



# Replication Study: Evaluating a Mobile Money-Linked Conditional Cash Transfer on Child Vaccination Completion in Pastoralist Communities of Afar Region, Ethiopia

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**Published:** 05 October 2002 | **Received:** 07 July 2002 | **Accepted:** 07 August 2002

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**DOI:** [10.5281/zenodo.18531370](https://doi.org/10.5281/zenodo.18531370)

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## Abstract

Conditional cash transfers linked to mobile money platforms are considered a potential strategy to improve healthcare access in hard-to-reach populations. An earlier study in a similar context found a significant positive effect on child vaccination completion. This replication study examines the generalisability of those findings within the nomadic pastoralist communities of the Afar Region, Ethiopia, where healthcare delivery faces distinct logistical and socio-cultural challenges. The purpose was to replicate the evaluation of a mobile money-linked conditional cash transfer intervention on child vaccination completion rates. The objective was to determine if the positive effects observed in the original study could be reproduced in the Afar pastoralist context, testing the intervention's transferability. This was a quasi-experimental replication study using a mixed-methods approach. A cohort of caregiver-child pairs from intervention and comparison pastoralist communities was followed. Quantitative data on vaccination status were collected via child health cards and caregiver recall. Qualitative data from focus group discussions explored barriers and facilitators. The intervention provided mobile money transfers conditional upon verification of scheduled vaccination attendance. The replication did not reproduce the original study's strong positive effect. Quantitative analysis showed a non-significant increase in full vaccination completion in the intervention group. Qualitative findings highlighted persistent logistical barriers, including mobile network coverage for money access and the mobility of pastoralist groups, as key constraints limiting effectiveness. The mobile money-linked conditional cash transfer did not significantly improve child vaccination completion in this pastoralist setting. This suggests the original intervention model may not be directly transferable without substantial adaptation to the specific infrastructural and livelihood realities of nomadic populations. Future mobile health finance interventions in pastoralist areas must be co-designed with communities to address mobility and connectivity challenges. Integration with existing mobile health outreach strategies and flexibility in verification procedures are recommended. replication study, conditional cash transfer, mobile money, vaccination,

pastoralist, Ethiopia, child health This study provides critical evidence on the contextual limitations of a mobile health finance intervention, highlighting that strategies effective in other settings may require significant modification for nomadic pastoralist communities.

**Keywords:** *Conditional cash transfers, Mobile money, Child vaccination, Pastoralist communities, Sub-Saharan Africa, Replication study, Ethiopia*

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