Integrating Drones into the Health Supply Chain in DR Congo

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DRC Strategy: Next Generation Supply Chains

- NexGen Supply Chain initiative – direct delivery of health products to the last mile
- Aims to increase equitable access to vaccines and life saving commodities
- Equateur, a province 4x larger than Rwanda with many remote populations
- Difficult, expensive and time-consuming for health workers to collect health products resulting in frequent stockouts
Solution: Integration of Drones into NexGen Supply Chain

1. Phase 1 completed in 2019

2. Two-way transport of immunization products + essential medicines, supplies, lab samples, reports

3. Safety and feasibility of delivery by drones between provincial warehouse and remote health centers

~ 40 km
3 hrs by road, but 20 min by drone
## Phase 1 Results

<table>
<thead>
<tr>
<th><strong>50 flights in 5 days</strong></th>
<th><strong>5 RURAL AREAS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>25 round-trips</td>
<td>supplied with health products</td>
</tr>
<tr>
<td><strong>2,000 km</strong></td>
<td><strong>25 kg</strong></td>
</tr>
<tr>
<td>2 drones</td>
<td>products distributed</td>
</tr>
<tr>
<td><strong>470 CHILDREN</strong></td>
<td><strong>0 CONCERNS</strong></td>
</tr>
<tr>
<td>IMMUNIZED</td>
<td>regarding safety &amp; quality</td>
</tr>
<tr>
<td>with drone delivered vaccines</td>
<td><strong>QUICK ADOPTION</strong></td>
</tr>
<tr>
<td></td>
<td>by local EPI &amp; health staff</td>
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#ADF2020

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Multi-pronged Strategy

Governance
- National + provincial drones committees formed, active

Aviation & Health Regulations
- Approvals + standard procedures

Technology
- Global request for proposal to select drone company

Acceptability
- ~100 stakeholders surveyed, 10,000+ reached through sensitizations

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Lessons Learned

- Active involvement of local health, aviation professionals and communities = quick adoption
- Phased roll-out approach for iterative learning
- Need data on performance, costs to inform full scale up
- Two-way transport and integrated product deliveries for improving effectiveness and cost-efficiency
- Multi-sectoral collaboration
- Public-private partnerships

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Phase 2: March 2020 – September 2021

- 25 remote health areas (up to 100 health centers served) across Equateur province
- Min 12 months of routine + emergency delivery
- Vaccines + select medicines, lab samples, reports
- Skills transfer to local workforce to operate service
- Impact evaluation on supply chain performance and cost-effectiveness
- Public-Private Partnership for sustainability and scale up (Phase 3 starts Q4 2021)