

ASLM

AFRICAN SOCIETY FOR LABORATORY MEDICINE

ADVANCING THE LABORATORY PROFESSION AND NETWORKS IN AFRICA

Qualifying the Workforce for AMR surveillance in Africa and Asia





- Cameroon
- Eswatini
- Zimbabwe
- Ethiopia
- Uganda
- Nigeria
- Malawi
- Sierra Leone
- Kenya
- Ghana
- Tanzania
- Gabon
- Zambia
- Senegal

- Bangladesh
- Cambodia
- Lao



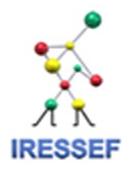
SHORTAGE



- Numbers and skills of professionals for
 - quality antimicrobial susceptibility test (AST) laboratory results,
 - interpreting AMR data
 - designing relevant and representative AMR surveillance protocols required for solid AMR surveillance systems
- Competency standards for AMR surveillance are not well defined even in reference laboratories.



Human resource (HR) strengthening and capacity building for AMR surveillance by the provision of microbiology and epidemiology training for AMR in the human, animal and environmental sectors



Roll out of standardized Microbiology and Epidemiology training across national AMR networks under the one health approach



- QWArS programme builds on the state-of-the-art standardised training modules developed by expert organisations
- Two certification and testing programs level in either Microbiology or Epidemiology.
 - Skilled - able to perform the field and laboratory tasks required to identify and track AMR
 - Expert - able to design and manage systems for AMR surveillance



A pool of skilled personnel capable of:

delivering key functions of national AMR surveillance under One Health approach

Roll out of standardized training across national AMR networks

Rationale for building qualification frameworks for AMR Experts?

- Training is a very popular intervention shortage and skills of human resources for health (HRH).
- Trainings, will be effective if they
 - work towards clear staffing norms-based targets;
 - are deliberately built for country ownership; comply with standards of educational quality; and
 - demonstrate effectiveness in developing skills and competence in addition to knowledge.



“The value of training in generating competence to support health programmes and providing career benefits for individual professionals requires several conditions that extend beyond the mere delivery of certificates of attendance upon completion of a face-to-face or virtual classroom.....”

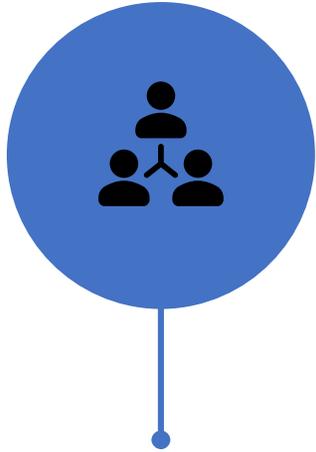
Mataka et al, 2021 Issue No 26

The Registration



- Demonstrates knowledge and skill required to competently perform the tasks in Microbiology practice and surveillance for AMR.
- The registry provides governments, professional councils, employers, and the public with a level of confidence in the ability of the registered professional to perform these tasks
- acknowledges the individual's commitment to maintaining that competence in the future through continued professional development.

QWArS Strategic Pillars – ensuring sustainability



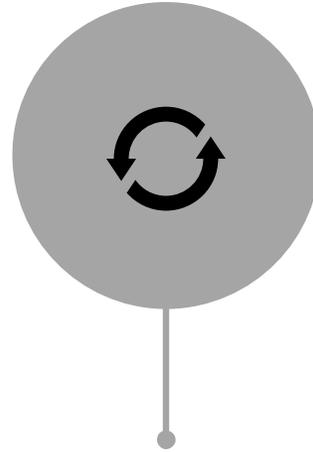
One Health

- Human & Animal Health
- Laboratory staff & epidemiologist
- AMR & AMU



In service training

- Training of staff that are in current functions and contribute to the AMR surveillance .



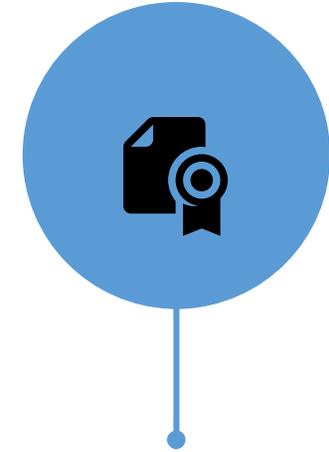
Sustainability

- Master trainers track
- Country ownership
- Link to regulation



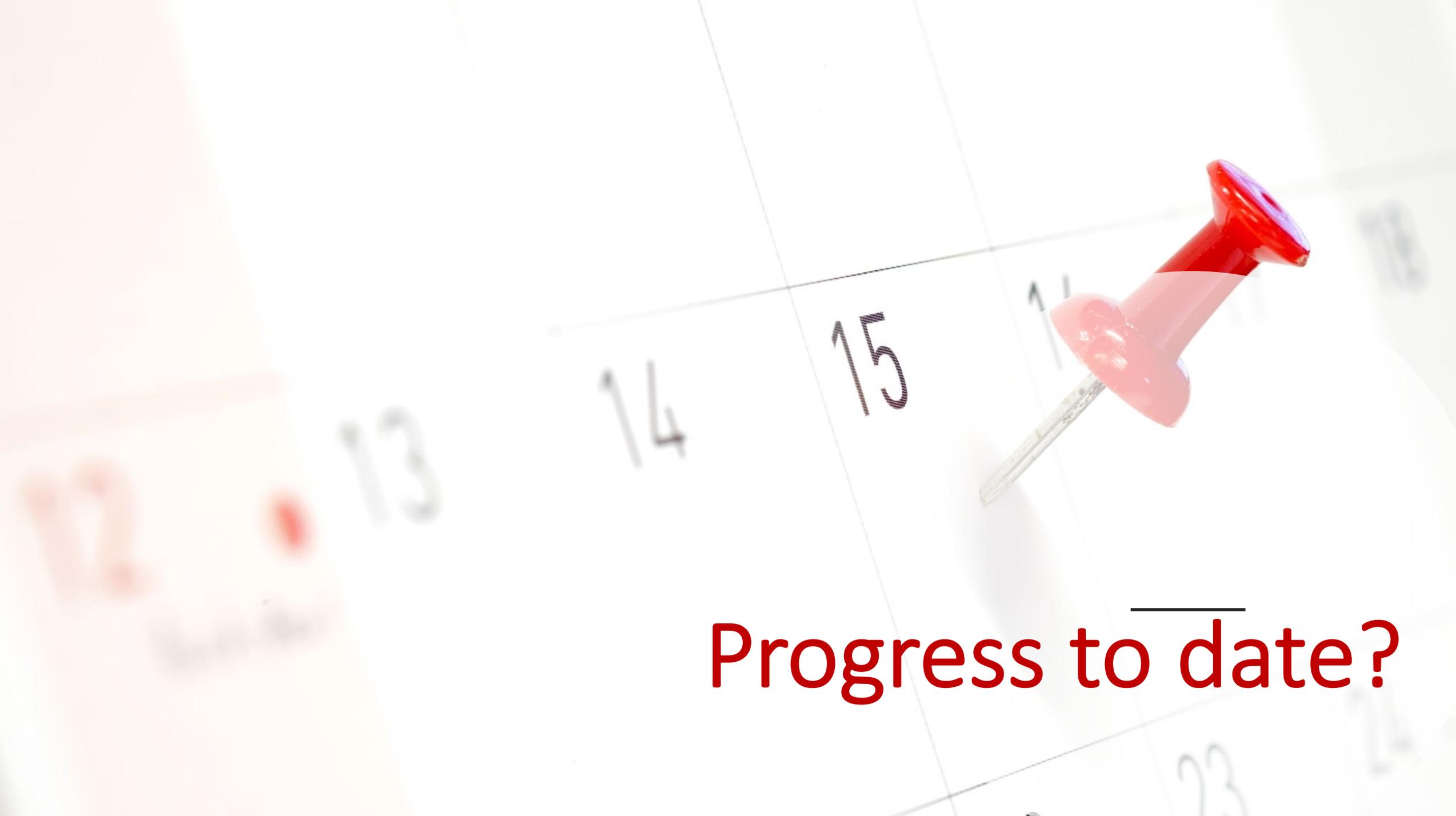
Support to the NAP

- Mentorship supporting the implementation of national AMR action plan.



Qualification

- Standardized training
- Formal qualification
- Option to maintain competencies
- Career benefit



Progress to date?

QWArS Enrolment Online learning

Progress of learners is captured using a learning management system under the ASLM Academy.

352 Total Enrolment
16 countries



AMR101

Participants

Badges

Competencies

Grades

Overview

Introduction

1. History of antibiotics

2. How AMR develops a...

3. Mechanisms of Antib...

4. Global burden of anti...

5. Detection of AMR



Module 1: Introduction to Antimicrobial Resistance



Home / My courses / AMR101

Your progress ?



History of antibiotics

In this section you will:

- Define antimicrobials
- Describe the history of antibiotics
- Describe how antibiotics work
- Describe how antibiotics have transformed medicine



Activities

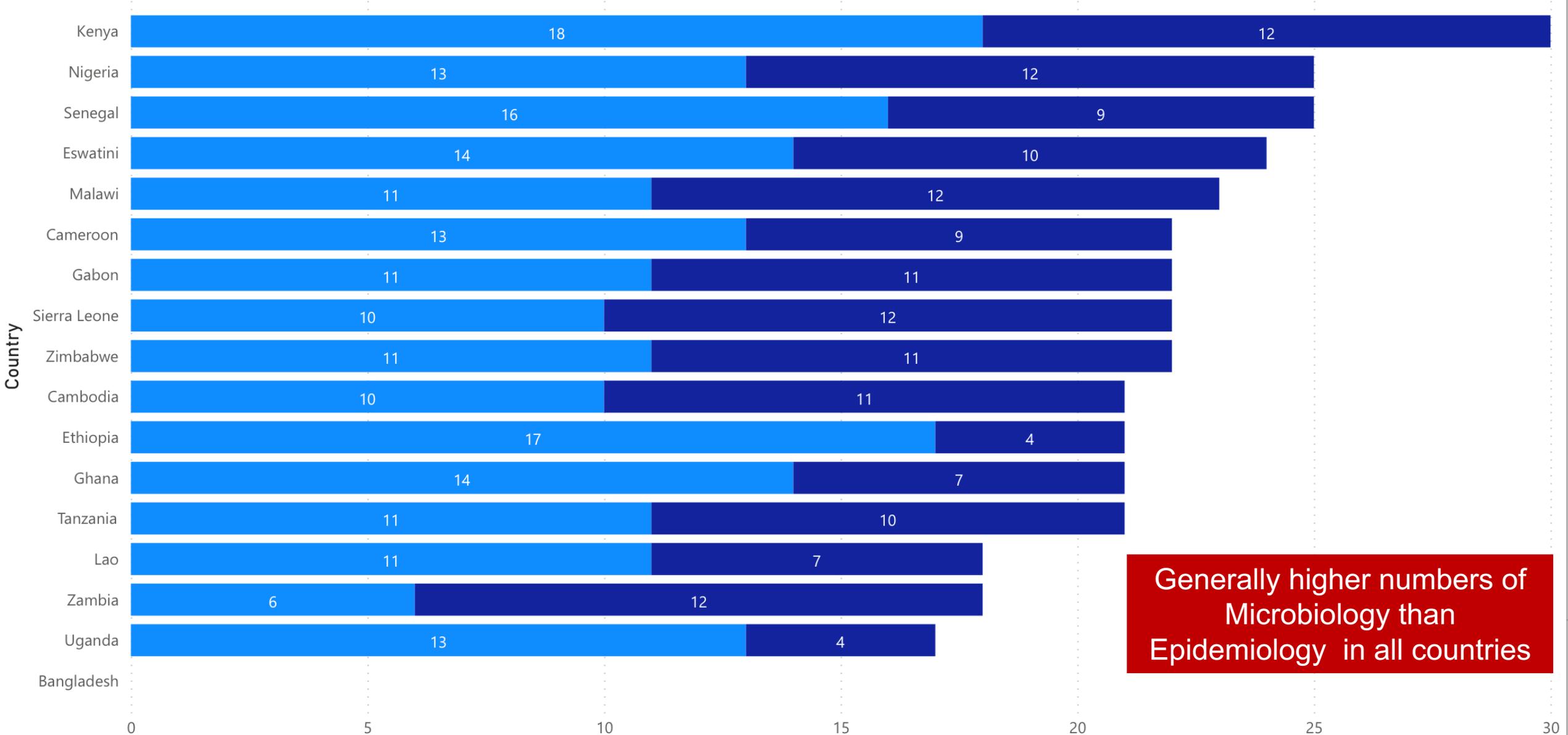
-  Feedback
-  Forums
-  Interactive Content
-  Quizzes
-  Resources

Course categories

-  Default tenant
-  ASLM Test tenant
- All courses ...

Enrolment by country

Training Type ● Laboratory track ● Epidemiology track ● Master training track



Generally higher numbers of Microbiology than Epidemiology in all countries

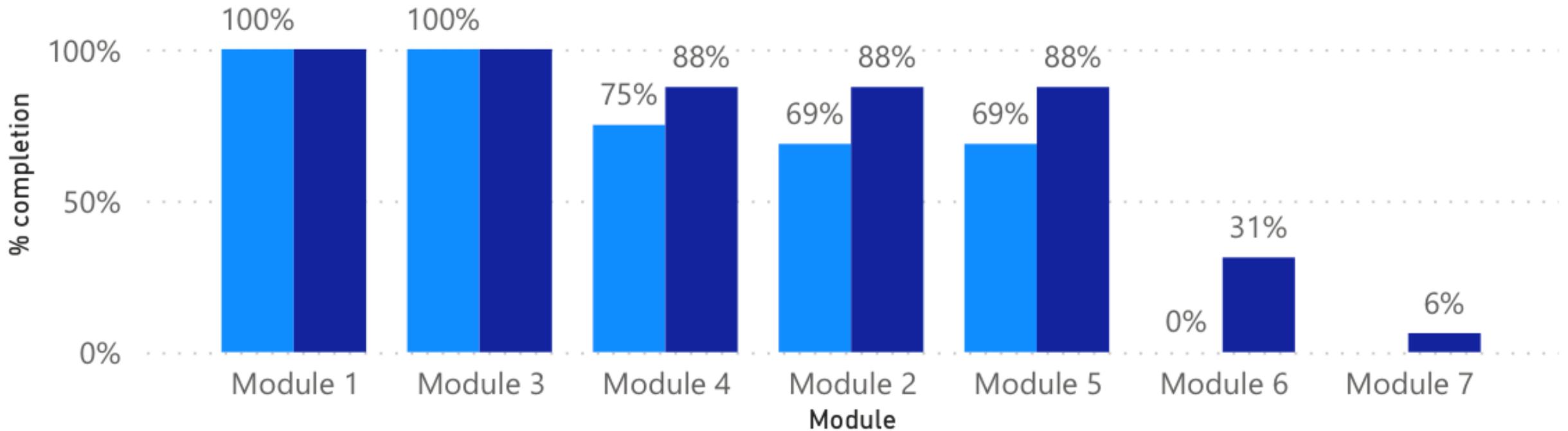


Face to Face training delivery – after online phase

- Shortlisted in-country trainers – subject matter experts
- Conducted formal orientation for the trainees and trainers before the training is rolled out.
- Procurement of reagents and supplies that for the practicum

Percent completion by Module by track

Track ● Epidimiology ● Microbiology



Feedback from initial trainings



Feedback survey from trainers

Evaluations by participants find modules useful



We may need module updates



Allocate more time for practical elements of the course



AMERICAN
SOCIETY FOR
MICROBIOLOGY

CAVIART
THE CAVIART GROUP

The professional exam

- Centralized exam with proctoring
- Development of Questions bank and the - draft exam of peer-reviewed questions
- Validation of exam questions and production of final exam



EXAMINATION CANDIDATE BULLETIN

for



AMR Microbiology and Epidemiology Examinations

Sponsored by



Prepared By

The Caviart Group, LLC

9336 Pine Cluster Circle, Vienna, VA 22181 703-835-9697

Instructions for Proctors

General information about this examination session

- Candidates need a laptop computer (not a tablet) with an Internet connection to take the exam.
- Recommended browsers are Chrome, Microsoft Edge, Internet Explorer, or Safari if they are on an Apple device
- Candidates may not access any other Internet sites or other computer programs except for a calculator during the session.
- Candidates cannot talk to each other during the examination.
- Candidates cannot have any books or other reference materials on their desks during the exam. They may have a few sheets of blank paper and a pen or pencil for their notes but these must be collected by the proctor at the end of the exam.
- Candidates cannot record any test questions in any way.
- Candidates can ask the proctor questions about the test administration only. Proctors should not answer any questions about test questions.
- Candidates have 2 hours to complete the examination.
- Each candidate's session is individually timed by the test administration software.
- If the candidate has not completed the exam at the 2 hour mark, the session will be ended automatically.
- There are no breaks during the examination session.
- A Non-Disclosure Agreement will appear at the beginning of the test. Candidates cannot take the exam if they do not agree to the terms in the Non-Disclosure Agreement. If a candidate does not agree to the terms, the session will be ended.
- In case of internet disruption, the test information is stored. As soon as a connection is reestablished, the test can resume without loss of progress or testing time.
- Candidates have the opportunity to review questions once they have reached the final question if there is still time left in the individual's session.
- Once a candidate reaches the review phase of the exam they will see an End Exam button. They should click on the End Exam button only when they are finished with the test.
- Candidates should not click the End Exam button until they are finished. If they do, they will not be able to resume a test session that they ended by selecting the End Exam

QWArS Professional Qualification Exam

QWArS Professional Qualification Exam

- 110 MCQs
- 2 hr. (120 minutes) Exam
- Each candidate's session is individually timed by the test administration software
- A Non-Disclosure Agreement at the beginning of the test.

The Professional Qualification Exam in numbers

224
Eligible
Candidates

140
Microbiology

84
Epidemiology

185
English
speaking

39 French
Speaking

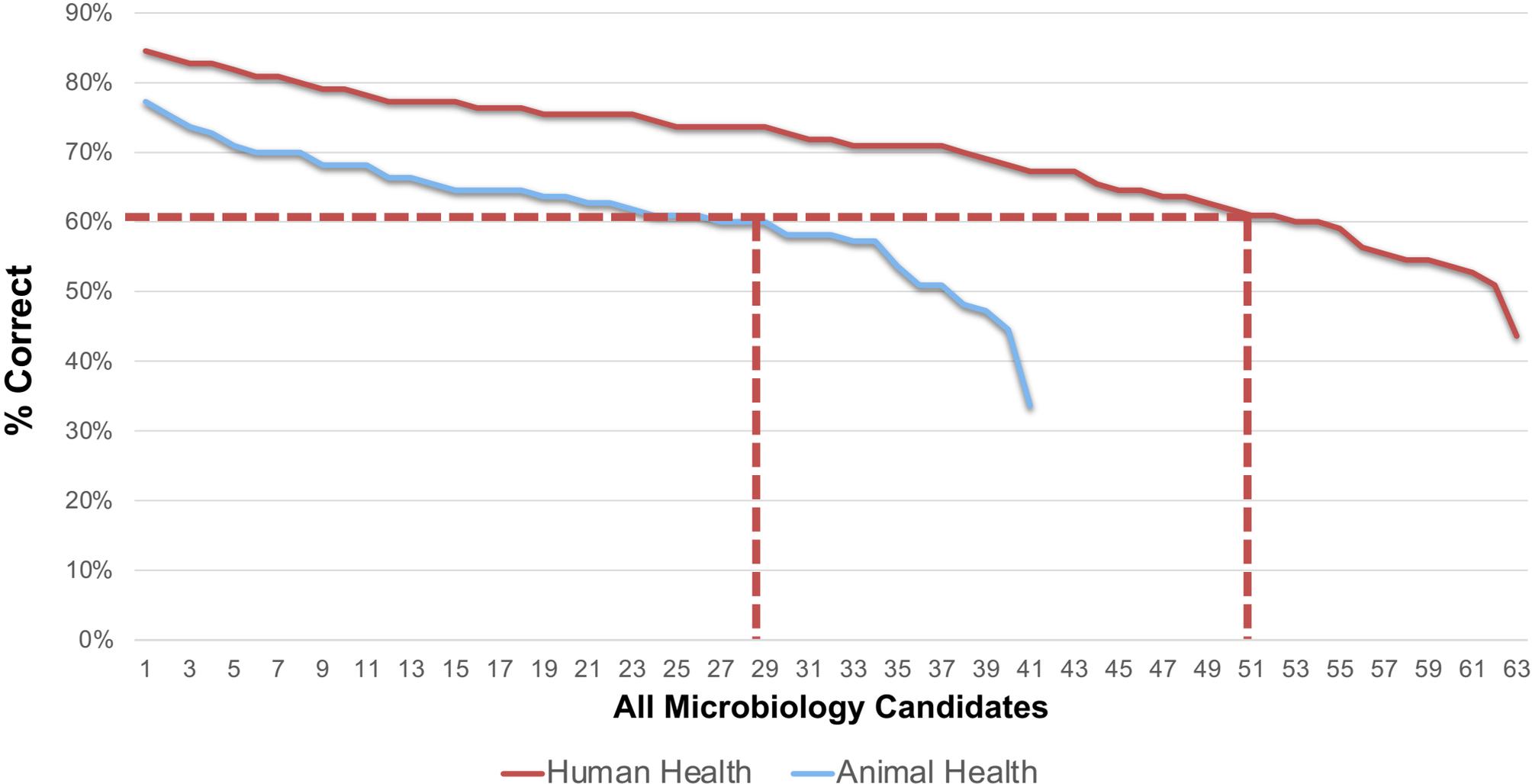
**22 failed to
show up**

128
achieved
passing
grade

96 Failed

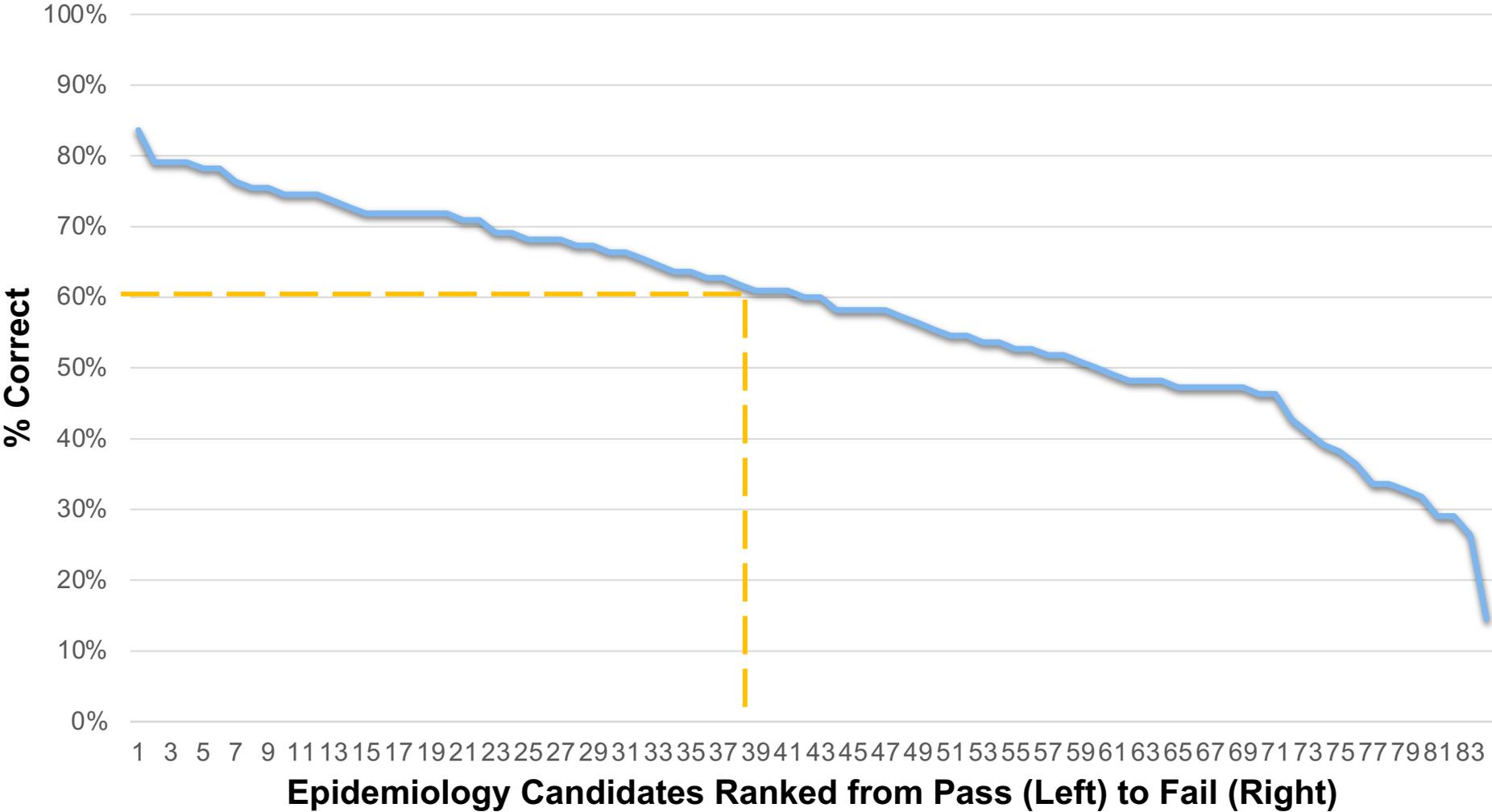
QWArS Professional Qualification Exam - % Correct

Percent Correct by Candidate by Specialization



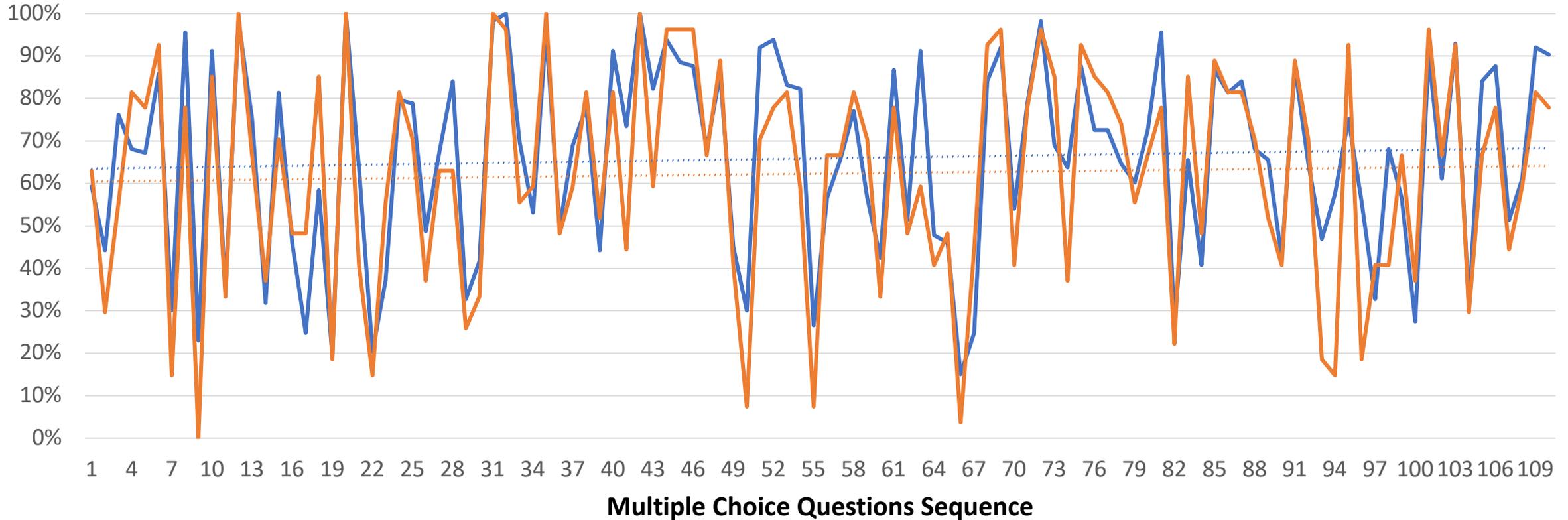
QWArS Professional Qualification Exam - % Correct

Percent Correct by Candidate - Epidemiology



QWArS Professional Qualification Exam

% Correct by MCQ (English vs. French)



Microbiology Track

Fr. Candidates

n=27

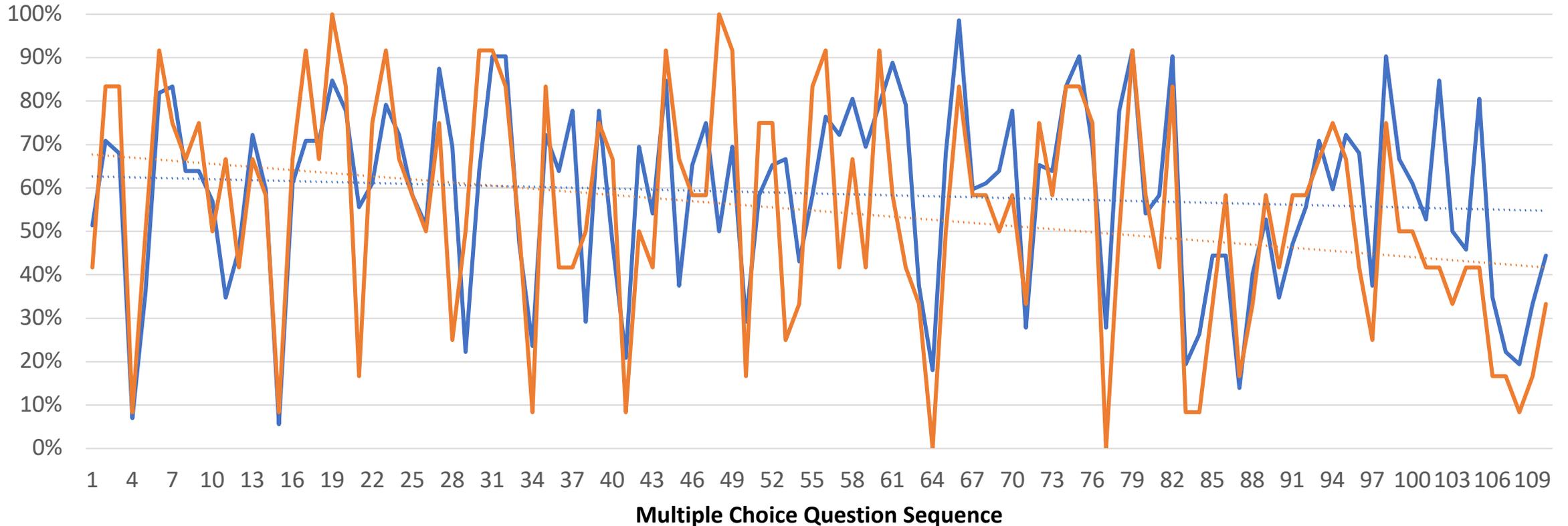
Eng. Candidates

n=113

No difference in performance by language. Deep dive still required to see how statistically significant this may be in consideration of candidate numbers.

QWArS Professional Qualification Exam

% Correct by MCQ (English vs French)



Epidemiology Track

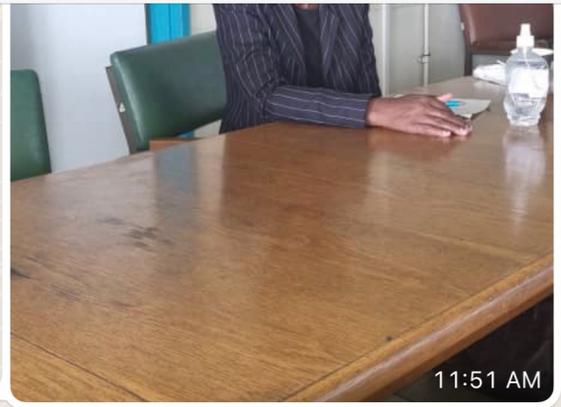
Fr. Candidates

n=12

Eng. Candidates

n=72

No difference in performance by language. Deep dive still required to see how statistically significant this may be in consideration of candidate numbers.



11:51 AM

+263 77 384 1024 ~NH
It seems the facilitators are shading lightning ⚡⚡⚡!
11:53 AM

~~XXXXXXXXXX~~
+263 77 384 1024 ~NH
It seems the facilitators are shading lightning ⚡⚡⚡!



Professor of 11:56 AM

Hello Epi team 12:16 PM

Score Report for
QWArS Professional Qualification Exam Zimbabwe

Candidate Name: Tapfumanei Mashe
Registration: ASLM144
Exam Date: 02/16/2022

Exam Program: Microbiology Track

Exam Result: Pass

Congratulations! You have passed the QWArS Professional Qualification Exam!

You have also gained 30 Continuous Professional Development (CPD) points from the Wits University in South Africa with this achievement. You will be receiving two certificates: the QWArS Professional Qualification Certificate from the ASLM Academy and a Certificate with the award of 30 CPD points. You have also been listed in the ASLM continental registry of AMR surveillance skilled professionals hosted at the ASLM academy. Please note that in order to maintain this registration, you will have to demonstrate continuous professional development activities related to AMR. More information will be provided in due course regarding maintaining this registration.

This professional registration demonstrates that you possess the knowledge and skill required to competently perform the tasks in Microbiology practice and surveillance for AMR. The registry provides governments, professional councils, employers, and the public with a level of confidence in the ability of the registered professional to perform these tasks and acknowledges the individual's commitment to maintaining that competence in the future through continued professional development.

We look forward to seeing you use what you have learned from the training program to help your country implement the National Action Plan on AMR and support other countries on the African Continent as you are a skilled resource in addressing the AMR

It was a wonderful course. Thank you so much ASLM team @Anafi @Sylvester Moyo and ZINAQ team Edina and Sibongile

7:45 PM

Tapfumanei Mashe

It was a wonderful course. Thank you so much ASLM team @Anafi @Sylvester Moyo and ZINAQ team Edi...

8:29 PM

Congratulations, keep them coming please 🤗
8:30 PM

+260 97 7783134 ~jejifpa23

QWArS Professional Qualification Exam Results

ASLM Academy
to Me
Today, 7:09 PM

Score Report for
QWArS Professional Qualification Exam Zambia

Candidate Name: Patrick Katemangwe
Registration: ASLM40
Exam Date: 02/14/2022

Exam Program: Microbiology Track

Exam Result: Pass

Congratulations! You have passed the QWArS Professional Qualification Exam

8:56 PM

+260 97 4342312 ~Stacy

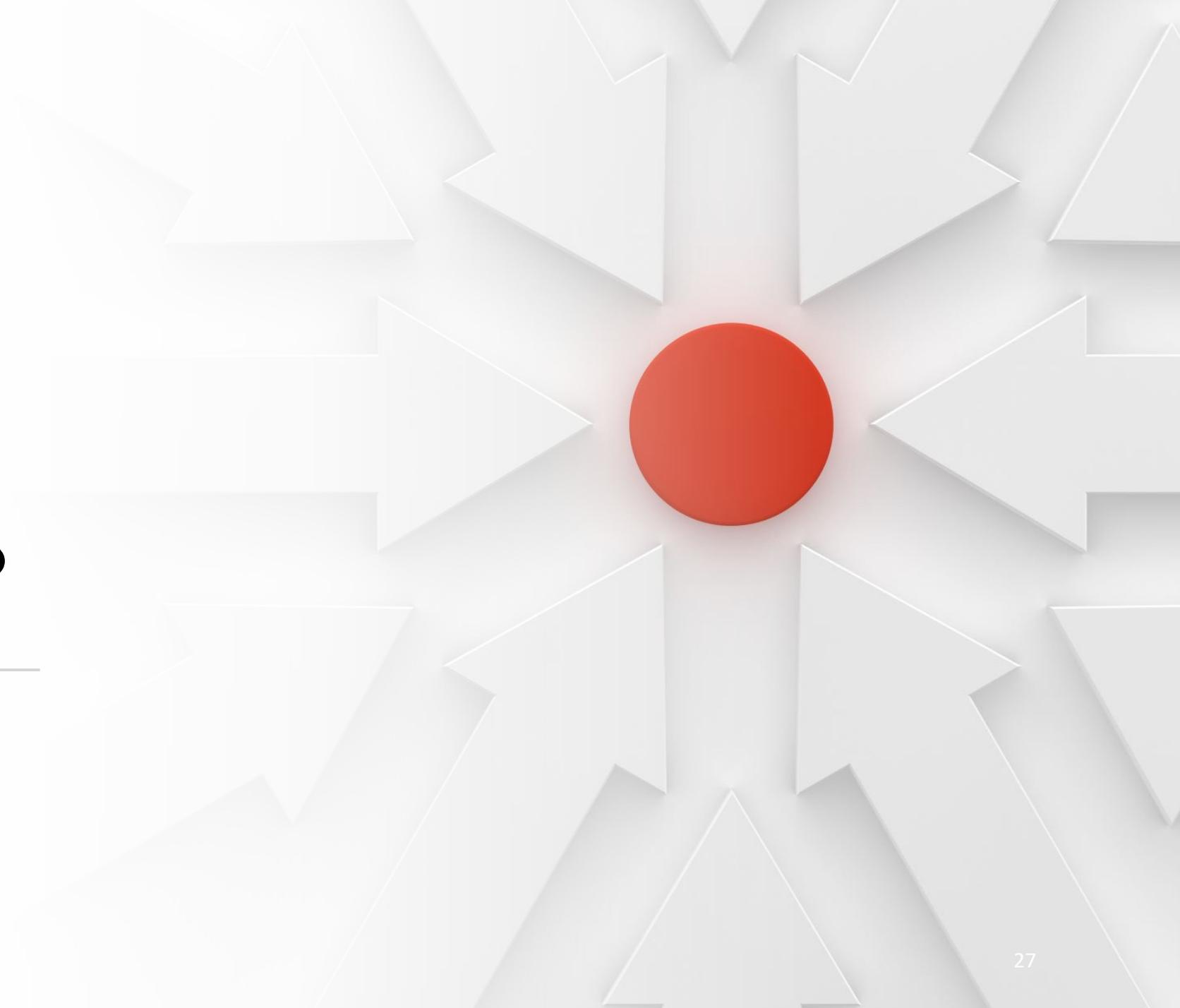
< All Mail

To: fannymbewe42@gmail.com > Hide

QWArS Professional Qualification Exam Results
Today at 7:09 PM

Some Issues

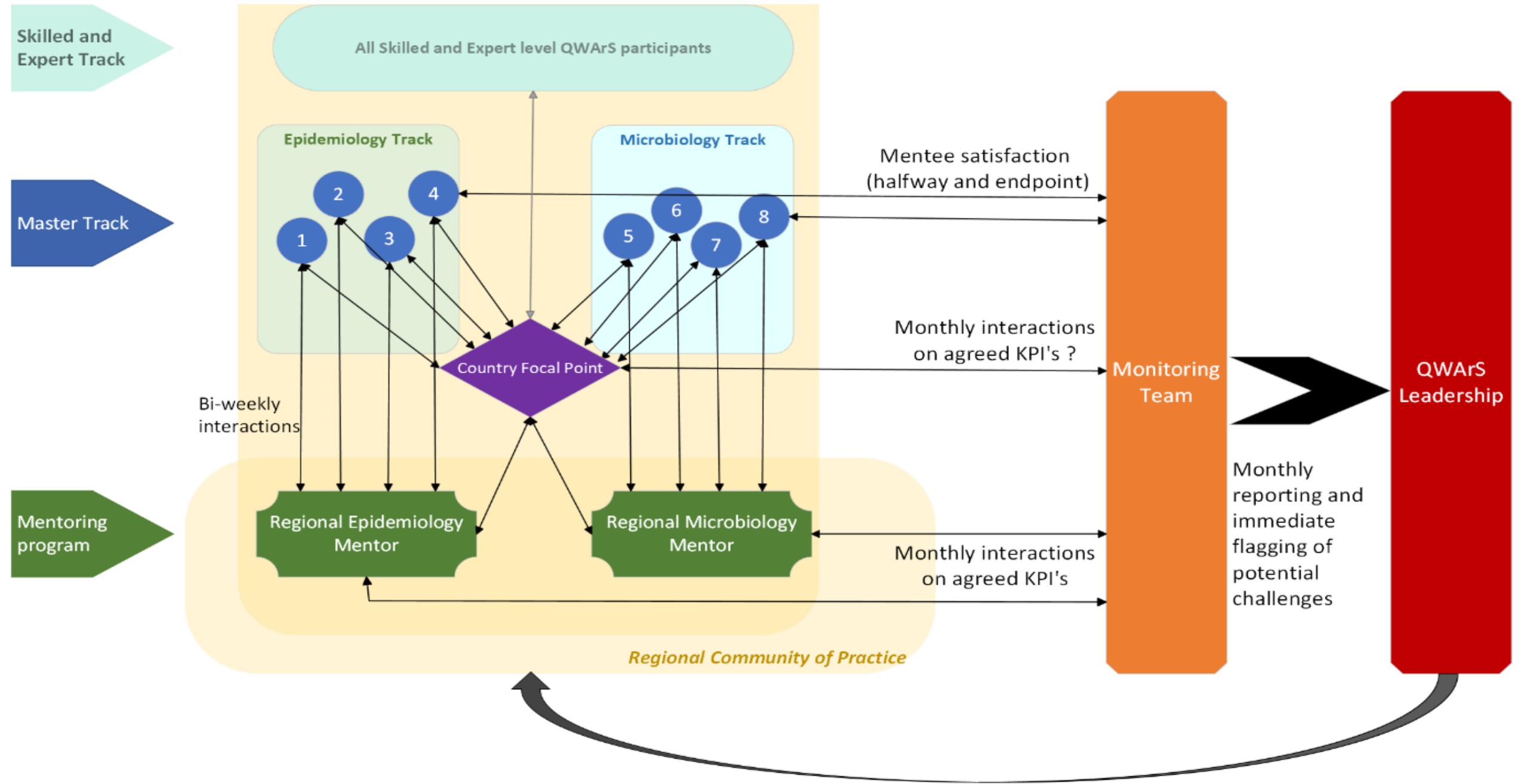
- Effect of the COVID-19 pandemic
 - Initially planned regional trainings, converted into in country trainings
 - tapping into available subject matter experts
 - (SMEs) provided the training on behalf of the QWArS consortium partners
 - Travel restrictions have resulted in delays
 - postponement of some of the modules to COVID-19 or unrest
- Exam skewed towards animal health



What's next ?

Mentorship program for the trainees

- Sustained support to trainees in their work
- At least 6 months



Looking ahead

- Master Track Training Delivery
- Consolidation of the framework via country engagement
 - the professional qualification and registration
 - The curriculum
 - The skilled workforce
- National Taskforces will be key
 - ensure continuous engagement to help facilitate the continuity and sustainability of the qualification framework.

Country National Task Forces formation

Nine
(9)



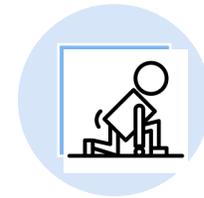
Constituted

Four
(3)



In progress

Three
(2)



Yet to begin

2nd Exam in August 2022

- Eligible countries that did not write in Jan-Feb window
- Another chance for those that did not reach passing grade (in Feb 2022 exams)
- More qualified personnel

A close-up photograph of an elephant's trunk holding a vibrant bouquet of flowers. The bouquet includes yellow daisies, red gerberas, and purple irises. The elephant's trunk is thick and wrinkled, with a small tusk visible on the right side. The background is a soft, out-of-focus grey.

THANK YOU
for your attention