Market entry challenges and strategies for emerging private sector innovations in public health systems: A case study from the Drones for Health Program in the Democratic Republic of Congo (DRC).

Private Sector in Health Systems Satellite Session
HSG Pre-Conference Symposium 2022
Session Theme: Frontier Health Markets in low- and middle-income countries

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Governments need to utilize all available resources, including private sector services, to increase health system resiliency. Yet many emerging private sector innovators who could foster innovation in the public health sector face enormous market-entry challenges. VillageReach has partnered with governments and private sector firms to overcome these barriers to improve equity and access to care. In this presentation, we will present a case study on how VillageReach is working with the government of DRC to introduce an innovative private sector service into the public health system and develop a market development strategy to make services more affordable for the public sector.

Drone logistics services have been identified as a private sector innovation with the potential to increase supply chain and health system resiliency and reduce inequalities. In 2015, VillageReach and our government partners began exploring the potential of drone logistics by partnering with early-entry start-ups to test the feasibility of this technology in Africa. Even after the technologies’ safety and reliability sufficiently matured, a major question remained: to what degree can drone transport improve the availability of health commodities and health outcomes?

In 2019, the DRC Ministry of Health and VillageReach partnered to conduct the world’s first supply chain performance and cost-effectiveness evaluation of bi-directional drone transportation through the Drones for Health initiative. We and others in the field have worked towards answering the aforementioned question and results indicate that drones can significantly improve supply chain performance. While data on supply chain benefits is positive, the cost of drone services are perceived as too high for resource-limited health systems. Now, the pressing question we need to answer is: how can the cost of drone transportation be optimized to ensure affordability?

One of the key drivers behind current cost levels is the narrow market focus. Swoop Aero, a for-profit commercial firm, was relying on a single-payer in the public health system to fund their market entry and 100% of their fixed costs. Given the financial constraints of the public health sector, but the clear benefits of drone logistics, we are now partnering with Swoop Aero to test the power of the following market development levers to unlock lower-cost services:

- Grow the health sector and secure new clients from other sectors and markets to utilize the drone logistics network to spread fixed costs amongst multiple clients
- Develop variability pricing strategies for non-price sensitive customer segments in the health market to subsidize lower-priced services for the public health system
• Secure advanced market contracts with a pool of customers to fund the deployment of services in new markets with higher profit-generating opportunities to subsidize services in areas with low commercialization

We will present the existing costs from our cost-effectiveness evaluation and the projected costs with the contributions of specific levers (volume, service definition, etc.) to reduce costs for the public health sector. We will also present our partnership approach with the government, a technical partner like VillageReach and private sector firms for market development.