DIGITAL TRANSFORMATION AND A CASE STUDY FROM THE HEALTHCARE ${\bf INDUSTRY}$

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1. Introduction:

In recent years, digital transformation has become an increasingly important topic in the healthcare industry. The healthcare industry is undergoing a paradigm shift thanks to Industry 4.0, which provides better user comfort through proactive intervention in early detection and treatment of various diseases (Popov et. al. 2022). The use of digital technologies in the form of Data, Technology, Analytics and Automation has the potential to greatly improve the quality and efficiency of healthcare delivery. However, successfully implementing a digital transformation initiative can be challenging for healthcare organizations. In this paper we will discuss about the Reducing Maternal and Newborn Deaths (ReMiND) program and how its successful digital transformation designed to address deficiencies in an existing community health program for pregnant women and new mothers (Prinja et. al. 2018).

2. Need for Digital Transformation:

In 2006, the Indian government launched the Accredited Social Health Activists (ASHAs) program to reduce maternal and infant mortality in rural communities. As part of the program, female community health workers (called ASHAs) visit pregnant women and new mothers to provide services such as nutritional counselling or referrals to hospitals for childbirth. However, the ASHA program did not have the same impact in the state of Uttar Pradesh (which has historically high maternal and infant mortality rates) as in other parts of the country due to limited training, inadequate job aid for ASHAs, weak supervision, and a lack of role clarity (Catholic Relief Services 2016).

3. Digital Transformation process:

To resolve the above challenges Catholic Relief Services and its partners launched the ReMiND project in collaboration with Govt. in two rural blocks in Uttar Pradesh as pilot

project and then scaled up across the state (Allen, Perlman and Elsner 2019). As per report, ReMiND has two key components that strengthen community-level systems around maternal and new born health:

Technology for data capture and reporting

- The mHealth app provides a user-friendly interface for ASHAs and their supervisors.
- For ASHAs, the app serves as a digital job aid to counsel women and families about prenatal care, delivery, and postnatal care.
- For the supervisors, the app serves as a tool to monitor ASHAs' workloads and identify performance gaps so they can help ASHAs close those gaps.

Delivery model and analysis of performance

- Under ReMiND, large ASHA meetings (involving more than 100 ASHAs, supervisors, and local government officials) were broken down into smaller events involving 20 ASHAs and a supervisor.
- Custom reports generated by ReMiND are used to talk to ASHAs about their performance and to solve problems.

4. Conclusion:

The ReMiND project delivered positive benefit at multiple levels of the health system and demonstrated what supportive supervision can look like within the government system. Studies also show a 12.7 % increase in iron-folic acid consumption; a rise in identification and self-reporting of complications during pregnancy (12.5 %) and after delivery (15.5 %); and more blood pressure, ultrasound, and abdominal checks (Allen, Perlman and Elsner 2019). Overall, the program is projected to prevent 16918 maternal (16.4 %) and 119646 infant (5.2 %) deaths over a 10-year period across Uttar Pradesh.

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