Maternal Healthcare in Low-Resource Settings
Investigations of IT as a Resource

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Abstract

Maternal mortality is a major problem especially in developing countries. Maternal deaths are partly attributed to the limited access to healthcare and a shortage of medically trained health professionals who can provide maternal healthcare service. Approaches have been adopted to improve access and quality of healthcare. However, the approaches have been challenged by quality of care and limited infrastructure. The quality of healthcare can be improved through transforming healthcare, by managing and organizing care on a value-based system. Thereby, involving multiple actors who integrate resources to co-create value in order to benefit themselves and others. Information technology (IT) has been identified as a key driver of value co-creation in this transformation though, the way in which IT can drive value co-creation in healthcare has not been fully explored. The thesis aims to enhance our knowledge on how IT as a resource contributes to value-based maternal healthcare in low-resource settings. This thesis draws on service dominant logic framework and case study approach. The empirical foundation of the thesis comprises of four studies that are focused on the use and design of IT for maternal healthcare. Three studies were carried out in Uganda and one study was carried out in Sweden. Interviews, observations, focus group discussions and document reviews were used in data collection. Thematic analysis was used to analyze the data that was collected. The studies resulted into the appended five published papers.

The findings in this thesis shed light on the empirical understanding of the practices in maternal healthcare that include institutions and structures, and, the existing IT infrastructure that support actors to co-create value. In addition, empirical insights on opportunities in which IT can be designed and used to achieve value-based maternal healthcare are provided. Lastly, findings provide insights into value as perceived by actors at various levels when they use IT to engage in co-creation activities in maternal healthcare. In addition to the empirical insights, the thesis contributes theoretically to information systems research by enhancing knowledge on the role of IT in service innovation. Particularly, this thesis contributes by identifying three aspects in which IT triggers value co-creation. Aspects include recreating relationships among actors, transforming actor capacities and re-organizing tasks in maternal healthcare. Thus, the thesis identifies the importance of IT in resource integration that leads to value. In addition, the interplay of all the three aspects extends understanding on the dynamics and transformative perspective of the service ecosystem that is required to achieve value-based maternal healthcare. Practically, the thesis contributes to value-based maternal healthcare by identifying managerial implications in the structural and functional roles of IT that overcome opposing demands in the co-creation activities at various levels of healthcare. Another implication is the digital infrastructures that communicate value propositions and provide resource-rich service platforms for resource integration. Lastly, the thesis contributes to policy by suggesting implications on applying task-shifting strategy in low-resource settings and, technology use and designs that support professionals and non-professionals in the task-shifting strategy.