Two strategic investments enhanced the quality of immunization outreach services and enabled systematic evaluation of non-immunized children.

Optimal investment for outcome oriented immunization program

**Background:** Urban immunization program is heavily dependent on Vaccinators (ANMs) for conducting outreach immunization as well for improving coverage. The constant in and out migration in urban areas cause poor immunization coverage and vulnerable slum areas present unique challenges like small working space and crowding at outreach sites resulting in disorganized positioning of logistics, inefficient management of due children, longer waiting time and improper messaging. Vaccinators are not provided sufficient support to transport and carry logistics to the outreach sites which in few instances need a travel time of >60 mins resulting in unavailability of critical logistics to avoid heavy bags during transit, or out-of-pocket travel expenses using private vehicles, and lack of efforts in conducting field visits to track non-immunized children for improving FIC. Thus, to enhance the quality of outreach immunization and to establish monitoring mechanism in urban municipal corporation of Nashik and Aurangabad, UNICEF Maharashtra extended Urban RI strengthening support to Public Health Department, Government of Maharashtra, India. Two key interventions were provision of ergonomically designed Outreach Immunization Bags (OIB) and instituting WHO Coverage Monitoring Charts (CMC) at all levels.

**Results:**
Determination of non-immunized and partially-immunized children using the CMC and the ability to conduct outreach sessions in small spaces using OIB resulted in Immunization Coverage >90% and an annual increment of 5% in FIC and 5% in CIC at Aurangabad and 3% in FIC and 10% in CIC at Nashik with total investment of $6164.22 catering to more than 50000 children in the 0 to 1 age group and more than 53000 pregnant women.

1. New sites added with small working spaces using OIB for outreach immunization in vulnerable slums. Packing/Unpacking time of logistics and Waiting time of due children reduced as OIB has dedicated sections (vaccines, medicines, consumables, registers, IEC & BMW) offering dual purpose of RI Workstation and Logistic carrier.

2. Reduced man hours and travel costs on private transport for carrying RI Logistics to outreach site due to the ergonomic design of the OIB. Promoted community mobilization and recognition of Outreach Immunization session with OIB during transit.

3. Identification and coverage of 215 non-immunized and 562 partially-immunized children in Aurangabad and 60 non-immunized and 1686 partially-immunized children in Nashik using CMC.

**Conclusion:** One time investment of $18.5/OIB/vaccinator and $24/CMC/health unit resulted in an estimated return on investment of $52/child when fully immunized using the Value-of-a-statistical life approach adding up to $2.6 million along with effective branding, minimized handling and cross infections, reduced wastage and improved ease of outreach thus intensifying the coverage and sustainability of conducting outreach RI sessions.

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