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Project VITAL: Telehealth Innovation for Healthcare Equity in Africa

Globally, an estimated 148.4 million people require humanitarian aid due to conflict and climate-related disasters, with approximately 89.3 million displaced individuals lacking access to essential healthcare services^{1,2}. Heightened attacks on healthcare facilities and workers exacerbate these challenges, particularly in Africa, where a severe shortage of health workers is anticipated to reach 6.1 million by 2030^{3,4}. In 2015, the region faced significant deficits, with only 1.30 health workers per 1000 people compared to the 4.5 needed to meet UN Sustainable Development Goals (SDGs)^{5,6}. Conflict-ridden areas like Cameroon/Sahel, home to over 30 million people in need of humanitarian assistance and mental health support, grapple with the highest maternal mortality

rates globally amidst climate change impacts and security concerns ⁷. West and Central African regions have the highest maternal mortality rates globally while suffering from the effects of climate change, including extreme heat, droughts, degradation of agriculture, and security challenges ^{8,9}. Overall, this leads to displaced populations with poor and worsening access to healthcare.

In response, Project VITAL pledges to establish a sustainable, culturally sensitive telehealth program for the Cameroon/Sahel region, anchored in the 3S pillars model: sustainability, safety, and security. Sustainability involves forming a steering committee, conducting needs assessments, and empowering local programmers and healthcare providers with technology-focused training and resources. Collaborations with local entities like iDocta, Pasteur Institute of Bangui, and Reach Out Cameroon aim to ensure contextual understanding and long-term viability, supported by a revenue model and governmental compliance. Safety will prioritize safe, quality care, Project VITAL will implement robust review systems aligned with best practices and WHO guidelines. Security means partnering with technology experts, the initiative will ensure secure platforms and devices, adhering to cybersecurity protocols and local regulations.

In a closely coordinated effort, Health Tech Without Borders, iDocta, and VSee established a steering committee in the fourth quarter of 2023. Early in 2024, iDocta and the team in Yaoundé, Cameroon, successfully conducted a targeted pilot program using the VSee telehealth platform. Insights gleaned from this pilot are now being meticulously applied to refine and tailor the VSee platform, customizing it to meet the specific needs of local clinicians and patients (Figure 1). Additionally, the Project VITAL team is expanding its workforce, hiring new staff, including clinicians and technical experts, to support project growth and implementation. Strategic outreach efforts have been outlined, engaging key community stakeholders to expand the platform's capabilities, encompassing telehealth, home health visits, laboratory scheduling, prescription refills, and pharmacy requests. Project VITAL is currently on schedule to commence a larger pilot later this year. Presently, the team consists of 4 innovators, including 6 full-time staff (2 female), 1 temporary employee, 3 doctors, 5 developers (1 female), 2 pharmacists, 1 lab technician, and an estimated 50-100 nurses. Additionally, 10 patients are currently participating in the trial phase.

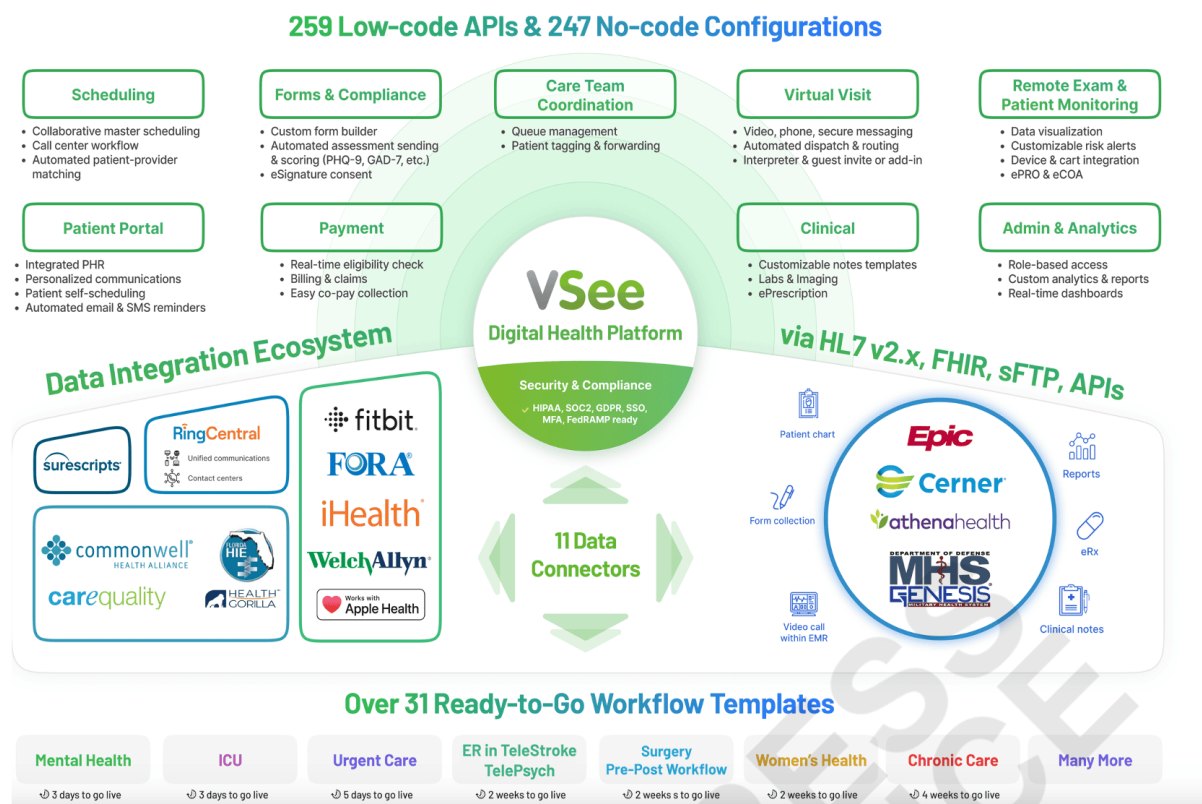
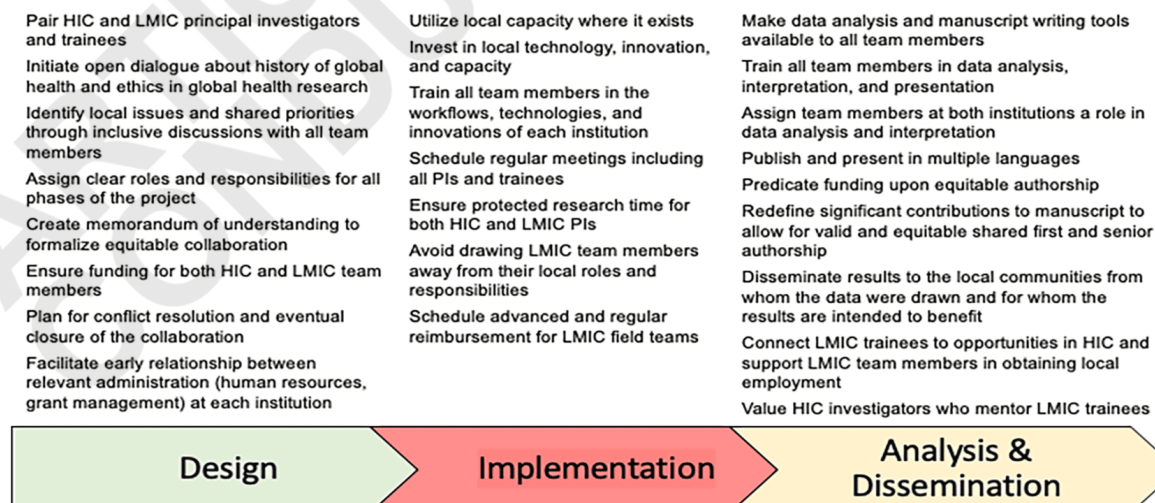


Figure 1 VSee Platform Customization

After a pilot in Yaoundé, expansion to remote North/Northwest regions will follow, addressing legal, financial, technological, and cultural barriers. Telehealth emerges as a promising solution, offering specialist access, peer consultations, education, triage, and epidemic monitoring, aligning with WHO's vision of equitable, efficient healthcare.

With a focus on sustainable partnerships and adherence to equity principles like the Douala Equity Checklist, Project VITAL aims to advance healthcare access, bolster health systems, foster innovation, and empower communities in line with UN SDGs and African Union 2063 Agenda (Figure 2).

Recommendations for advancing equity in global health during each phase of research.



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Figure 2 Project VITAL Expansion and Goals

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