Using EdTech to address the health workforce shortage in Africa

Kate Tulenko
CEO, Appleseed Education & Corvus Health
Africa’s Youth Will Make or Break the Continent

• Almost 60% of Africa’s population is under the age of 25
• More than one in four young people in Africa – around 72 million – are not in employment, education or training (NEET)
• Africa needs to absorb 122 million young people into the job market in the next 10 years
• At the same time, most HICs are aging with below replacement rate fertility & need millions of skilled workers
• Due to the global economic crisis, many African countries are reducing support to higher education
Africa & HICs Need Millions of New Health Workers

• Nurse vacancy rates vary from **30 to 55%** in Africa

• The UK NHS currently has 105,000 health worker vacancies across all professions • The US has 1 million unfilled nursing vacancies, resulting in increased wages, unionization, & strikes • Germany has 12% vacancy rates in ICUs and 6% vacancies in other units..

• WHO estimates an 18 million global health worker shortage by 2030

❖ Understaffing is decreasing health sector coverage, profits, & growth, & increasing legal liability.

African Schools are Unable to Meet the Demand

• African schools turn away 10s of thousands of qualified students every year, foregoing millions of dollars of revenue.

• Most African nursing schools are small & owner-operated

• They have little or no access to Online learning, Education software, professional management, Capital for expansion, School Management Software, Student Information Systems

• Faculty shortages severely limit the number & types of programs

• Schools have dropout rates of 60% or higher, resulting in lost revenue
Appleseed Education

Appleseed is an EdTech platform that solves national and regional, and global nursing shortage by supporting nursing schools in Africa to improve their quality, efficiency, & profitability, scale existing programs, & add new programs.

Providing support, digitization & Business Process Outsourcing (BPO) to African nursing schools to improve nurse:

• Number
• Quality
• Mobility
Scaled Services to Improve & Expand all Schools

1) **Platform Services:** Annual School Assessment & Goal Planning, Group Procurement, Online Learning, improved access to school Financing & Student Loans, staff training across all school operational functions

2) **Centralized Services:** Fee for service advisory services to meet the needs of clients that go beyond what can be provided on the online platform.

3) **Graduate Recruitment:** Appleseed leverages its relationships with both schools and employers to efficiently recruit our partner schools’ graduates locally & internationally.
Transforming African Refugees from Rejected to Recruited

- Africa has 30 million refugees & IDPs (30% of the world’s refugees)
- According to UNHCR, refugees typically stay between 10 and 15 years in refugee camps.
- 125,000 people cross from Africa to Europe via the Mediterranean/year
- >70% of refugees have mobile phones and more than 90% have access to 2G or 3G networks
- Appleseed is working to enable many of the 5,000 health professional schools in Africa to offer online learning so refugees can complete globally recognized non-clinical degrees such as health IT, billing & coding, pharm tech, social work, hospital engineering tech, etc. completely online.
- Refugee students enrolled in clinical degree programs can get their clinical experience in clinics & hospitals located in or near their camp.
- Once they have completed their degree, Appleseed can match the refugees with HIC jobs.
Remotely empowering care givers in India, Bangladesh and Indonesia

Anubhav Arora
Co-Executive Director, Noora Health
Estimated shortage of healthcare staff to serve over 1.3 billion people in India.

Average time that public healthcare providers are able to spend with a patient and their family.
We believe in the powerful role families can play in healthcare

1. Identify priority family care practices & Develop engaging materials

2. Support effective training delivery

3. Support continued care through tech

TOTAL REACH TO DATE:
660 hospitals and 5000+ clinics
Phone-based Health Messaging Service

**Enrollment & Routing**

Users either call to subscribe or are enrolled through the government portal (e.g., Reproductive & Child Health portal).

**Voice Call Service**

Customized voice calls are received on a pre-determined schedule.

**WhatsApp Service**

Customized WA messages are received on a pre-determined schedule.

**Live chat & call Support**

Users can ask specific questions on WA or live call.

Simplified service for representation
Health Educator Platform (HEP)

HMW continue to engage & support frontline trainers?

- **A/B testing**: Simple app or WA-based platform
- **Streamlined data collection**: Under 30 sec form submission
- **Summarized analytics**: Trainers are able to see personalized metrics on impact/performance
- **Knowledge bank**: Access to digital tools and learning material
Next on Roadmap for RES & HEP

**Improve Engagement**
- A/B testing messages
- Integrate LMS in HEP

**Build Scalability**
- Smarter routing, triaging, and responding

**Focus Higher Risk**
- Higher dosing of specific messages
- Live training on the phone

**Strengthen Data & Governance**
- Experimental dashboards
- Open source enterprise architecture
Data-based solutions to inform frontline health workers

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CommCare Connect

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**Vision**
A world where all people have access to the services they need to thrive

**Mission**
To build and scale sustainable, high-impact digital solutions that amplify frontline work

Dimagi is a global social enterprise that powers impactful frontline work through scalable digital solutions and services.

Dimagi is most well-known as the makers of CommCare, the most widely-deployed digital platform for enabling Frontline Workers. Governments and organizations across all sectors use customized mobile, web and SMS applications built on CommCare to deliver services at the frontline.

Dimagi is a certified Benefit Corporation with teams in the United States, India, South Africa, Senegal and around the world.
Youth Empowerment Opportunities: Frontline Workers for additional impact

Dimagi is already reaching over 150,000 Frontline Workers who create significant impact in their day-to-day jobs.

Youth can and are empowered to work as Frontline Workers in many LMICS.

Frontline Workers require digitally supported capabilities to deliver more services and unlock additional impact.

- Youth can serve low-resource areas in urban and periurban areas supporting health services
- Literacy pre-requisites can be waived for community self-help development programs (health, agriculture sectors)
- Performance-based incentives can support upward movement for youth volunteers (FLWs)
- Age, gender and education levels have been shown to have no effect on FLW’s ability to classify Pneumonia and provide treatment accordingly*
Learn
Users select and receive training through a digital training platform.

Deliver
Users deliver additional services via their active jobs, leveraging CommCare.

Verify
Service delivery is verified - leveraging biometrics, GPS, and data algorithms.

Pay
Users can see what pay they are owed, and be paid digitally or manually.
Learn

Integrated Learning Experience
Users can learn directly in Connect through the digital learning platform.

Demonstrate Competence
Users must pass tests to demonstrate competence. Additional in-person or remote human testing can be included.

Get Certified
If they pass the test, users will receive certification to perform the job.
Advancing Partners and Communities project, FHI360, Senegal

Youth civic volunteers in SN received training via CommCare to deliver SRH content

Mobile Platform for Franchisor project, UNCDF, Senegal

Since 2018, Dimagi has been implementing a project with UNCDF Senegal, Orange (Telco operator), Orange Money franchisees and BASIF micro-franchisor to design, test, and manage a micro franchisor network to help young entrepreneurs seize economic opportunities in the digital financial services ecosystem.

COMMERCARE

- Case management features
- Job Aids & targeted follow-up workflows for youth
- Linkages to Employers
- Predictive analytics to target youths at high risk for drop out
Thank You

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Matching migrant workers with health jobs in UAE

Samuel Joy Cherian
Founder and CEO, Huntr
COMPANIES

SERVICE PROVIDERS: I.E GOVT, TRAINING ORGANIZATIONS, NON-PROFITS

CANDIDATES
Thank you