HealthPulse AI uses machine learning and computer vision to improve the accuracy of rapid diagnostic test results while automatically digitizing data for surveillance, program reporting, and test validation.

HealthPulse AI provides image quality assurance and interpretation of rapid test results captured on any smartphone or tablet - even when offline. HealthPulse AI capabilities can be seamlessly integrated into any health worker, telehealth, or incentive management platform for accurate, high-quality rapid test results. Additional services include customizable apps and chatbots, digitized instructions for use, public health reporting, and quality control functionality such as fraud and non-adherence flagging.

**AI results for any RDT**

Designed to work with any RDT, for any condition. Requires only an image captured on any commodity smartphone. No new hardware or paper cards required.

**Accurate, cost-effective insights**

Designed for AI accuracy exceeding 95% with the robustness required for self and community testing programs, for less than $.03 per image.

**Flexible integration options**

Seamless integration using standards based APIs for online and offline use (web service, mobile SDK) to augment existing solutions such as apps, telehealth tools, and chatbots.

**Real-time surveillance at scale**

AI powered insights and program data in real-time to strengthen pandemic preparedness and response in communities and at scale.
Use cases enabled by HealthPulse AI

**Strengthen surveillance systems for disease elimination**

CHWs capture RDT results via a simple web portal, WhatsApp chatbot, or RDT reader app. Test results and AI interpretation insights are available in real-time to understand test positivity rate (TPR), disease patterns, and resource usage/allocation strategies. HealthPulse AI augments real-time disease surveillance and pandemic preparedness response for any health condition identified via an RDT.

**Power virtual care models**

Untrained self-testers or CHWs access usability-tested digital use instructions for HIV or COVID tests through any app or WhatsApp chatbot. Users capture an AI-verified image of the test. In real-time, telehealth clinicians receive a clinical decision support package consisting of a high-quality image of the RDT, augmented images, and AI test result interpretation. HealthPulse AI expands accessibility of testing and enables linkage to skilled virtual providers armed with powerful tools for confident decision making.

**Automate private sector incentive programs**

Pharmacists, in their point-of-sales systems, receive quick test administration reminders and capture AI-verified images of malaria, HIV, or COVID tests. AI result interpretations and fraud flags enable automated incentive payments while alerting program auditors of test anomalies. Through automation, HealthPulse AI enables private sector providers to scale cost-effectively and allows them to focus on test anomalies where human eyes are most crucial.

**Train public health workers & provide testing support**

Community health workers and clinicians access usability tested digital use instructions and AI-verified image capture capabilities from any app or RDT reader — even when offline. Supervisors and program administrators receive real-time test results with AI result interpretation insights to help monitor health worker testing performance. HealthPulse AI seamlessly plugs into public health workflows, enabling any digital solution that has a dependence on high-quality test results to be a powerful RDT reader.
Audere is a global digital health nonprofit developing AI based solutions to address important problems in health delivery by providing innovative, scalable, interconnected tools to advance health equity in underserved communities worldwide.

We operate at the unique intersection of global health and high tech, creating advanced, accessible software that revolutionizes the detection, prevention, and treatment of diseases — such as malaria, COVID-19, and HIV. Our diverse team of passionate, innovative minds combines human-centered design, smartphone technology, artificial intelligence (AI), open standards, and the best of cloud-based services to empower innovators globally to deliver healthcare in new ways in low-and-middle income settings.

PROVEN VALUE

Audere partners with local innovators, implementers, and global health funders to develop cutting edge solutions for use by healthcare workers, patients, and decision makers. Our solutions strengthen surveillance systems, power virtual care models, automate private sector incentive programs, and support public sector testing programs.

EXAMPLES OF OUR INNOVATIVE PROGRAMS:

- Development of a multi-country malaria surveillance system, generating AI insights for the most widely used RDTs to provide insight into TPR and to inform intervention strategies.
- Pilot of a COVID-19 self-test WhatsApp chatbot, integrated with public health reporting systems in Africa and South America.
- Pilot of the first virtual healthcare solution to increase access to HIV prevention medication via at-home self-testing in Kenya.
- Pilot of health worker apps for malaria detection and treatment with PSI in Kenya, THINKMD in Nigeria, and deployment of AI services for malaria and HIV incentive program automation with Maisha Meds.
- Demonstrated efficacy of COVID-19 self-swab nasal specimen collection for individuals as young as 5 years old and developed an at-home specimen collection kit with FDA EUA, enabling kit distribution via pre-placement in-homes, self-service vending machines, and high-volume pharmacies.

*Development of our projects is funded by grants and support from the Bill & Melinda Gates Foundation, FIND, and other global health partners.*

Interested in learning more? Contact us:

Dino Rech, CEO
dino@auderenow.org

Paul Isabelli, COO
paul@auderenow.org

Sarah Morris, CPO
sarah@auderenow.org

©2023 Audere