

# Harnessing Technology in Healthcare Sector - SEWA Rural's Journey

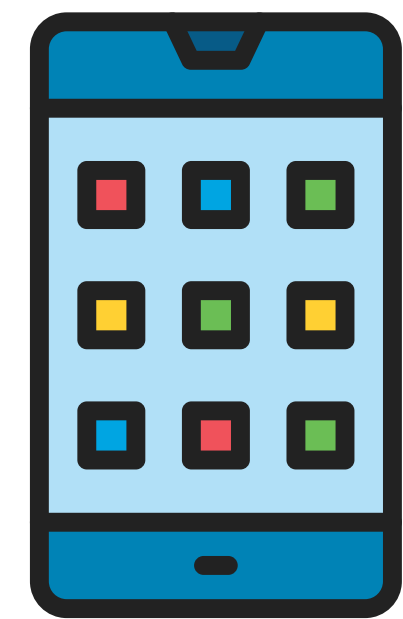


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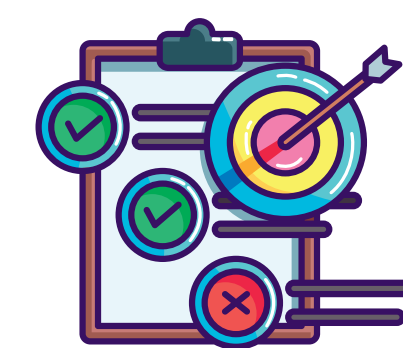
## BACKGROUND

The coverage of community-based maternal, neonatal, and child health (MNCH) services remains low, especially in hard-to-reach areas.



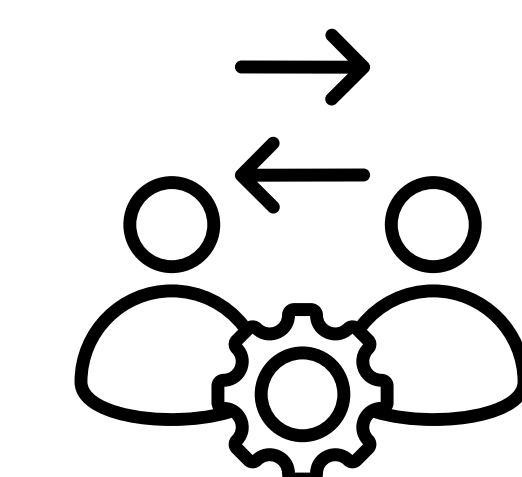
Evaluation of the effectiveness of a mobile phone and web-based application, **Innovative Mobile-phone Technology for Community Health Operations (ImTeCHO)**, as a job aid to the government's **Accredited Social Health Activists (ASHAs)** and **Primary Health Center (PHC) staff** to improve coverage of MNCH services in **rural & tribal communities of Gujarat, India**

## OBJECTIVE

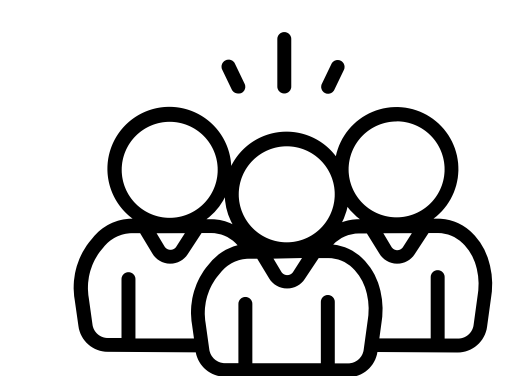


Reduce maternal and child deaths and malnutrition through mobile phone application for ASHAs and web application for PHC staff.

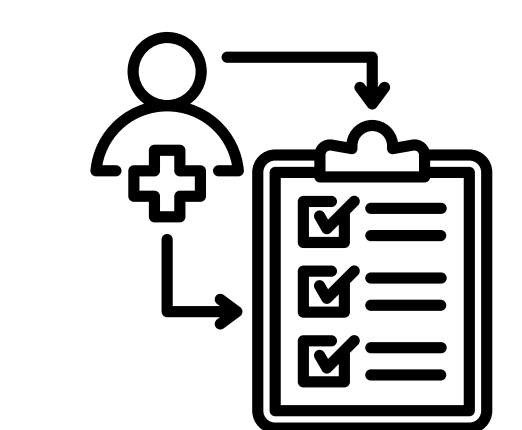
## METHODOLOGY



**Two-arm, stratified, cluster randomized trial of 36 months in 11 Primary Health Centers (PHCs) in each arm – intervention and control arm**



Participants of the study are pregnant women, mothers, infants, ASHAs, and PHC staff



Primary outcome measures are a composite index made of critical, proven MNCH services and the proportion of neonates who were visited by ASHAs at home within the first week of birth.

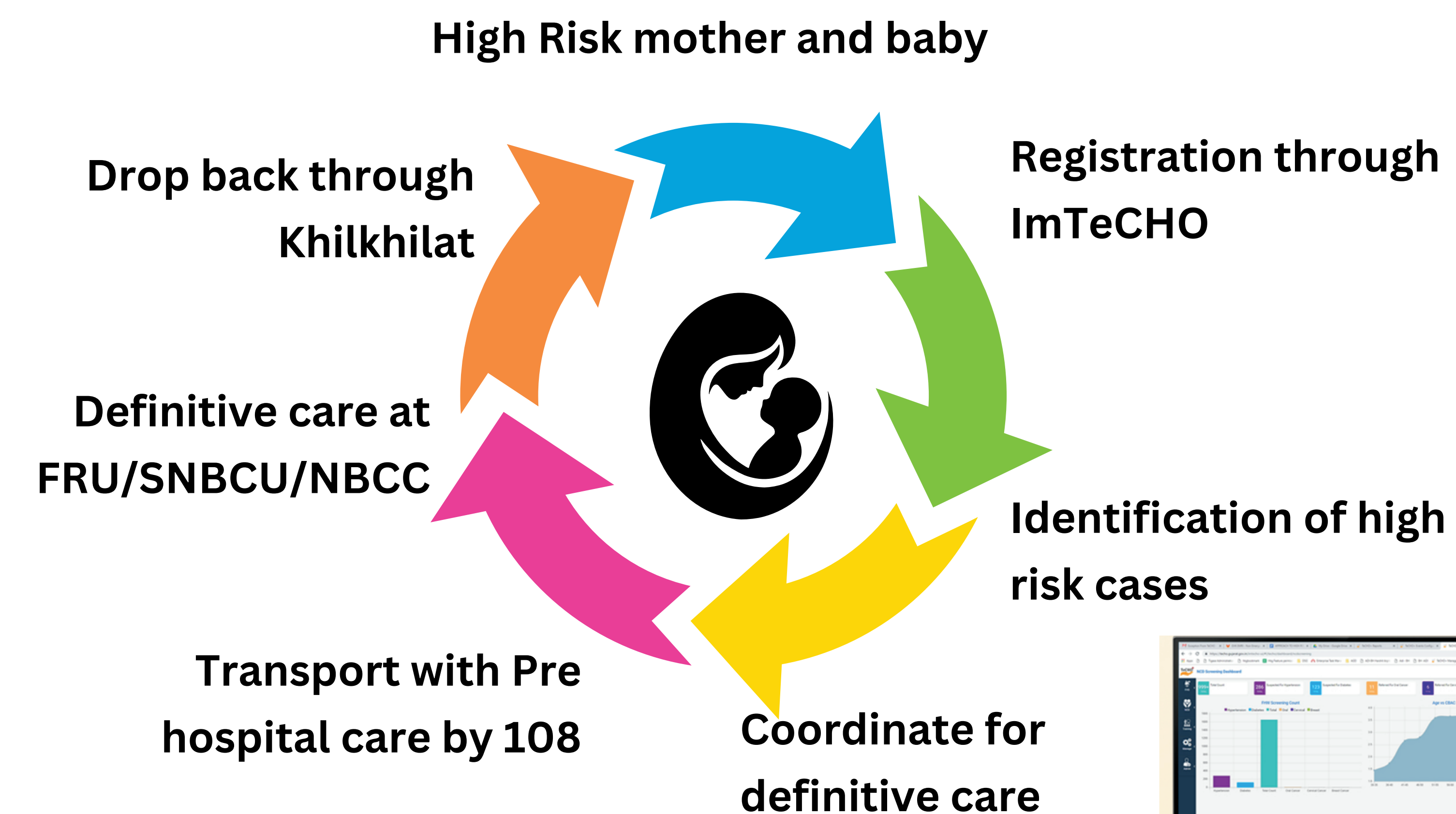
To evaluate the following -

1. Mobile application used as a job aid to ASHAs to increase coverage of MNCH services

2. Job aid to ASHAs and Auxiliary Nurse Midwives (ANMs) to increase coverage of care among complicated cases

3. Web application as a job aid for medical officers and PHC staff to improve supervision and support to theASHA program.

## COORDINATED CARE CYCLE THROUGH PUBLIC HEALTH SYSTEM



### Key areas of Intervention

1. Severe Anemia
2. Under Nutrition
3. Neonatal
4. Sepsis/ Pneumonia
5. Vaccination reminder verification
6. Referral linkages



## RESULTS AND FINDINGS

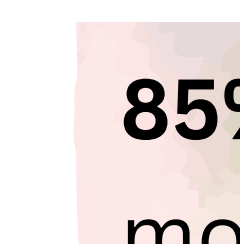
### Outcomes around MNCH services

- Improved coverage of at least two home visits within first week of birth - 32.4% in the intervention clusters compared to 22.9% in the control clusters.
- The composite coverage index was 43% in the intervention clusters compared to 38.5% in the control clusters, which resulted in - **61% increase in Home based newborn care, 52% increase in cases of exclusive breast feeding and 16% reduction in infant mortality rate.**

### Adherence to the ImTeCHO by the PHC staff



**24% of the days**, PHC medical officer logged in to the web application



**85% of the days**, ASHAs logged in to the mobile application.



**41% of the deliveries** reported by ASHAs on the day of delivery.



**34% of scheduled tasks** marked completed by the PHC medical officers and 78% by ASHAs

## REFLECTIONS AND LEARNINGS

- The coverage and quality of most of the MNCH health services improved in the intervention arm compared to the control arm.
- Communication strategies such as short video clips as job aids increased the effectiveness of the visits. Longitudinal digital tracking and scheduling improved the coverage of visits during ANC and PNC period.
- Improvement in the quality of home visits with regard to physical examination, early initiation of and exclusive breastfeeding, counselling from ASHAs for antenatal and neonatal complications, and use of ORS for diarrhea.
- The uptake of the ImTeCHO intervention was satisfactory among ASHAs as reflected in high login and task completion rate, whereas it was lower than expected among the PHC staff.

