Project ECHO®

Extension for Community Healthcare Outcomes

Strengthening Integrated Surveillance and Laboratory Networks in Africa

Addis Ababa, Ethiopia

March 27, 2017

Brian Wood, MD [bwood2@uw.edu]

Bruce Struminger, MD, MA [bstruminger@unm.edu]

What is ECHO?

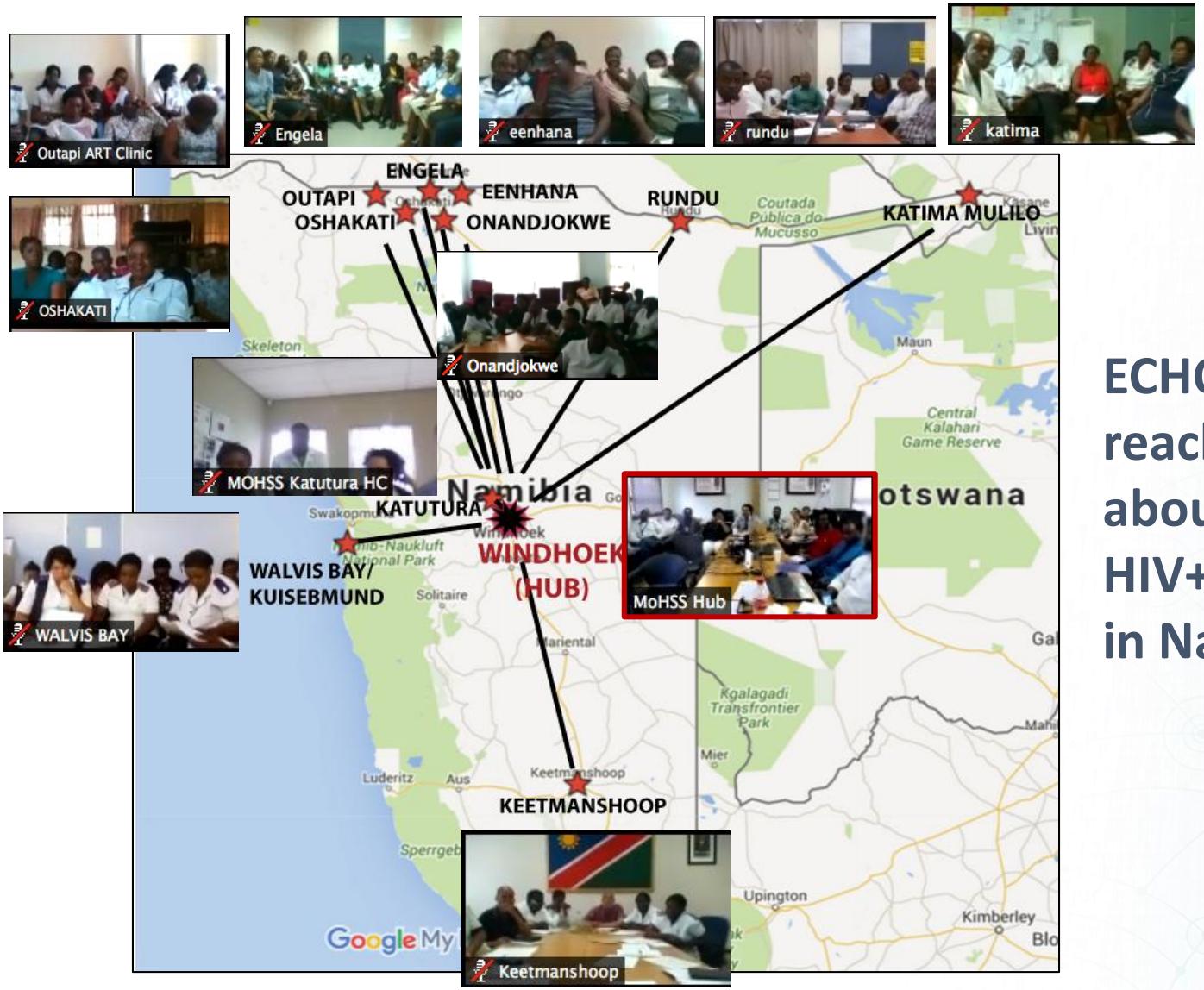
Team-based problem solving through virtual communities of practice

Goal: link multidisciplinary teams for guided collaboration across large distances

First ECHO Session in Namibia

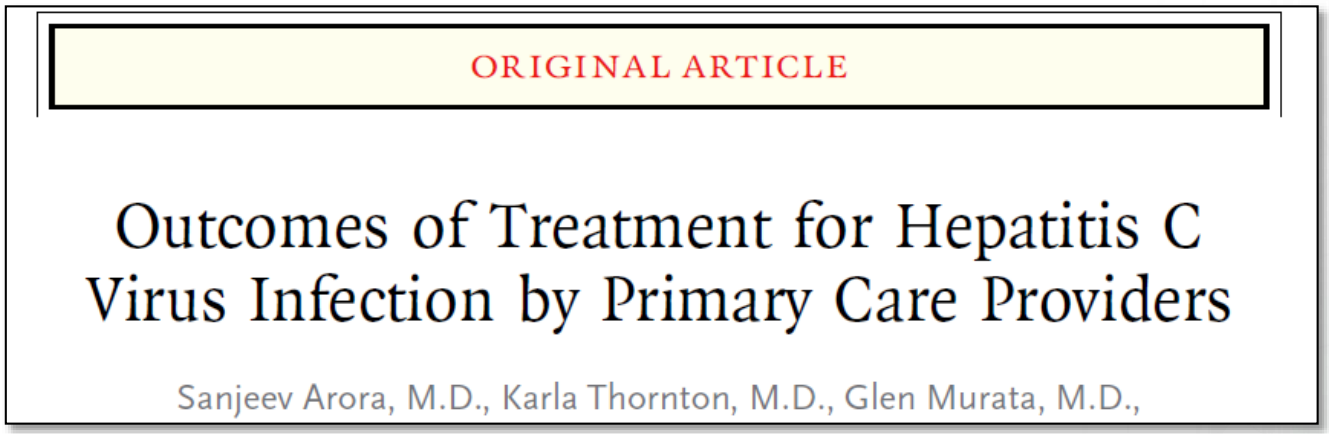
November 24, 2015

Namibia ECHO Hub and Spokes



ECHO reaches about 60,000 HIV+ patients in Namibia

Does ECHO Work?



ORIGINAL ARTICLE

Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers

Sanjeev Arora, M.D., Karla Thornton, M.D., Glen Murata, M.D.,

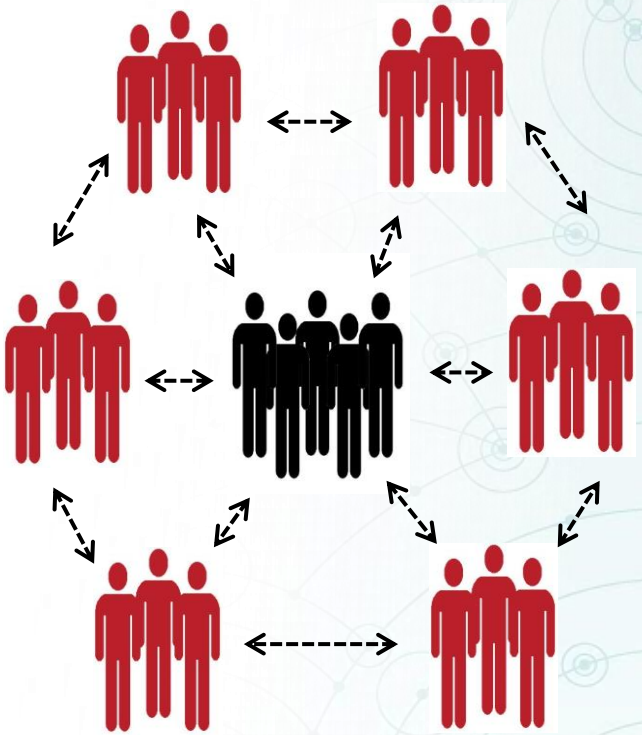
	21 Community ECHO Sites (N=261)	University Clinic (N=146)	P Value
HCV SVR	58.2%	57.5%	0.89

✧ Cost-effectiveness: average ICER/QALY $8,300[2]

1. Arora S, Thornton K, et al. NEJM. 2011;364:2199-207.
2. Wong JB et al. AASLD 2013, Washington DC, Abstract 245.

ECHO Virtual Communities of Practice - Principals

- Use **technology** to leverage scarce resources
- Promote **collaborative problem solving**
  - Connect teams across large distance (no travel)
  - Facilitate continuous information exchange
  - Provide longitudinal mentorship to increase workforce competency
- **Promote evidence-based best practice** to reduce variations in processes
  - Brief lectures
  - Highly-contextualized cases
- **Reinforce protocols and guidelines**
- **Monitor implementation and outcomes**

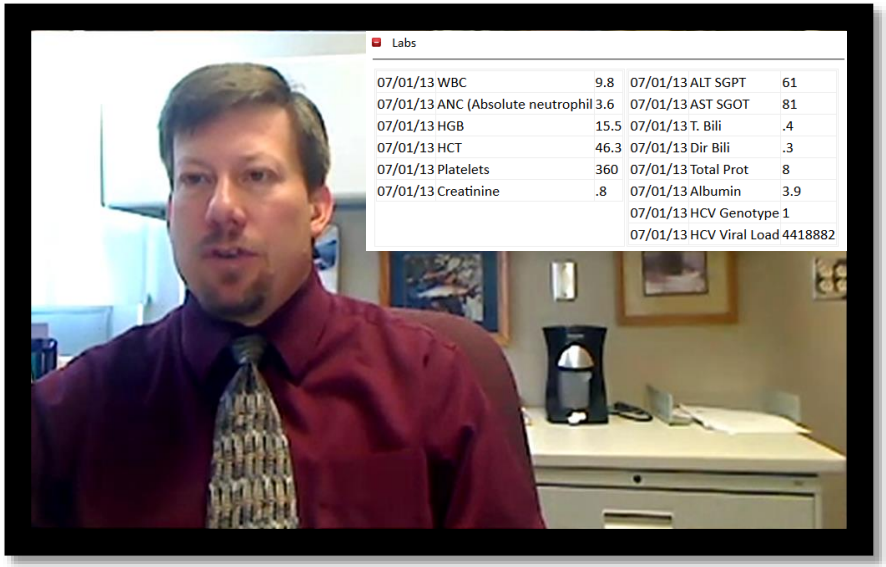


Arora S, Geppert CM, Kalishman S, et al: Acad Med. 2007 Feb;82(2): 154-60.

Examples: disseminate protocols, share resources, prepare for outbreaks

ECHO Programs at University of Washington

- HIV
- Hepatitis C
- Tuberculosis
- **Antimicrobial Stewardship**
- **Public Health**
  (leadership, surveillance, field services)
- Heart Failure
- Geriatrics
- Psychiatry & Addictions
- Mental Health Counseling



Additional Applications of ECHO

MDR TB Program in Kenya

India MDR TB ECHO – Nov 29, 2016

Tanzania – First Laboratory ECHO Launched November 23, 2016

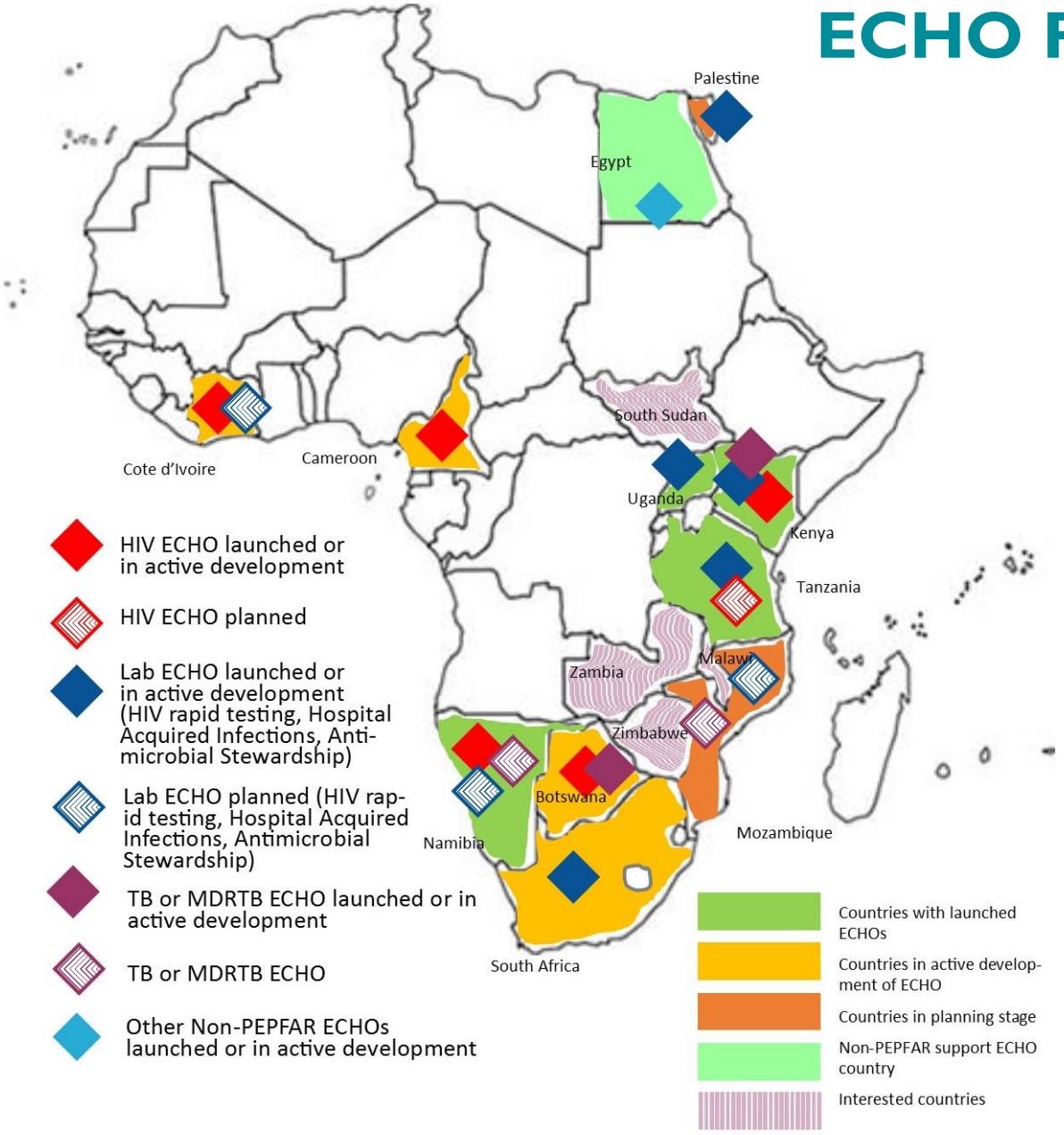
With guests from Namibia and Kenya via Zoom
Additional lab ECHOs in development: Namibia and South Africa

Uganda – Laboratory ECHO Launched March 6, 2017

With guests from Tanzania

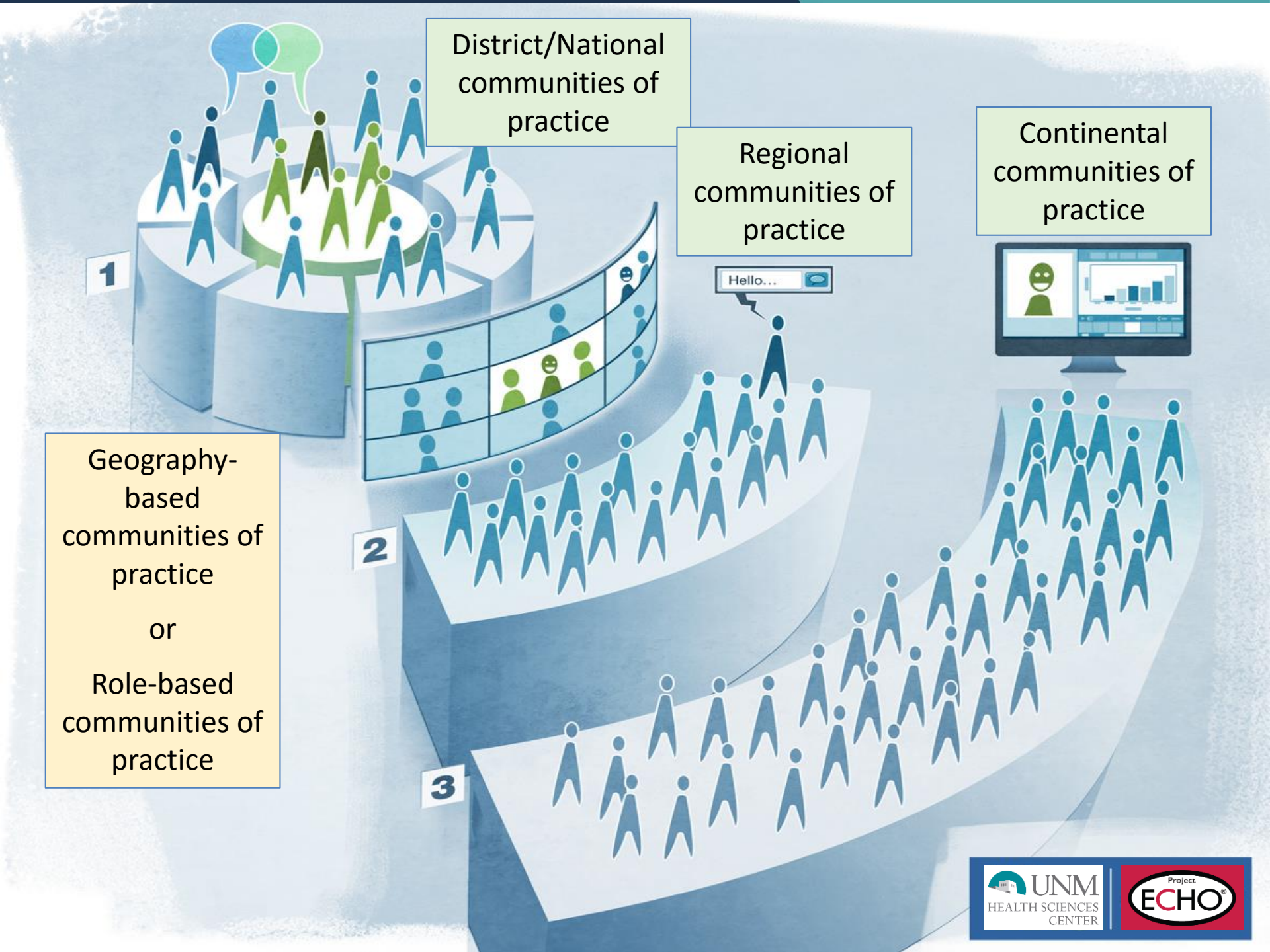
Additional lab ECHOs in development: Namibia and South Africa

ECHO Programs in Africa



Africa Launches:

- **Namibia** – Pilot completed, now in post-pilot phase (since November 2015)
- **Kenya** -- MDR TB (July 2016) and HIV (October 2016)
- **Tanzania** – first lab ECHO for HIV RTQCI (November 2016)
- **Uganda** – HIV RTQCI ECHO (March 2017)


District/National communities of practice
Regional communities of practice
Continental communities of practice
Hello...
1
2
3
Geography-based communities of practice
or
Role-based communities of practice
UNM HEALTH SCIENCES CENTER
Project ECHO

Potential Benefits of Applying the ECHO Model to Laboratories and Surveillance Networks

Build local expertise in laboratory workforce	• Continuous training and mentoring of laboratory staff • Enhance problem solving and workforce development
Improve communication, coordination, and collaboration	• Strengthen connections between local lab staff and national and international lab experts and peers • Decrease laboratory staff isolation and promote continuous information exchange & rapid dissemination of protocols
Significant cost and time savings related to reduced travel for trainings	• Increase time for education and training (CME/CNE) • Reduce absence of lab staff from their posts due to attendance at trainings
Opportunity to engage in CQA/CQI activities	• Highlight programmatic challenges and find solutions through collaborative problem solving • Monitor implementation of protocols and outcomes; strengthen infrastructure for efficient outbreak response

ECHO is a dynamic and interactive longitudinal distance network that allows efficient sharing of information, data, and evidence-based best practices

Move Knowledge Instead of People