

# CHAPTER - 16

## THE ROLE OF COMMUNITY HEALTH WORKERS (CHWs) ENGAGEMENT FOR IMPLEMENTATION OF DIGITAL SOLUTION IN PUBLIC HEALTHCARE DELIVERY SYSTEM

<sup>1</sup>Navneet Patkar

<sup>1</sup>Student, IIHMR University

<sup>2</sup>Dr. Vinod Kumar SV

<sup>2</sup>Professor, IIHMR University

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### INTRODUCTION

The advent of digital technologies has instigated a significant transformation in various sectors, and healthcare is no exception. In recent years, the incorporation of digital solutions into public healthcare delivery systems has emerged as a revolutionary approach, promising enhanced access, quality, and efficiency of healthcare services. An integral component for the successful implementation of this transformation is the involvement of Community Health Workers (CHWs), who play a crucial role in bridging the gap between healthcare providers and the communities they serve [1][2]. Community engagement plays a pivotal role in the effective rollout of digital solutions within public healthcare, promoting a sense of ownership and heightened adoption. The involvement of community members enhances the cultural appropriateness and relevance of digital

solutions, addressing specific needs and priorities community engagement facilitates the identification of community-specific requirements, ensuring that digital solutions align with the actual needs of the population.

However, despite its numerous advantages, community engagement presents challenges. Limited digital literacy and access to technology among community members can impede their participation in digital healthcare solutions [2]. Cultural and language barriers, as identified by Esquivel et al. (2016), pose hurdles to effective communication and comprehension of digital solutions. Overcoming power imbalances, ensuring inclusivity, and addressing community skepticism are vital challenges in achieving meaningful engagement [3].

To overcome these challenges, various effective strategies for community engagement have been identified. Active participation of community members in the design, development, and decision-making processes enhances engagement and instils a sense of ownership (Simmons et al., 2018). Co-creation and co-design approaches, advocated by Grimes et al. (2019), empower communities, enabling them to contribute their perspectives and needs. Building trust through transparent communication, cultural sensitivity, and ongoing support emerges as a key strategy in fostering community engagement [4].

## **RESEARCH QUESTION**

What were the successful strategies employed for involving Community Health Workers (CHWs) and communities in the integration of digital solutions within public healthcare delivery systems?

## **RESEARCH OBJECTIVES**

1. To assess the present extent of involvement of community health workers (CHWs) in the integration of digital solutions within the public healthcare delivery system.
2. To identify obstacles and challenges impeding the efficient engagement of community health workers (CHWs) in the incorporation of digital solutions in the public healthcare delivery system.
3. To explore the contribution of community health workers (CHWs) in fostering the effective implementation of digital solutions in public health.
4. To validate the data inputted by community-level health workers and enhance their proficiency in utilizing the community health integrated platform by gathering suggestions and proposing corrective modifications.

## **RESEARCH METHODOLOGY**

The research employed a cross-sectional study design to investigate the engagement of Accredited Social Health Activists (ASHAs) and Auxiliary Nurse Midwives (ANMs) in the implementation of digital solutions across 34 districts in the state of Rajasthan. The sampling technique involved telephonic interviews and surveys to collect data, utilizing a questionnaire as the primary data collection tool. The study focused on ASHAs and ANMs as the inclusion criteria, and the data collected were subsequently analyzed using Microsoft Excel. The research spanned a duration of three months, and a sample size of 400, comprising ASHAs and ANMs, was targeted for the study. This comprehensive approach aimed to gather insights into the perspectives and experiences of frontline health workers in the

context of digital solution implementation in the public healthcare delivery systems.

## **RESULTS AND DISCUSSION**

The first category, "Facility and Geography-Related Issues," represented 64.50% of the total issues, with 258 instances identified. The second category, "Health Worker Application-Related Issues," constituted 32.25% of the issues, with 129 instances recognized. The third category, "Beneficiary Details and Service Details Related Issues," comprised 3.25% of the total issues, with 13 instances identified. Further exploration into the sub-issues of the first category showed that "Geography and Facility Deletion Related Issues" constituted 56% of the total issues in this category. The second sub-issue, "Geography and Facility Migrated and Update Related Issues," represented 40% of the total issues, while the third sub-issue, "Created New Geography and Facility Related Issues," accounted for 5%. Similarly, the sub-issues of the second category, "Health Worker Application Related Issues," were examined. "Mobile Number Deletion Related Issues" comprised 58% of the total issues in this category, followed by "Registration and Login Related Issues" at 32%, and "Software Related Issues" at 11%. Examining the sub-issues of the third category, "Beneficiary Details and Service Details Related Issues," "Vaccination Update Related Issues" dominated, constituting 54% of the total issues. Meanwhile, "Population Update Related Issues" and "Survey Details Related Issues" represented 31% and 16%, respectively.

## **CONCLUSION**

The involvement of community health workers (CHWs) in the implementation of digital solutions in the public healthcare delivery system, particularly within the context of Khushi Baby,

plays a crucial role in improving healthcare outcomes. This discussion underscores the advantages of community engagement, outlines the challenges encountered, and presents effective strategies for involving CHWs and communities in the implementation of digital solutions. The literature review highlights the positive influence of community engagement on the adoption and utilization of digital solutions. It indicates that community involvement enhances the relevance and cultural appropriateness of these solutions, ensuring they cater to the specific needs and priorities of the population. However, challenges such as limited digital literacy, access to technology, cultural and linguistic barriers, and power dynamics must be addressed to achieve meaningful engagement.

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