Today, Logistimo impacts the lives of 674M people in 5 countries across Africa and Asia.

Digitally enabling vaccine supply chains and assessing stability and performance

What was the situation?

- Immunization coverage of just 63.2% for a birth cohort of 5.37M in the North Indian state of Uttar Pradesh
- 77.7% of the population of the state residing in rural areas
- Immunization coverage in Bareilly and Shahjahanpur districts below the state average
- Vaccine replenishment is ad hoc; health workers and supervisors have neither formal title nor technical aptitude
- Vaccine inventory is tracked via non-standard registers
- Movement of vaccines from state to district to cold chain points that host the immunization sessions is disjointed
- There is a need to gain real-time visibility into inventory in the system so as to improve vaccine availability
- A digital LMIS that works seamlessly across devices, operating systems, transmission channels, and connectivity scenarios is key
- In addition to a digital intervention, it is essential that the data collection process is standardized and human capacity is strengthened

What was the action taken?

- Logistimo is a technology platform with simple mobile and web applications that simplify data collection across the supply chain, especially at the last mile, and deliver actionable analytic insights to users at every level in the supply chain
- Health workers were given standardized paper forms, SOPs for future reference, and a basic feature phone to access the Logistimo application
- In 1 day, users were trained on using the application and equipped to enter transactions within 48 hours of immunization sessions
- The pilot ran for 19 months after which an analysis was conducted to understand time taken for the supply chain performance to stabilize

What were the results achieved?

- Implementing the LMIS, alongside people and process interventions, resulted in strong user adoption of the digital information system, low error rates, and enhanced availability of vaccines
- The data suggest a sequential pattern of efficient technology adoption in month 1, followed by stable data quality in month 3 and stable supply chain performance in month 13
- Zero-stock events and replenishment time declined dramatically, suggesting sufficient proactive behavior by users

Purpose: Assess the effectiveness of pilot interventions in assuring vaccine availability at all cold chain points

<table>
<thead>
<tr>
<th>Process + Product + People = Reliable vaccine availability</th>
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<tbody>
<tr>
<td>Inventory Management</td>
</tr>
<tr>
<td>Multidimensional Analytics and Dashboards</td>
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<td>7.45M population served</td>
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All adoption metrics consistently ranged around the 80% mark across the 18 month pilot

Data entry error rates reduced to less than 0.25% and stabilized 3 months into the pilot

Stock availability in cold chain points improved across the board to >98% in 13 months

~200M doses of vaccines | 95% rural transactions
Real-time monitoring of 7,000 cold chain equipment
>99% reporting rate | >95% stock availability | 2.5 TB data