many challenges since they are becoming more complex and more needed. Every detail of a patient's interactions with health care providers is maintained in Electronic Health Records (ECR) and Healthcare information systems (HIS). However, most of the existing systems are often focused on documenting what happens in manual health care process, rather than providing the highest quality patient care. Healthcare business processes and stakeholders can no longer rely on manual processes, to provide better patient care and efficient utilization of resources, Healthcare processes must be automated wherever it is possible. In this research, a detail survey and analysis is performed on the existing health care systems in Saudi Arabia, and an automated smart medical healthcare business process model is proposed. The business process management methods and rules are followed in discovering, collecting information, analysis, redesign, implementation and performance improvement analysis in terms of time and cost. From the simulation results, it is evident that our proposed smart medical records system can improve the quality of the service by reducing the time and cost and increasing efficiency

Keywords: business process management, electronic health records, efficiency, cost, time

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