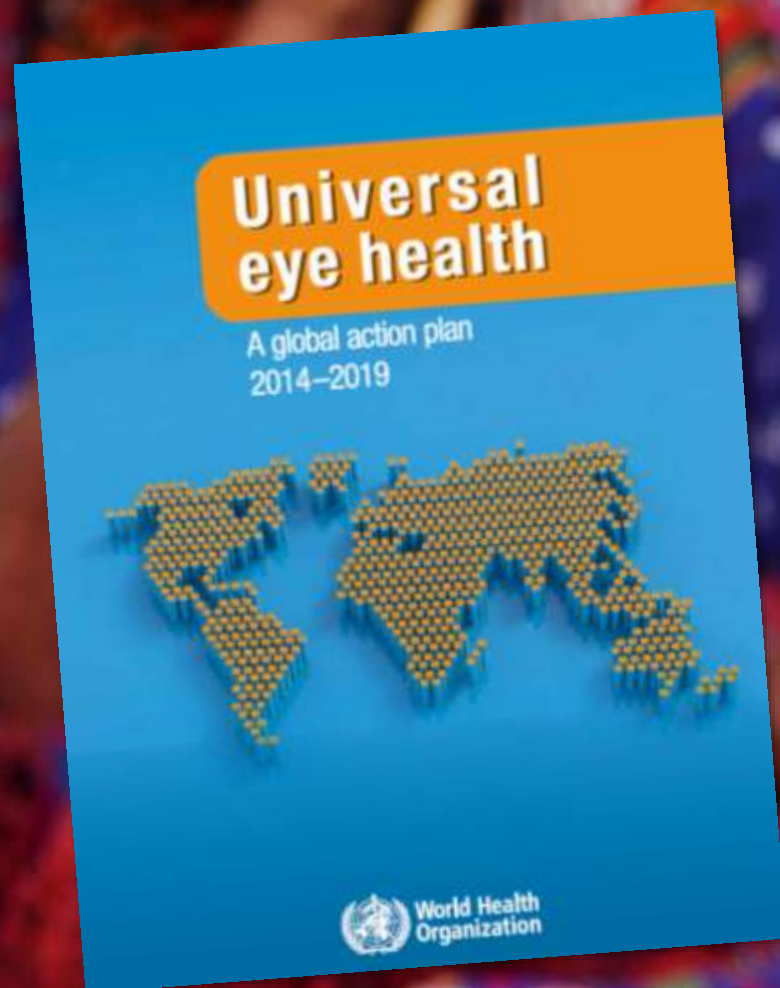# Assessing the impact of a global health MOOC/OER

Sally Parsley, Astrid Leck, Daksha Patel
OE Global, Delft, April 24th 2018

285 million visually impaired people

Universal eye health

A global action plan 2014–2019

World Health Organization

(WHO, 2013)

Eye health human resources challenges
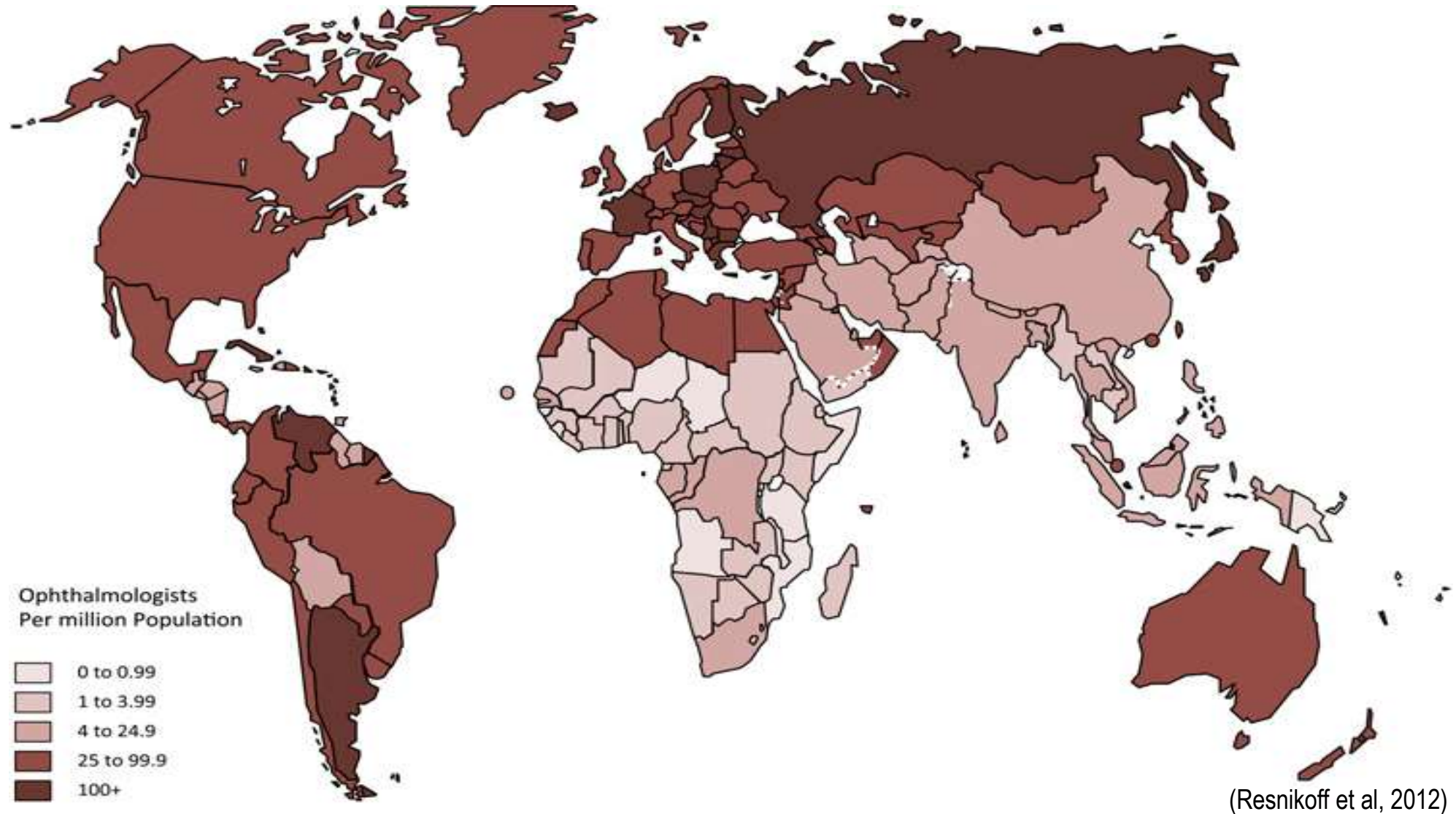
Ophthalmologists
Per million Population

- 0 to 0.99
- 1 to 3.99
- 4 to 24.9
- 25 to 99.9
- 100+

(Resnikoff et al, 2012)

Global Blindness MOOC/OER


- Essentials of planning and management for eye care services
- Accessible, acceptable and applicable content for a variety of eye care contexts
- OER to enable further local educational transformation
- Involvement of global experts in content development and mentoring

What happened?

	Run 1 (Apr 15)
Joiners[4]	3,544
Learners[4]	**2,183**
Live in LMICs[1]	69%
Work in Health/social care[1]	81%
Completed ≥50% of course[3]	744 (34%)
Completed ≥90%[3]	444 (20%)
Certificates/upgrades sold	143 (7%)
Course rated as: "Excellent/Good" [2]	96%

No. of learners
(1,043 total)
- 1-10
- 11-25
- 26-75
- +75
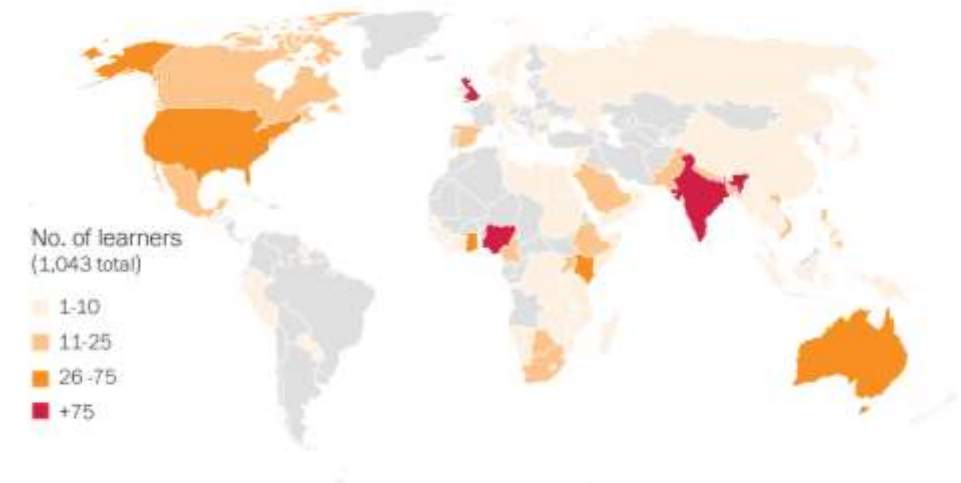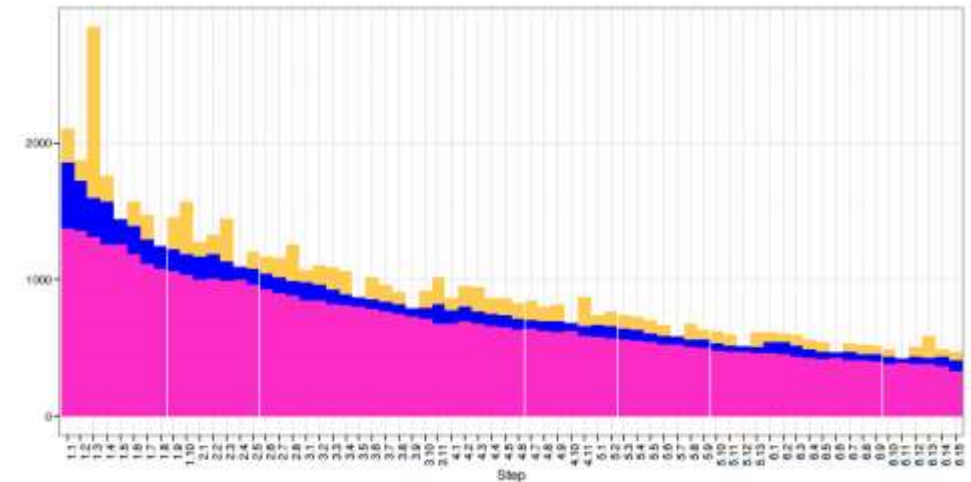
[1] Pre-course survey (n=1,107) [2] Post course survey (n=214) [3] Datasets.   *All % shown are % of learners*

Learning experience & applicable knowledge

- "The training was very valuable and **cross sharing of vast experiences so enriching**." *Kenya*

- "Good teaching **materials to disseminate the knowledge** to others to adopt" *Bangladesh*

- "I have learnt that **only seeing patients in my clinic will never overcome the burden of blindness**." *Burundi*

- "I can now use planning principles, doing a SWOT Analysis and setting SMART objectives to **start planning the delivery and evaluation of outreach programme."** *Cameroon*

- "I have learned how to systemeticaly analyze a complicated problem and address it. I have been involved in an outreach program in *Honduras* for the past 11 years, and I'm convinced that **I can use what I've learned to try and make the program more effective.**"

- "To me, the course played a very vital role as it **empowered me** with planning skills especially for Vision 2020 national and district planning [...] i have already **started using the information on my daily activities** as well as in planning." *Botswana*

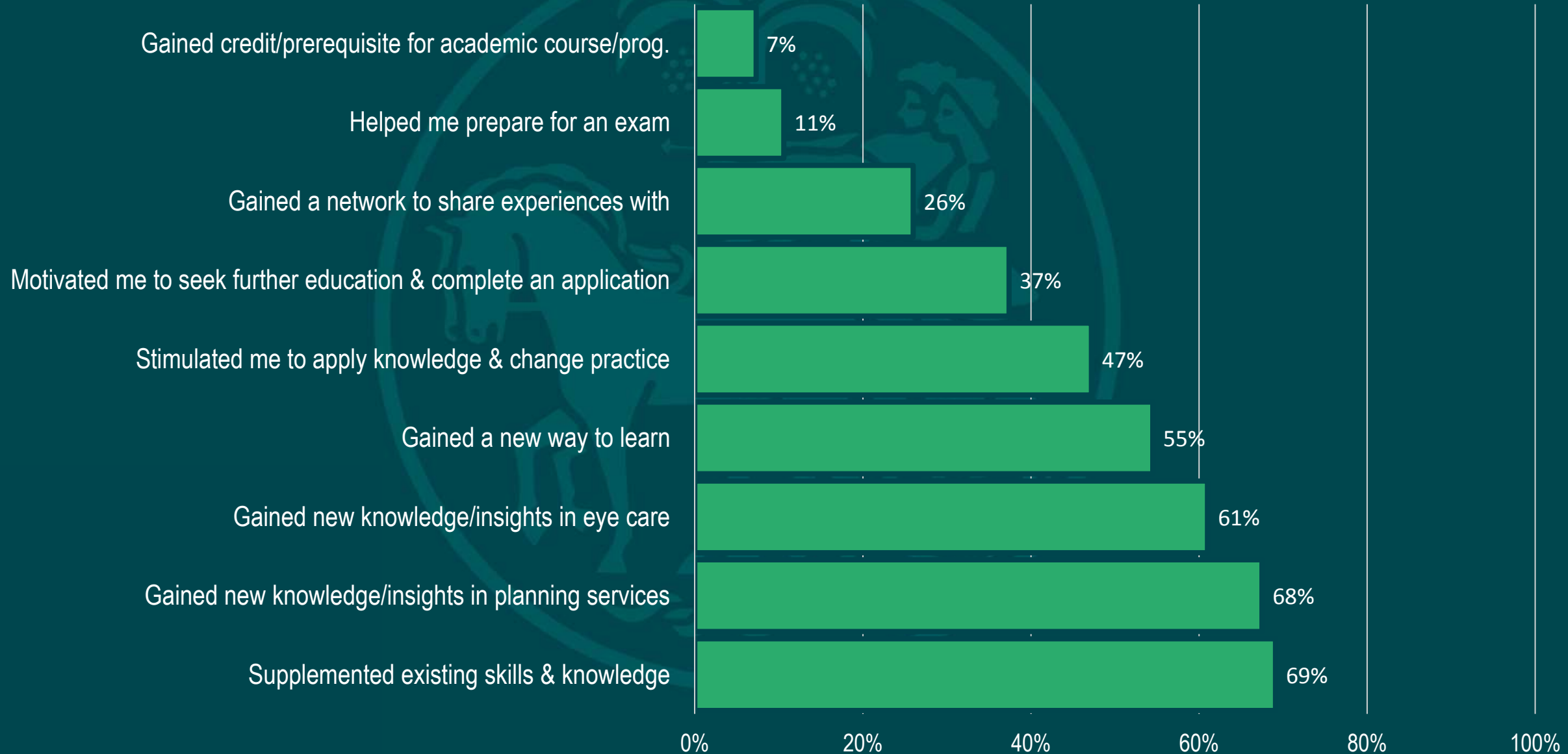# So what? Online survey after 1 year

94% working in eye care & 82% living in LMICs (n=139)

- Had participation led to career or educational benefits?
- Had the OER been used to support further teaching and learning?
- What impact had the course have on their practice as health providers, within the constraints of their health system?

88% reported educational benefit

Category	Percentage
Gained credit/prerequisite for academic course/prog.	7%
Helped me prepare for an exam	11%
Gained a network to share experiences with	26%
Motivated me to seek further education & complete an application	37%
Stimulated me to apply knowledge & change practice	47%
Gained a new way to learn	55%
Gained new knowledge/insights in eye care	61%
Gained new knowledge/insights in planning services	68%
Supplemented existing skills & knowledge	69%
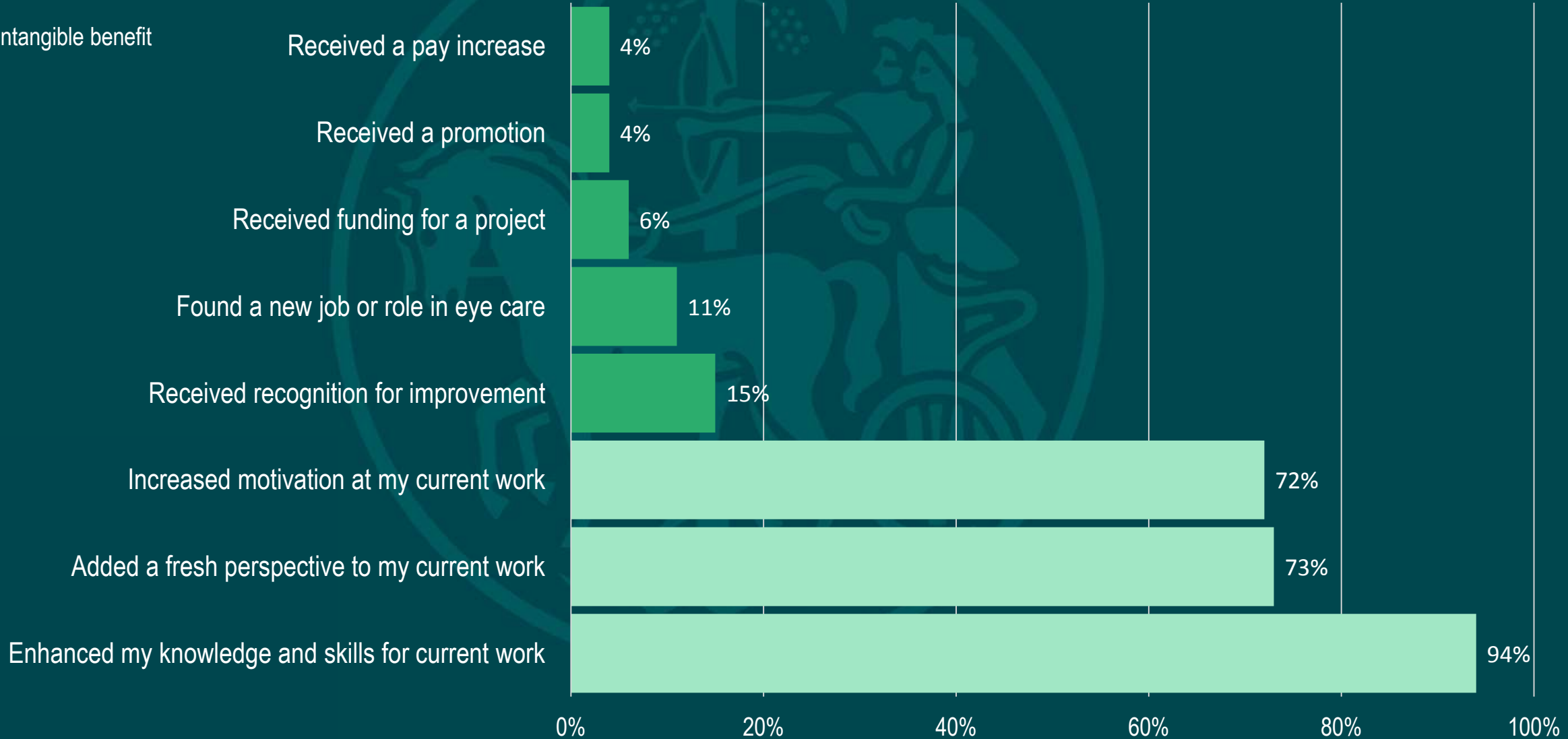
70% reported re-use of materials
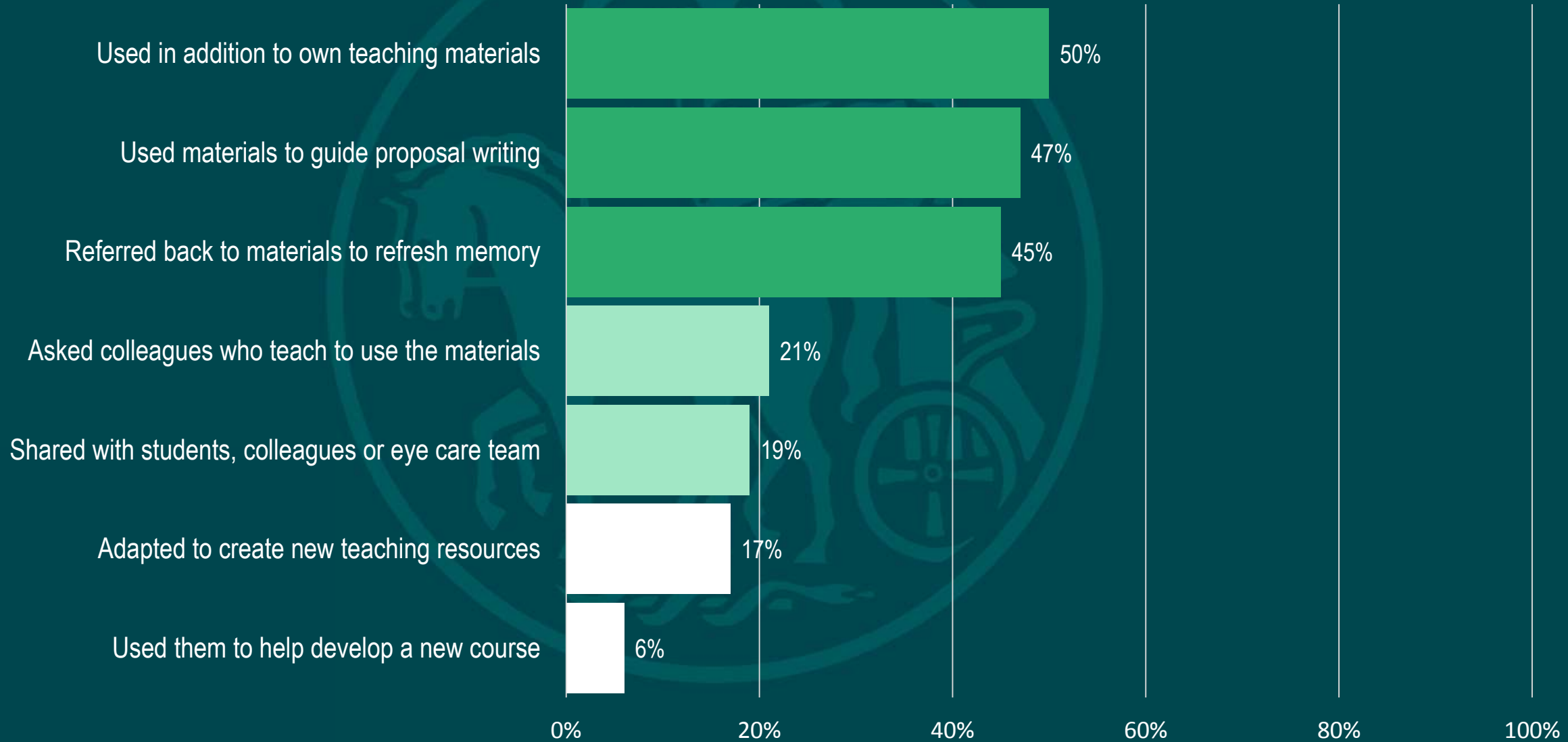
Used in addition to own teaching materials	50%
Used materials to guide proposal writing	47%
Referred back to materials to refresh memory	45%
Asked colleagues who teach to use the materials	21%
Shared with students, colleagues or eye care team	19%
Adapted to create new teaching resources	17%
Used them to help develop a new course	6%

0%   20%   40%   60%   80%   100%
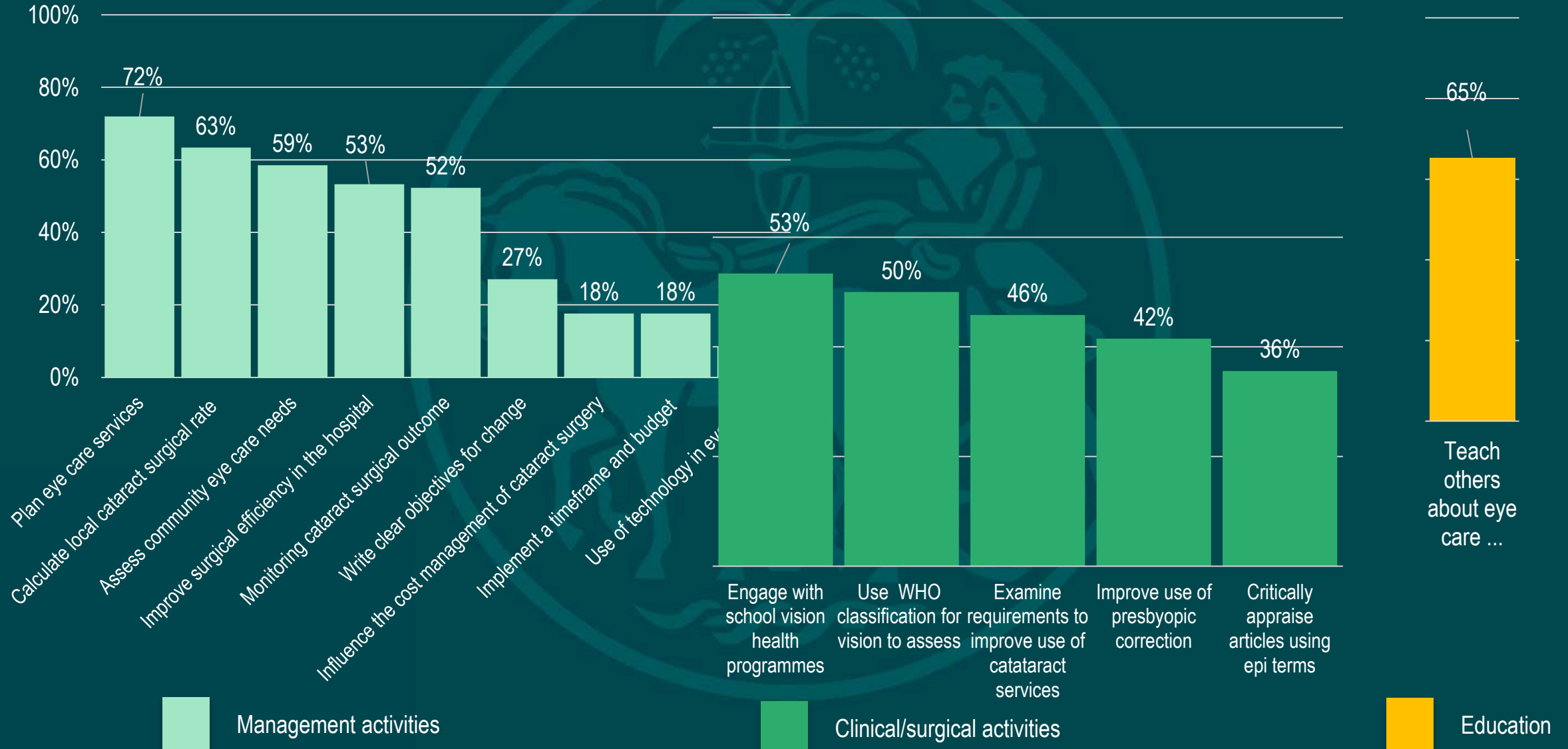
- "To me it was,**a.real refresher course**, being one of the first graduates of the MSc course in 1994 and **not having an opportunity or time to go for a refresher program**. Useful. Need more of this" *Ghana*

- "I loved the forum and the discussions. The quizzes in the middle were a big help. **Because of the course I am able to properly plan and structure an ideal eye unit** …" *Kenya*

- "We deal mostly with low income group and their issues are almost same as I studied in course. **The course motivated me** for community eye health care awareness **and we started working with schools to give them bases awareness, early eye screening**." *Pakistan*

In summary

- The course had **widened participation** in public health eye care education by reaching a range of eye health professionals across many countries, especially in LMICs

- Learning **was applicable** at the local level

- OER content did support **further teaching and learning** at the local level
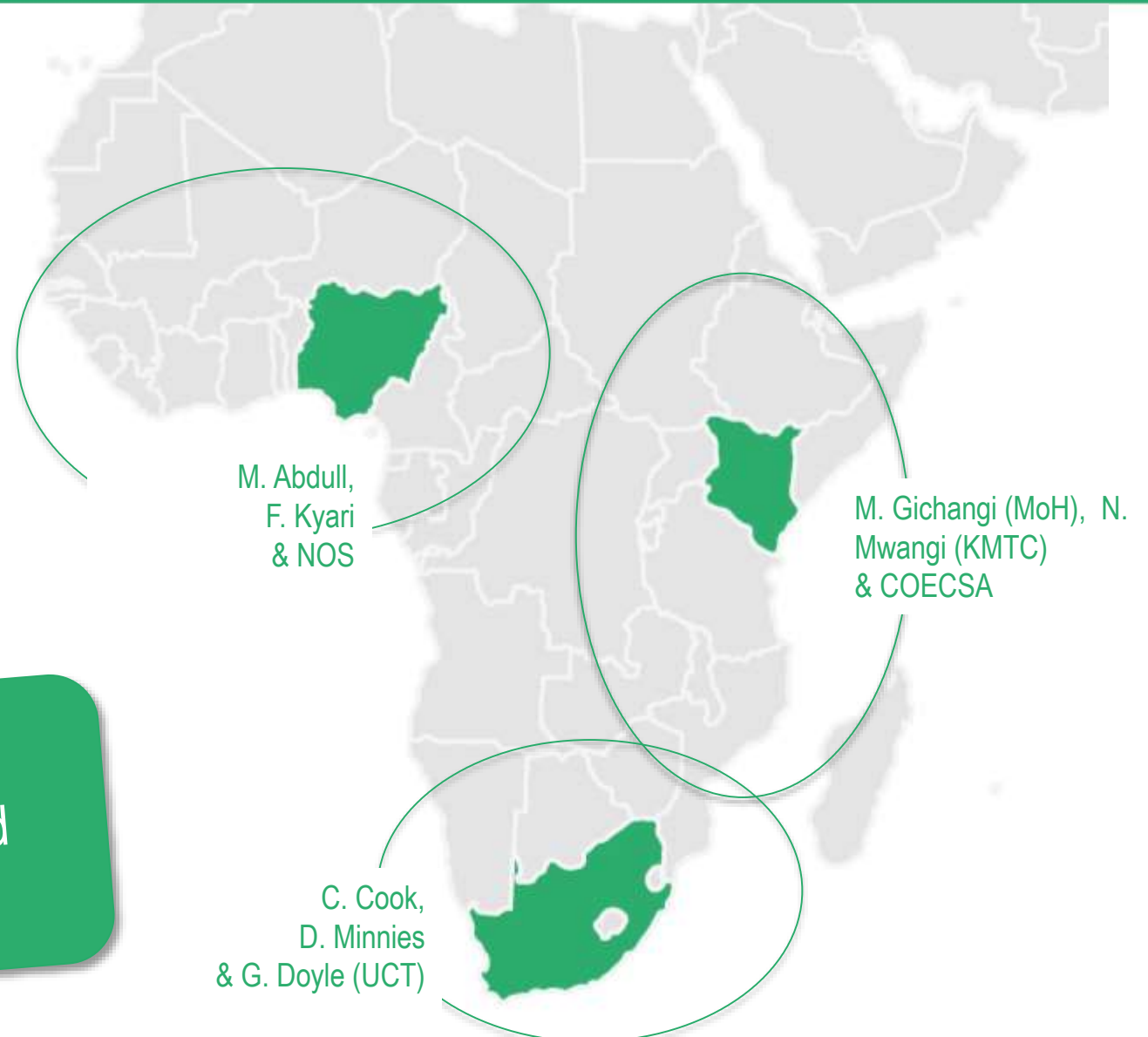
Limitations:
- Self-selecting group of respondents
- Unable to link respondents with course data sets
- Questions listed potential pre-identified benefits for individuals

Further activity and 'stories' of impact

- New project with 3 partners localising the MOOC/OER

- More case studies from health workers, educators and institutions

- Influencing the LSHTM MSc PHEC

Impacts are complex and emergent

M. Abdull, F. Kyari & NOS

M. Gichangi (MoH), N. Mwangi (KMTC) & COECSA
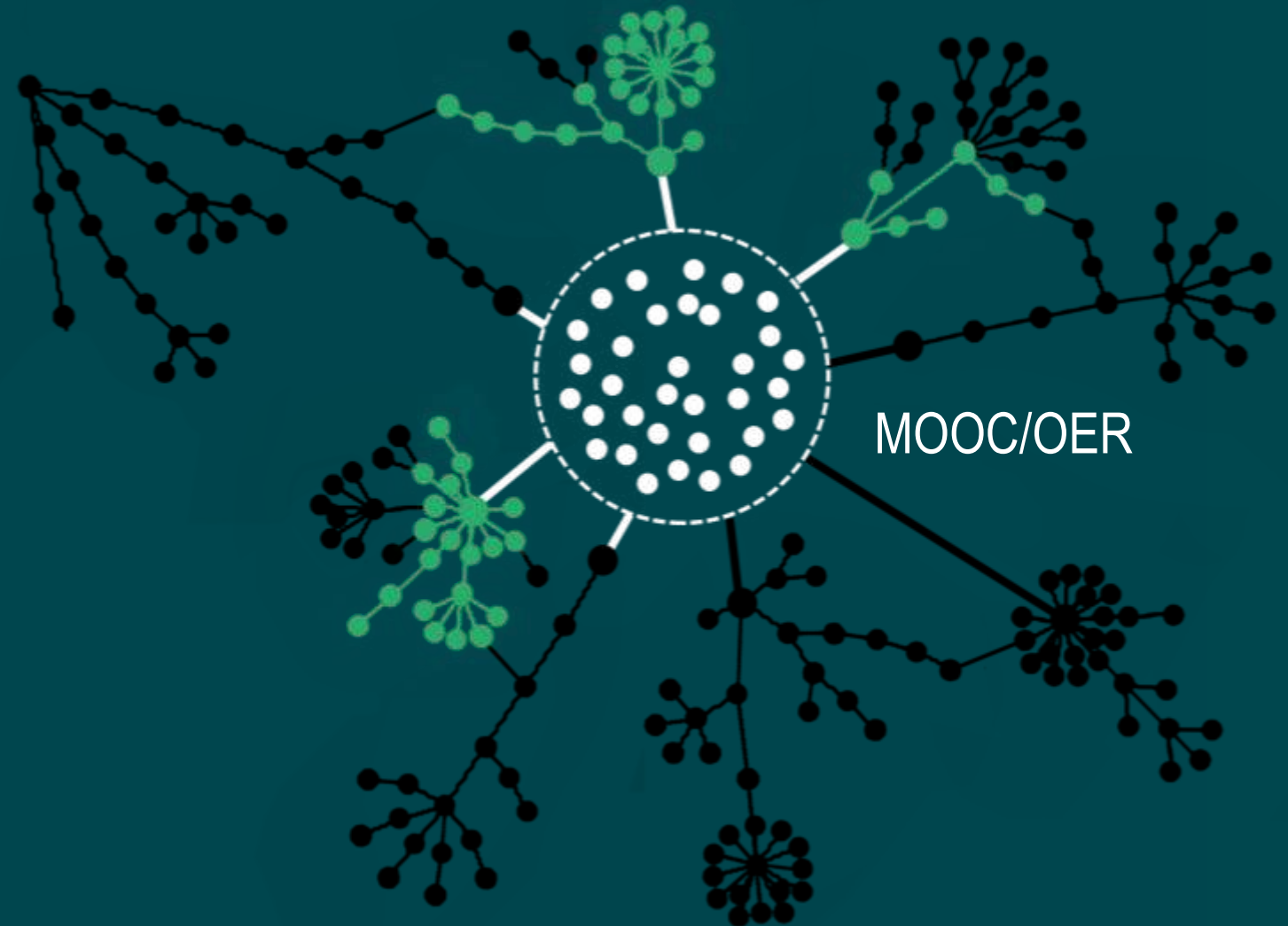
C. Cook, D. Minnies & G. Doyle (UCT)

MOOC/OER: Constraints and enablers

- Lack of coverage or value creation
- Equity and inclusion considerations (Hodgkinson-Williams & Arinto, 2017)

OER Adoption Pyramid
(Trotter & Cox, 2016)

MOOC/OER

The value creation framework (VCF)

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Capturing "the learning enabled by community involvement and networking" (Wenger et al., 2011)

Indicators

Stakeholders	Cycle 1. Immediate value	Cycle 2. Potential value	Cycle 3. Applied value	Cycle 4. Realized value	Cycle 5. Reframing value
Health worker or educator **Manager** **Planner / policymaker** **Sponsor**	Levels of access, activity, participation, connections & interactions with people/resources Value and quality of above Meta conversations about the network	Information received Skills acquired Change in perspective Inspiration Confidence Types and intensity of social relationships	Implementation of advice & solutions Reuse of products and tools Use of social connections New processes or policies Innovation in practice Transferring learning practices	Personal performance Organisational performance & reputation Knowledge products as performance	Community aspirations Assessment Relationships with stakeholders Institutional changes New frameworks

Global Blindness MOOC/OER VCF: Examples

Cycle 1. Immediate value	Cycle 2. Potential value	Cycle 3. Applied value	Cycle 4. Realized value	Cycle 5. Reframing value
Data on access, participation & relevance of interactions (A) "The training was very valuable and cross sharing of vast experiences so enriching." (A) "Access to quality CPD is limited and costly. This method allows study outside of the working day and without cost" (C) Activity during the 3 course localisation projects (D)	"I can now [..] start planning the delivery and evaluation of outreach programme" (A) "Good teaching materials to disseminate the knowledge to others to adopt" (A) Intend to pursue my interest in this subject by engaging with my national prevention of blindness committee (B, 55%) "I am able to properly plan and structure an ideal eye unit." (C)	"Global Blindness course has really help me a lot to run Vision 2020 Program" (C) Shared the OER (C, 47%) "The course helped me to participate well in other futurelearn courses." (C) Outputs of the 3 course localisation projects (D) Using content to teach outreach team (__) I applied to the LSHTM as a re____ (E)	Received recognition for improvement (C, 15%) "Increase in CSR in 3 remote districts in Kenya" (D)	"… am writing a proposal that will enable us do screening of university students before start of next academic year." (C) "started working with schools to give them bases awareness, __y eye screening" __loping an OER __e (D)

Using VCF to develop quant & qualy instruments for assessing impact

Data sources: (A) Datasets from FL for run 1   (B) GB1 post course survey   (C) 1 year later online survey
(D) Stories shared by localising partners   (E) Other informal stories shared with the LSHTM MOOC/OER team

In summary

- Follow up online surveys can highlight if a MOOC/OER is helping to bridge a known training gap.

- Now developing mixed methods approach to gain further insight into cycles of value creation, + constraints and enablers, for all stakeholders in our global health MOOCs/OER.

	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5
Health worker					
Manager					
Planner / policymaker					
Sponsor					
Constraints and enablers (agential, cultural & structural) (Cox & Trotter, 2017)					

Thank-you

Find out more

https://ICEH.lshtm.ac.uk/oer

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