

IMPROVING ANATOMIC PATHOLOGY IN SUB-SAHARAN AFRICA TO SUPPORT CANCER CARE

Stephanie Ayers

African Strategies for Advancing Pathology



Overview of African Strategies for Advancing Pathology

- Denver-based non-profit organization formed in 2014
- Membership organization focused on building capacity for pathology services to support cancer in sub-Saharan Africa
- Current membership: 29 members from the US, UK, Europe, Australia, and sub-Saharan Africa
- All members have extensive experience working in Africa

What is pathology?

- The science of the cause and effect of diseases
- The branch of medicine that deals with the laboratory examination of samples of body tissue for diagnostic purposes
- Pathology in support of cancer care

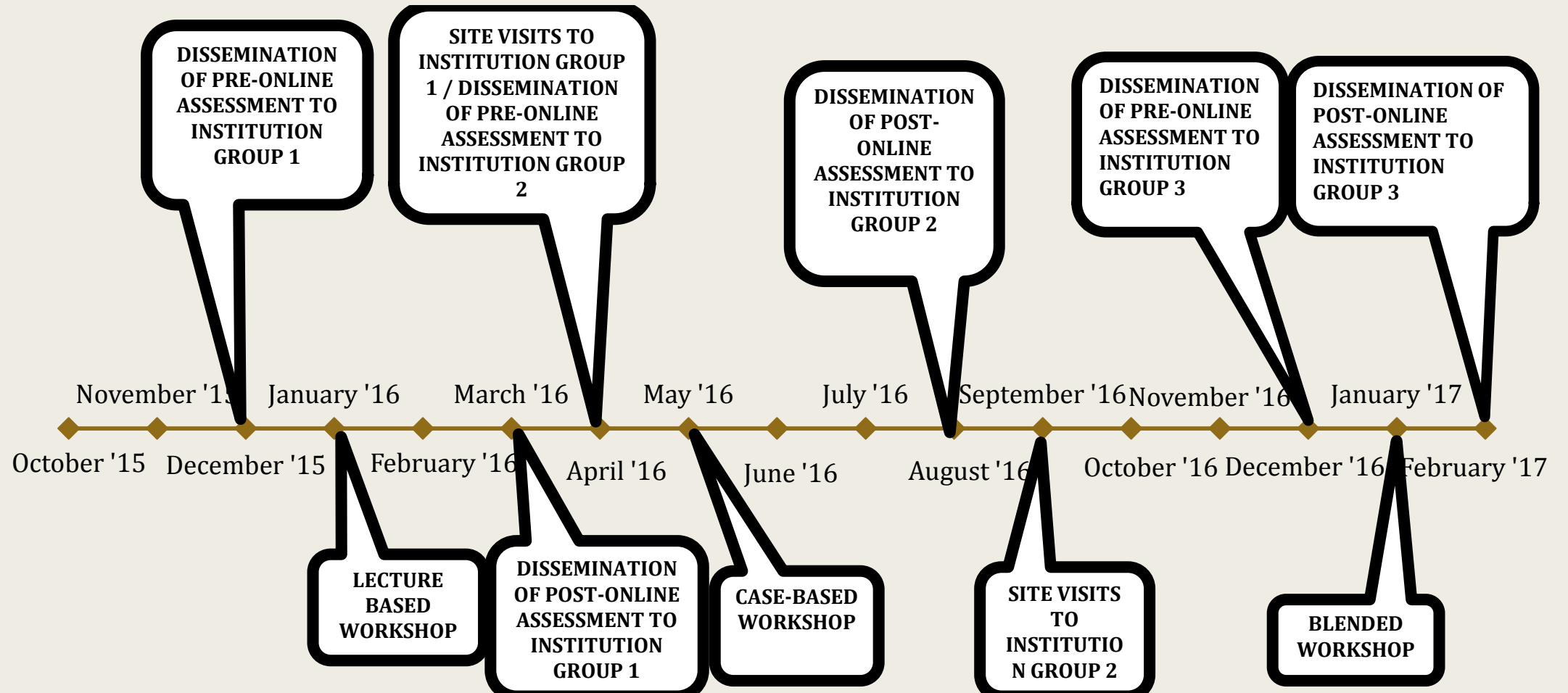
NCI PAR 15-155: Improving Anatomic Pathology in sub-Saharan Africa to Support Cancer Care

- Research project funded by the National Cancer Institute
- Goal: To determine which training approach is most effective at improving the expertise of the pathology workforce in low and middle income countries (LMICs) in sub-Saharan Africa, and share the lessons learned to contribute to future training efforts.

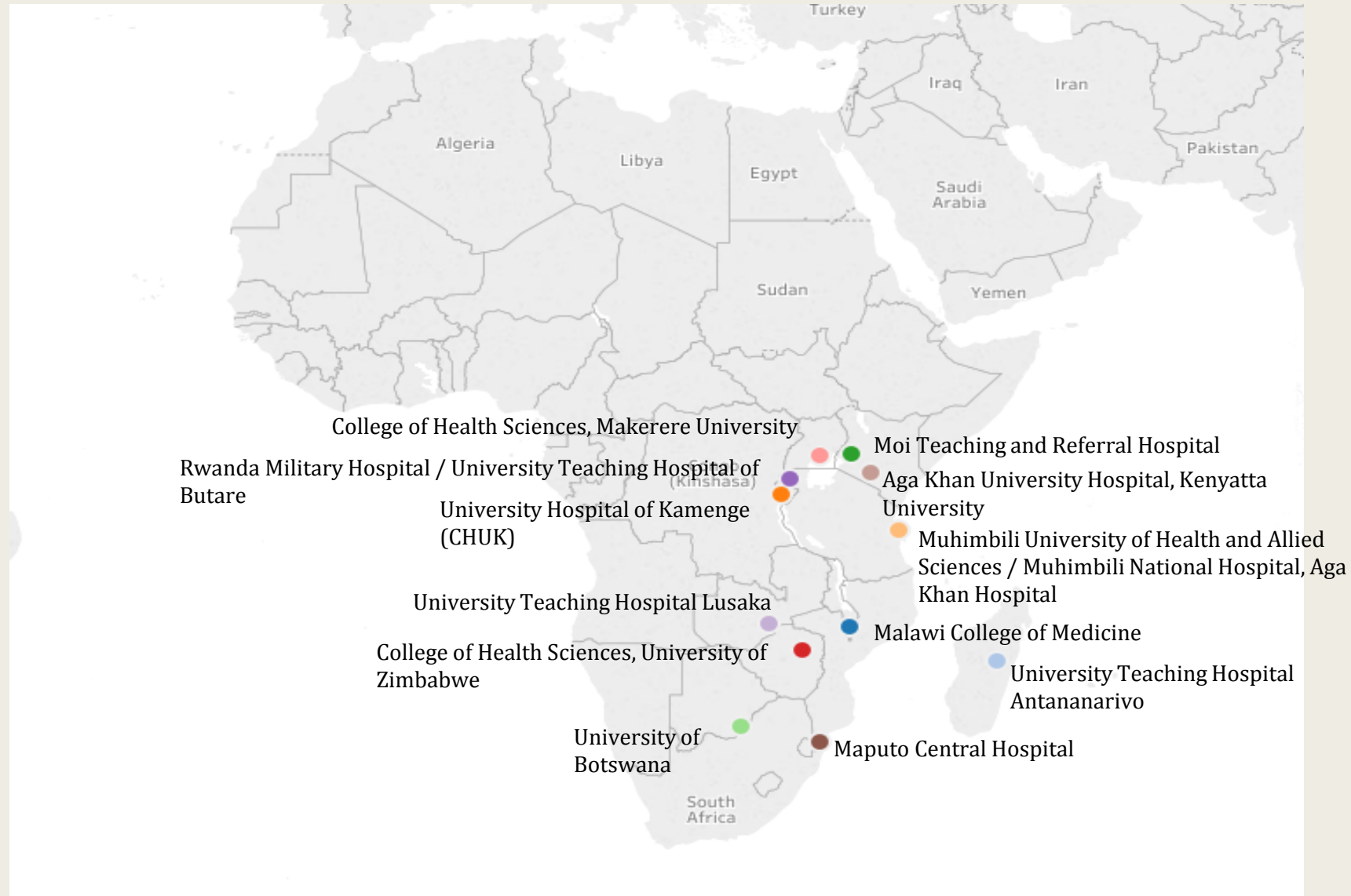
METHODS

- Three workshops held in January 2016, May 2016, and January 2017
- 16 participating pathology departments; 52 total participants
- Four common cancers (breast, cervix, prostate, colorectal) presented at each workshop
- Each workshop featured a different teaching style
- Pre / Post workshop online institutional assessments
- Pre / Post workshop participant assessments
- Institutional site-visits

Project Timeline



Participating Institutions



DIDACTIC / LECTURE-BASED

- Powerpoint Presentations
- 3-4 lectures for each cancer type
- Lectures harmonized in total duration and overall structure

CASE-BASED TRAINING (CBT)

- No lectures presented
- 2-7 cases per cancer type
- PowerPoint presentations from the didactic workshops were available as reference material
- Faculty conducted summation session after each cancer session

BLENDED APPROACH

- 30-45 minute lecture for each cancer type emphasizing the most important information for solving the case
- Same cases from the CBT, in a shorter time frame

RESULTS

- Workshop Post-Assessment Average Scores:
 - *Didactic: 63%*
 - *CBT: 76%*
 - *Blended: 68%*
- The improvement in scores from the pre-assessment to the post-assessment for both the CBT and blended workshops was 19%
- 86% of survey respondents reported that they perceive changes at their institutions that they attribute to participating in the workshops
- Those variables which exhibited an increase in reporting across all institutions from the pre-workshop online survey to the post-workshop online survey were those institutions which:
 - *Have a tumour board;*
 - *Routinely obtain second opinions for new cancer diagnoses;*
 - *Have histology lab procedure manuals;*
 - *Monitor and report ischemic time for breast biopsies;*
 - *Monitor and report time of fixation for breast biopsies;*
 - *Routinely sample 12-15 lymph nodes from resection specimens for colon cancer;*
 - *Routinely use synoptic reports; and,*
 - *Routinely assign Gleason scores.*

CONCLUSIONS

- Participants seemed most engaged during the blended workshop
- Participants seemed more enthusiastic and invested when working through cases
- The training conducted at the workshops has contributed to a higher performing pathology workforce and the improvement of anatomical pathology laboratories in the participating institutions

NEXT STEPS

- Expand the courses to be held more frequently and cover a wider range of topics
- Use an approach designed to maximize program reach and minimize costs while incorporating a blended teaching approach
- Hold local / regional workshops that require less participant travel
- Involve more local experts
- Have an ongoing mentorship program for pathologists and senior residents from LMICs

QUESTIONS?

Contact: pathologyinafrica@gmail.com