

Strengthening Community Health Systems through mHealth: The ReMiND Project

Introduced by the government in 2006, Accredited Social Health Activists, or ASHAs, are community health workers who act as the key links between rural households and the health system. While this cadre has tremendous potential to improve health outcomes, its impact can be limited by low levels of literacy, weak interpersonal communication skills, and limited use of data. CRS' Reducing Maternal and Newborn Deaths

(ReMiND) project developed a mobile application for ASHAs and their supervisors, ASHA Sanginis. Its introduction to the ASHA cadre at the community level in select districts in the state of Uttar Pradesh (UP), India, has demonstrated how improved interpersonal communication and supportive supervision can strengthen community health systems and lead to improved coverage of key health services.

Beneficiary impacts

Increased beneficiary knowledge: After 2 years of ReMiND implementation there was an increase in knowledge of pregnancy danger signs (from an average of 1.60 to an average of 2.57), and delivery danger signs (from an average of 0.86 to an average of 1.22) with the greatest increase among women who were less educated (CRS 2014).

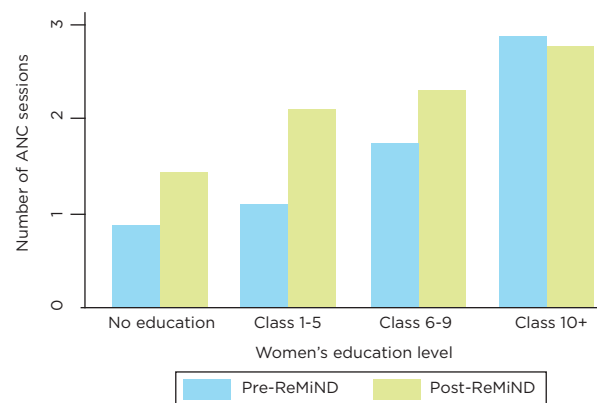
Increased care-seeking: Women were 12 percent more likely to receive the recommended three antenatal care visits at midterm compared to baseline (CRS 2014).

Increased coverage of positive health behaviors: The changes in critical health behaviors increased by significantly more in ReMiND areas than comparable non-ReMiND areas:

- Iron-folic acid (IFA) consumption (12.7 percent)
- Identification and self-reporting of complications during pregnancy (12.5 percent) and after delivery (15.5 percent) (Prinja et al. 2016a).

Reduced maternal and infant deaths: An external study found that projected over a decade, implementation of ReMiND across UP would result in the prevention of 16,918 maternal (16.4%) and 119,646 infant (5.2%) deaths (Prinja et al. 2016a).

Antenatal care sessions completed, by women's education level

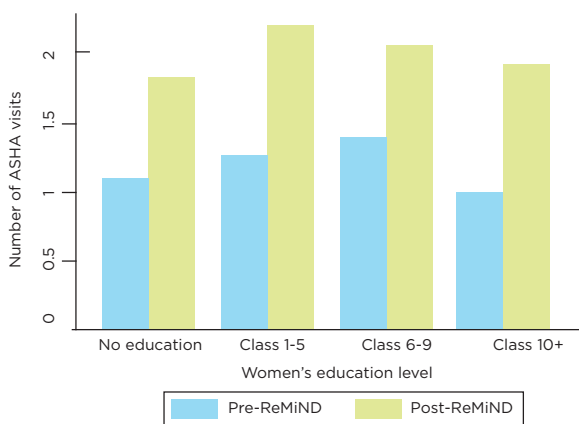


ASHA impacts

Wide adoption of the app: Baseline and midterm results showed that the app was widely adopted by ASHAs.

Increase in ASHA coverage: There was a 15 percent increase in the number of women who had received a visit from an ASHA during their pregnancy, during the first 2 years of the project. This was mostly among low-performing ASHAs, and across households of all education levels, as per below (CRS 2014).

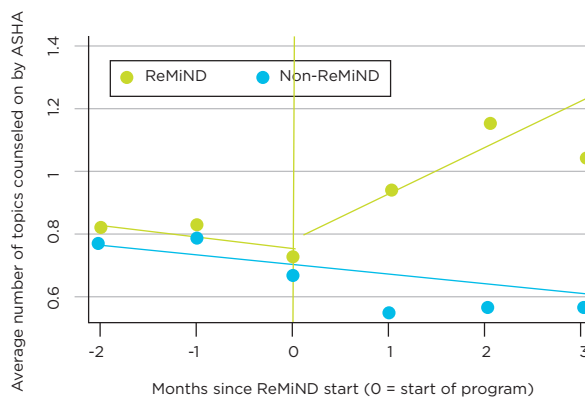
Number of ASHA visits, by women's education level



Low-performing ASHAs were helped most: The percentage of low-performing ASHAs decreased from 61 percent to 19 percent (CRS 2014).

Improved frequency and quality of ASHA counseling: After the app was introduced, women were 28 percent more likely to receive a counseling visit from ASHAs, on twice as many topics, and most of the increase was counseling on nutrition (37%). This coincides with increased use of the app. See below (CRS 2014).

Average number of topics ASHAs counseled on



Intervention entry point





Facility impacts

Increased quality of care: Women in the ReMiND catchment area received a greater average number of care components, including blood pressure checks (6.3 percent increase), ultrasound (8.6 percent increase), abdominal examinations (7.1 percent increase) and urine samples taken (9.3 percent increase) than in non-ReMiND comparison areas (Prinja et al. 2016a).

Finance and systems impacts



ReMiND is aligned with existing systems at the community level: ReMiND supports existing systems through improved interpersonal communication. This is supported both by the apps and the improved meeting platforms.

ReMiND is cost effective: An external study found that ReMiND is as cost effective as vitamin A and zinc fortification, measles immunization, case management of pneumonia, and oral rehydration therapy (Prinja et al. 2016a). Overall, ReMiND incurs an incremental cost of 6,078 Indian rupees (US\$96) per disability-adjusted life year (DALY) averted and 176,752 rupees (US\$2,792) for life saved.




ReMiND has manageable costs: Total project costs are projected to be 6 percent of the annual Reproductive and Child Health (RCH) budget – and the project is therefore financially sustainable (Prinja et al. 2016b).

“I feel good when people give compliments for my work and this gives me inspiration to continue my work.”

ASHA, Mooratganj (CRS 2014)

THE SANGINI APP

ASHA Sanginis make up the cadre of supervisors who support ASHAs. ASHA Sanginis began work in UP in early 2015. This app helped define what it is to be an effective Sangini: giving feedback to the ASHA, tracking the ASHA’s progress and accompanying the ASHA on field visits.

<p>Improved record keeping</p> 	<p>When Sanginis visited ASHAs regularly and talked with them about their performance, this encouraged ASHAs to keep better records. This has also helped ensure that the Village Health Index Register (VHIR) survey is up to date, and improves the tracking of ASHA incentive payments.</p>
<p>Peer networks improve performance</p> 	<p>ASHAs who named high performers as friends and family were also strong performers. Every such tie an ASHA named within the same sub-center was associated with her making an additional 35 visits per year, holding all other variables constant. This indicates that mentorship and strengthened peer networks improve performance (CRS 2014).</p>
<p>Value of multiple usage modes</p> 	<p>ASHAs had strong preferences for using the web-based or voice-based interfaces, but the majority used both. Overall they accessed the voice-based mode the most (De Renzi 2016).</p>

“The mobile also helps people with record keeping. When I visit ASHAs, and I see there is information missing from the ASHA diary, I ask them to open it right away and fill it in. There is now coverage of all pregnancies, and nearly all infants.”

Sangini Kaushambi

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