## 2023 INNOVATION EXCHANGE & PARTNER SUMMIT

From Algorithms to Opportunities: Harnessing Innovation for Youth Employment

November 7-8, 2023









SESSION: Win-Win? New opportunities for youth in digital health

## 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

- For every additional patient a ward nurse has, the mortality rate of all the patients increases by 7%
- 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 & owneroperated
- 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.





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### Remotely empowering care givers in India, Bangladesh and Indonesia

Anubhav Arora Co-Executive Director, Noora Health



## **Solutions for Youth Employment**

Innovation for Impact: Opportunities in Healthcare

November 8, 2023



Estimated shortage of healthcare staff to serve over 1.3 billion people in India.

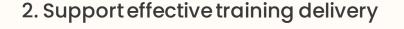


Average time that public healthcare providers are able to spend with a patient and their family.



## We believe in the powerful role families can play in healthcare

Identify priority family care practices
 Develop engaging materials



3. Support continued care through tech

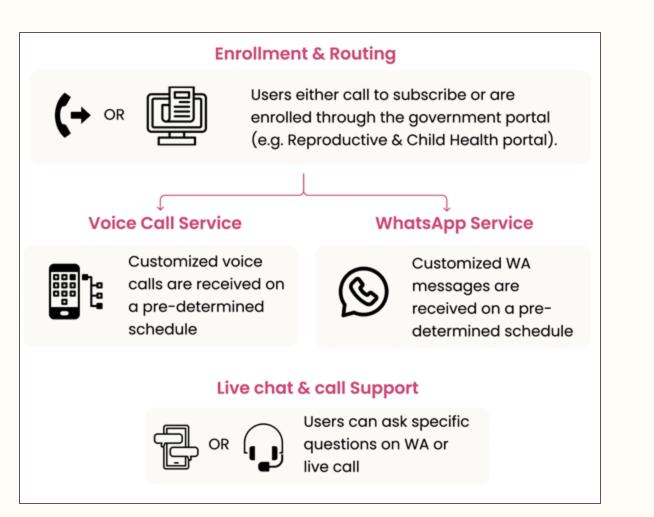






#### TOTAL REACH TO DATE: 660 hospitals and 5000+ clinics

## Phone-based Health Messaging Service



22:53 Patient Care Companion 2.53 (a) Patient Care Companion Today's message for your family art Small babies throw up milk (regurpitate ) quit. \$53 pm J/ Hi it's been a month after my delivery. Can you guide me to eat proper diet. Hil thank for asking your question. There must be no restrictions in the food for the mother. A lactating mother requires a nutritious and complete diet after the delivery. This will help in wound healing for the mother, help increase the breast milk, and help in the baby's growth. She should have locally available fruits and vegetables. Her food should include grains like rice and wheat, green leafy vegetables (spinach), drumstick leaves, pulses (dal), rajma, groundnuts, jaggery, dates, paneer, milk and if non - vegetarian, she can eat eggs, meat or fish. 30 1 She must also drink 8-10 glasses of water everyday. 💧 Use iodized salt in the food 💪 She should take 1 tablet of Iron and Calcium daily for 6 months 💪 9.54 per



MCH

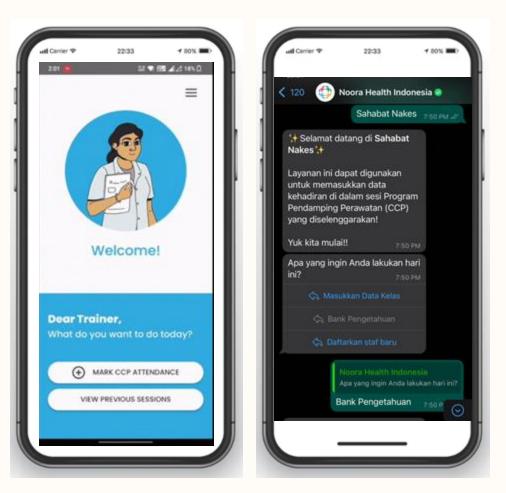
NCD

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

noorahealth.org





SESSION: Win-Win? New opportunities for youth in digital health

### Data-based solutions to inform frontline health workers

Mercy Simiyu Director of Frontline Programs, Dimagi

# dimagi

## CommCare Connect

Mercy Simiyu Director, Frontline Programs – CommCare Connect

msimiyu@dimagi.com



# dimagi

#### 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.

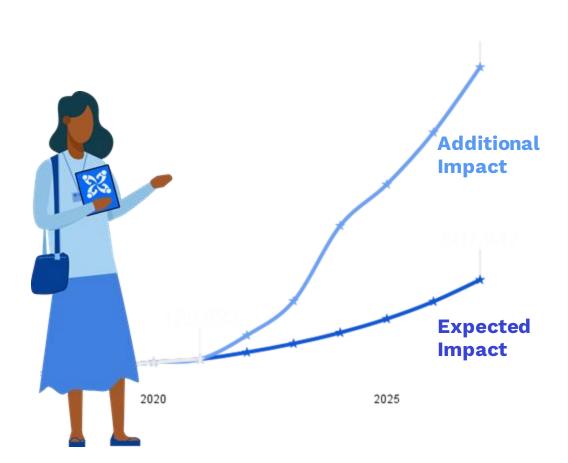
#### Youth Empowerment Opportunities: Frontline Workers for additional impact

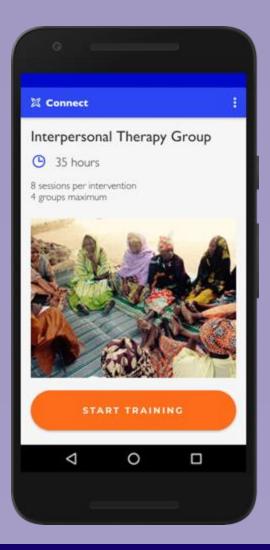
Dimagi is already reaching over **150,000** Frontline Workers who create significant impact in their day-today jobs.

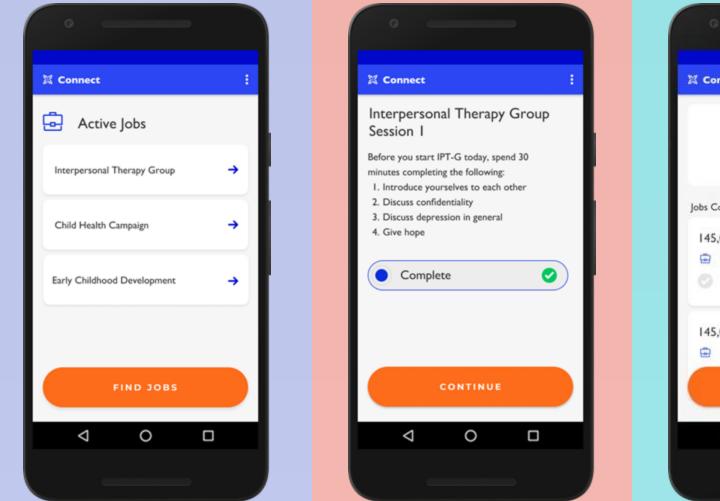
Youth can and are empowered to work as Frontline Workers in many LMICS.

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.

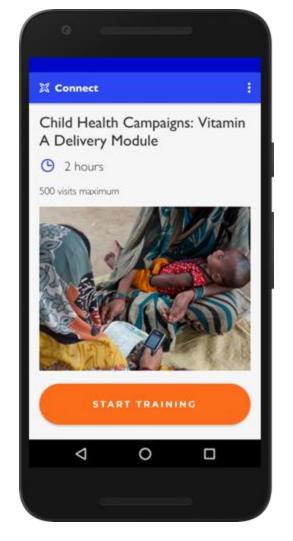
#### 23 Connect Partners in Care 290,145 SLL Jobs Completed 145.072.50 SLL Interpersonal Therapy Group To be paid by Partners in Care 145.072.50 SLL Interpersonal Therapy Group ACCEPT PAYMENT 0 $\bigtriangledown$

Pay

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

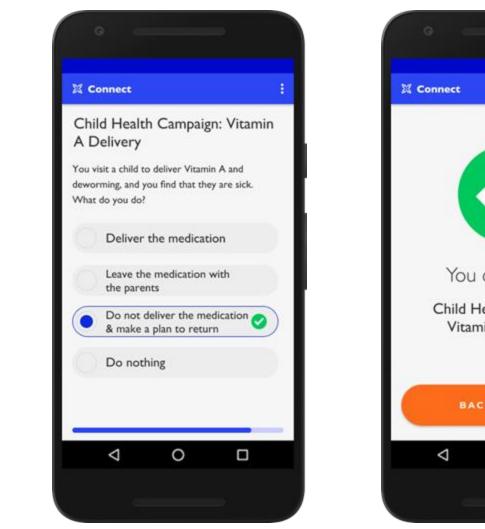
#### Learn





#### 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.

## You completed Child Health Campaign: Vitamin A Delivery 0

#### **Get Certified**

If they pass the test, users will receive certification to perform the job.

## **Dimagi: Technology for Youth**

#### 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.



#### COMMCARE

- 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

Mercy Simiyu Director, Frontline Programs CommCare Connect

msimiyu@dimagi.com

## Thank You

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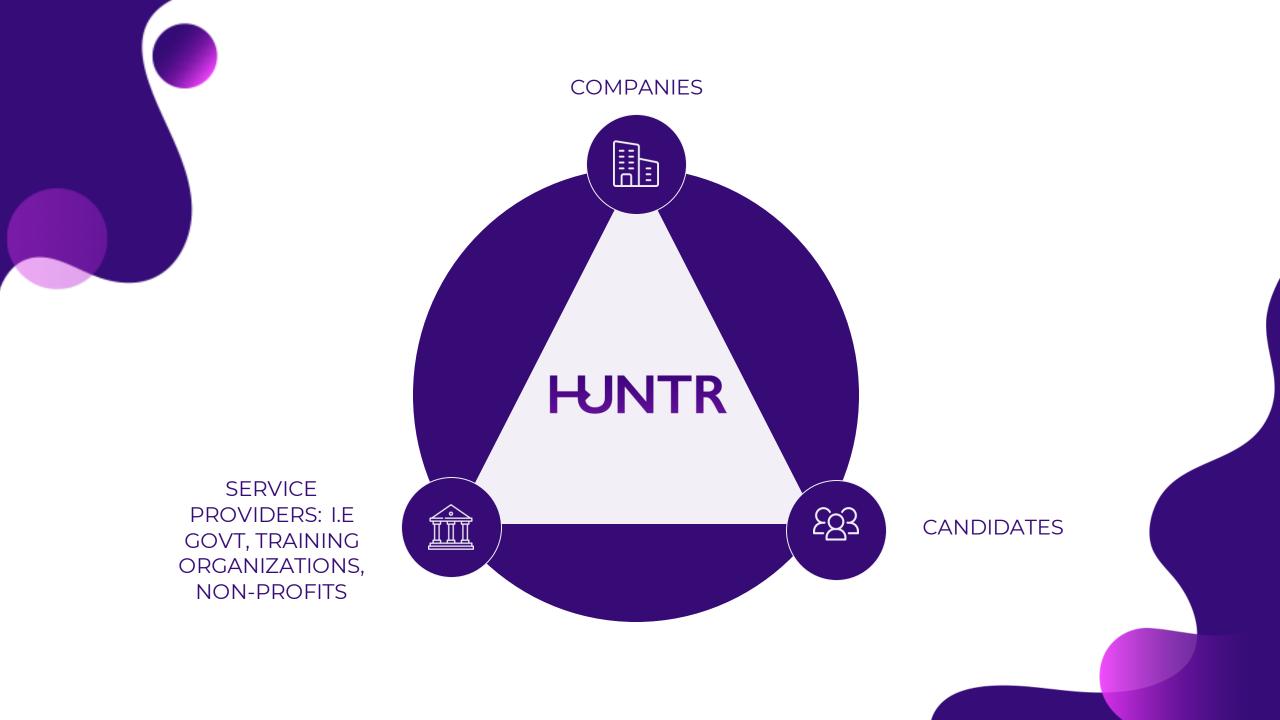
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## Matching migrant workers with health jobs in UAE

Samuel Joy Cherian Founder and CEO, Huntr

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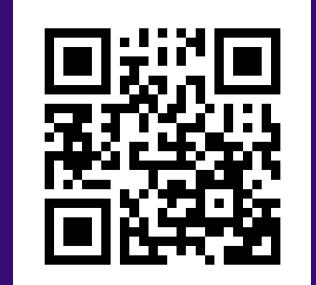












## Thank you