Introduction of the Clinibee App for Critical Care Nurses in sub-Saharan Africa

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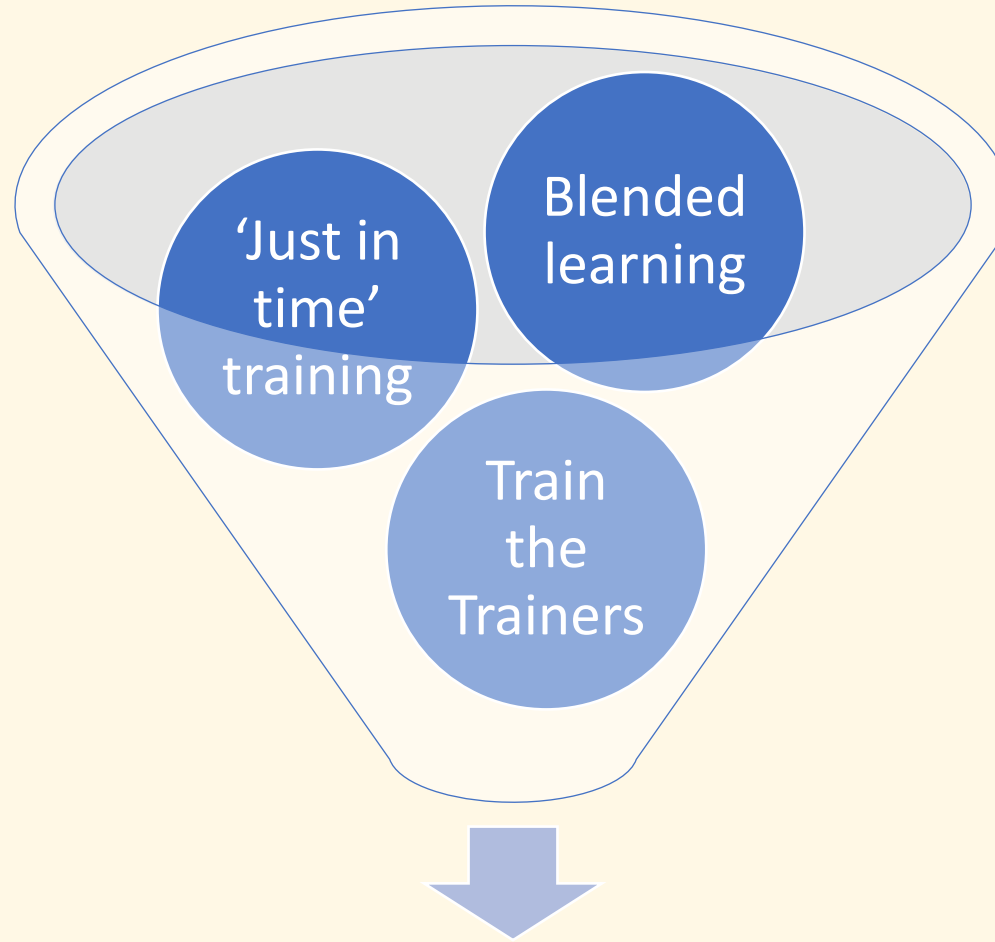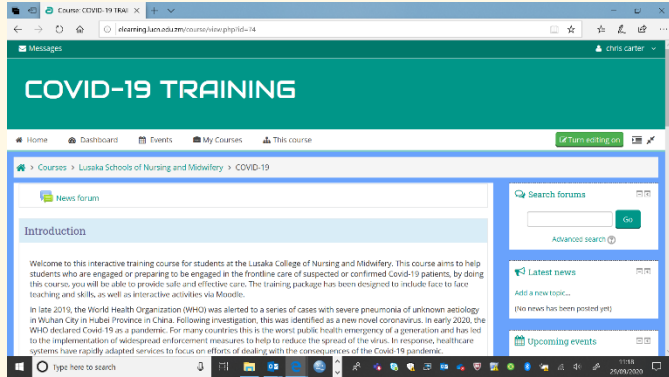
Acknowledgements

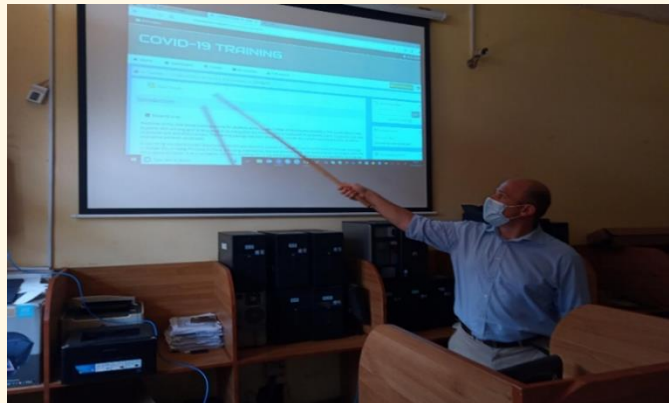Current & Previously Funded Projects

Latest projects included UKRI / Newton Challenges Identified

- Critical shortage of healthcare workers:
  - <300 critical care nurses for 18 million people (Zambia)
  - <10 critical care nurses for 17 million people (Malawi)
- Urgent challenges identified:
  - Conservation of oxygen supplies
  - Correct use of oxygen delivery devices
  - Use of other strategies e.g. conscious prone position
- Knowledge and skills in using oxygen therapy

Initial Rapid Response (May – October 2020)

'Just in time' training

Blended learning

Train the Trainers

Rapid Response

Strategic Team

SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE, JUSTICE AND STRONG INSTITUTIONS
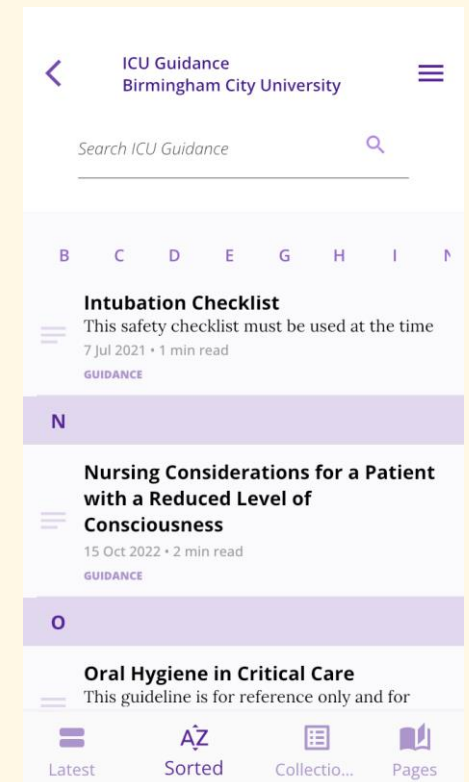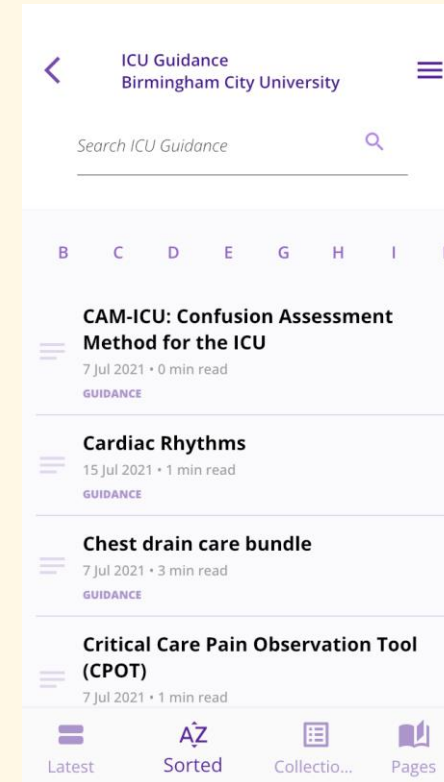
17 PARTNERSHIPS FOR THE GOALS
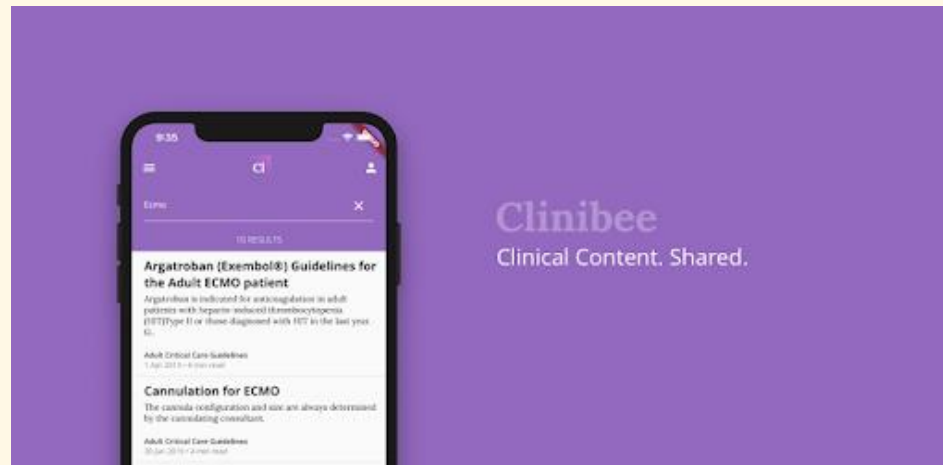
SUSTAINABLE DEVELOPMENT GOALS

About Clinibee

- Enables organisations to:
  - Rapidly respond to evolving clinical practice
  - Provide appropriate governance oversight, with instant distribution to staff at the patient bedside.
- The platform reduces
  - Administrative burden
  - Enables clinical collaboration
  - Standardises clinical practice
  - Drives quality improvement throughout the organisation.
- At its core is patient safety.
- Mobile and digital apps widely in NHS / critical care units (Ventola et al., 2014)
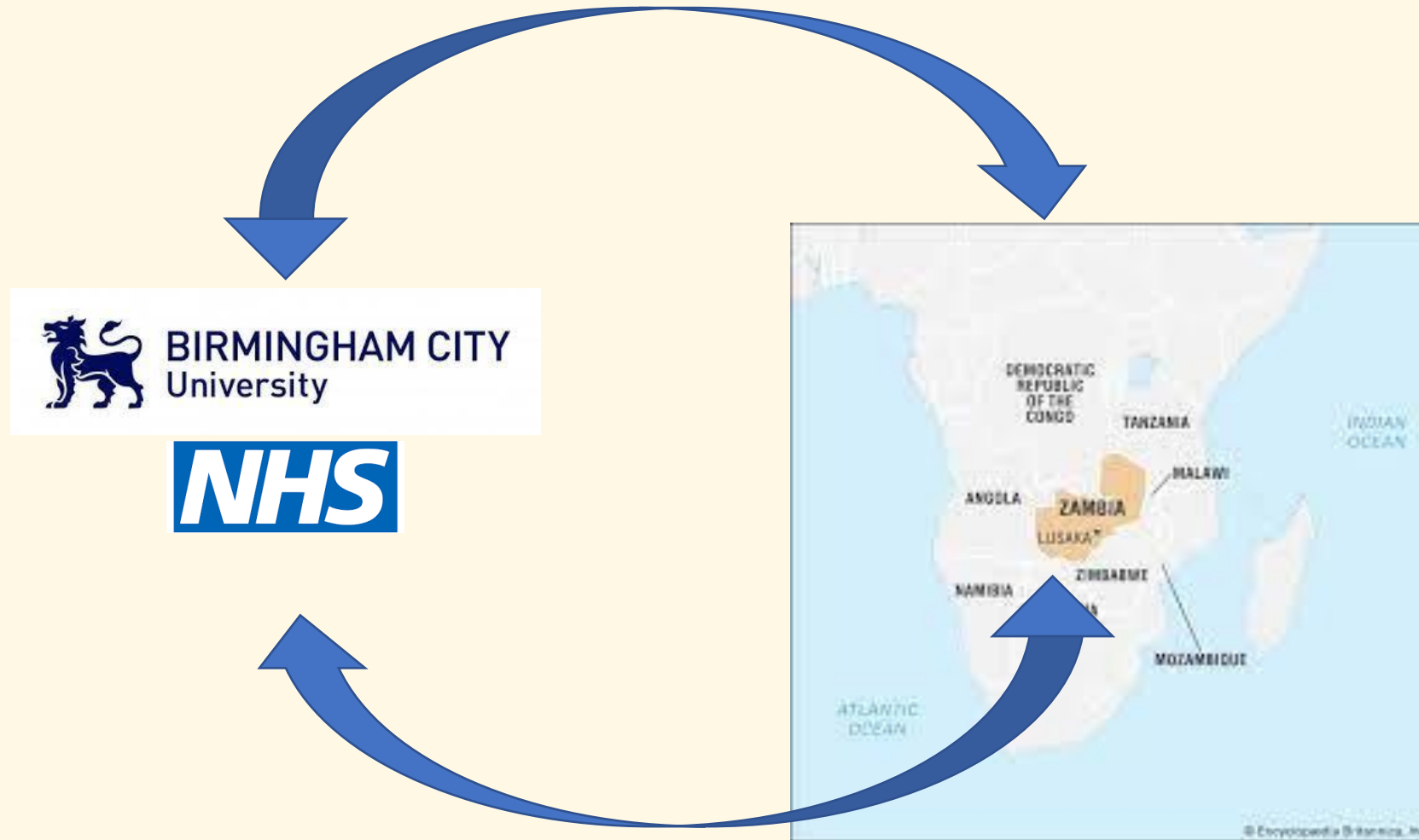
Aim

- To develop context specific critical care evidence-based information for nurses in Zambia to access at the bedside.

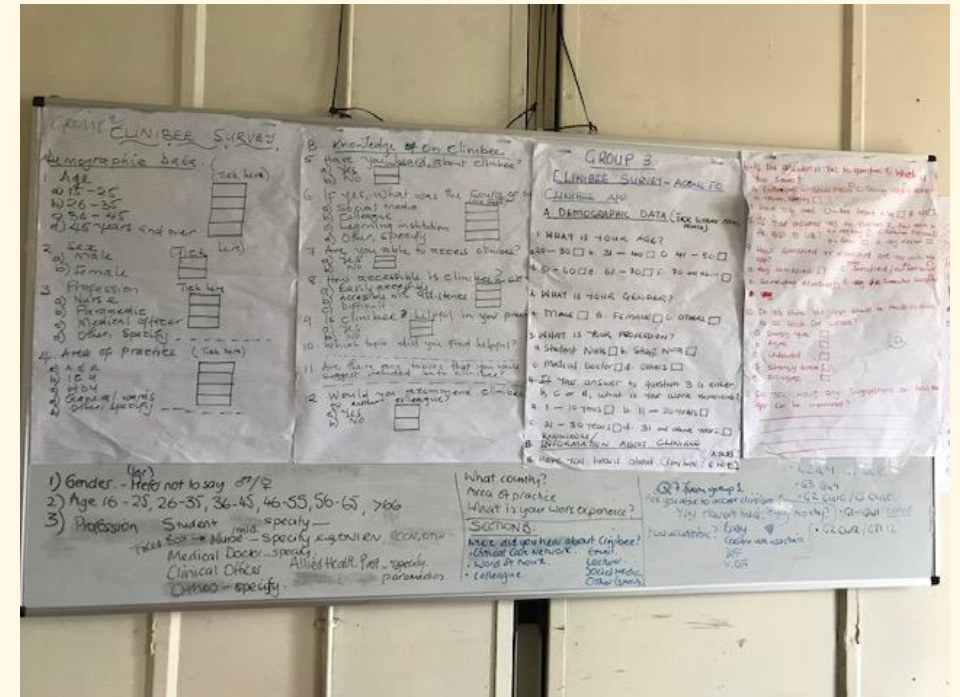# Co-design (Flyan et al., 2021. Bate et al., 2016)

Project achievements

- Identification of specific topics in critical care

- Development of context specific resources

- Zambian team supported by international team to develop and peer reviewed guidelines

- 34 emergency, trauma & critical care resources designed and uploaded
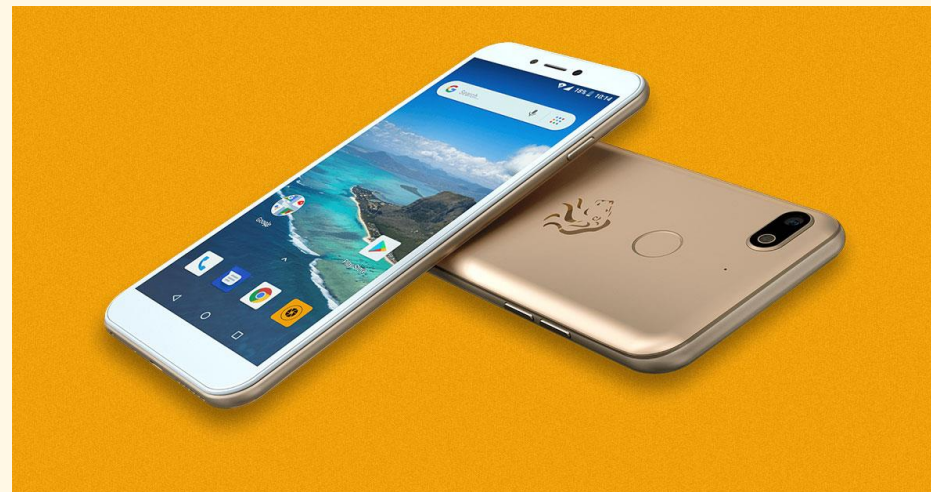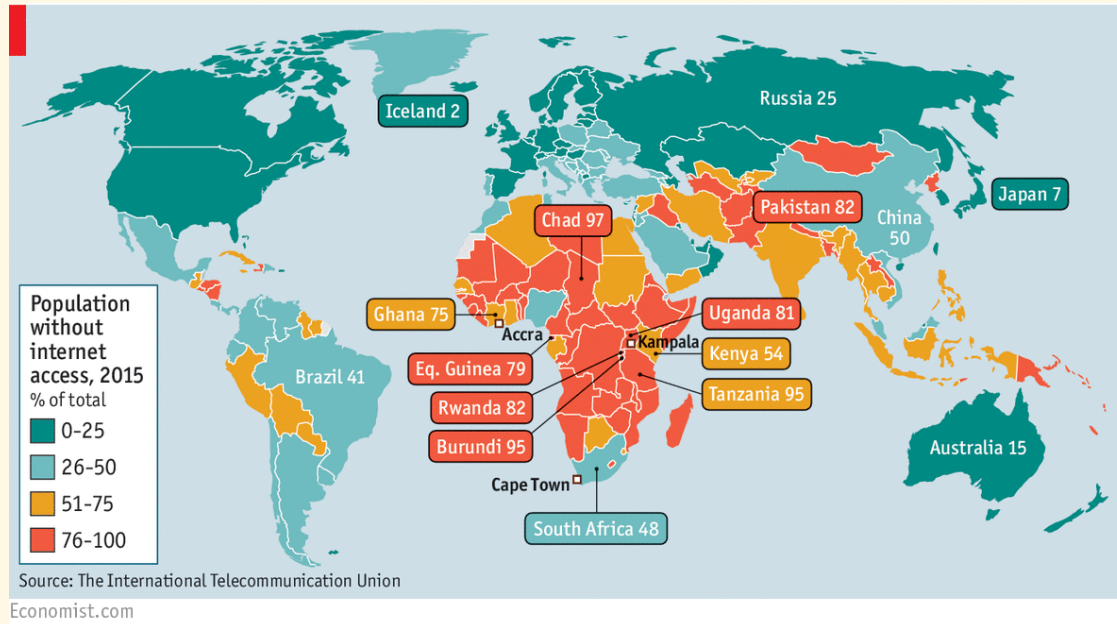
Method for Pilot Evaluation

- As the first step in project monitoring and evaluation, an evaluative approach to assessing impact was used

- Anonymous online survey via a mobile phone was conducted

- Unique URL sent to all users

Findings from the evaluation

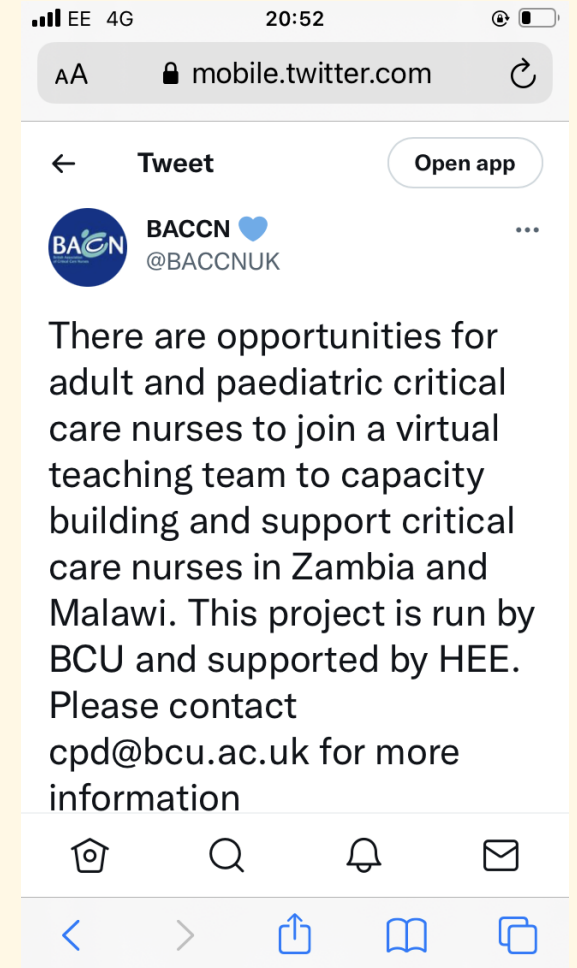- 64 critical care nurses are members at the time of the evaluation.
- 33 (51.5%) responses were received, deemed an acceptable response.
- 23 (69.6%) reported using Clinibee
  - 19 (57.6%) finding it easy to use.
  - Most accessed topics included tracheostomy care bundle, weaning from mechanical ventilation and eye care.
- 10 (30.4%) respondents who were not accessing the app, no responses were given as to why.

Limitations and solutions

Population without internet access, 2015
% of total
- 0-25
- 26-50
- 51-75
- 76-100

Source: The International Telecommunication Union

Economist.com

Iceland 2
Russia 25
Japan 7
Pakistan 82
China 50
Chad 97
Ghana 75
Accra
Kampala
Uganda 81
Eq. Guinea 79
Kenya 54
Rwanda 82
Tanzania 95
Burundi 95
Cape Town
Australia 15
South Africa 48
Brazil 41

WAZNI MOBILE SHOP

Opportunities and next steps

- Use of clinical based apps have huge potential

- App has been launched in Malawi

- Health Education England (HEE) Global Placement for Health Partnerships grant:
  - Virtual volunteers delivering virtual lectures
  - Volunteer infographics designer designing information for Clinibee

References

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