WHO-HEE: Working for Health 2030

Ensuring a diverse primary care medical workforce

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More than 90% of our research in Allied Health was judged to be Internationally Excellent or World-leading in the latest Research Excellence Framework

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Overview

- Background

- Sources of differential attainment

- What our research tells us

- Potential solutions

More than 90% of our research in Allied Health was judged to be Internationally Excellent or World-leading in the latest Research Excellence Framework

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The state of medical education and practice in the UK
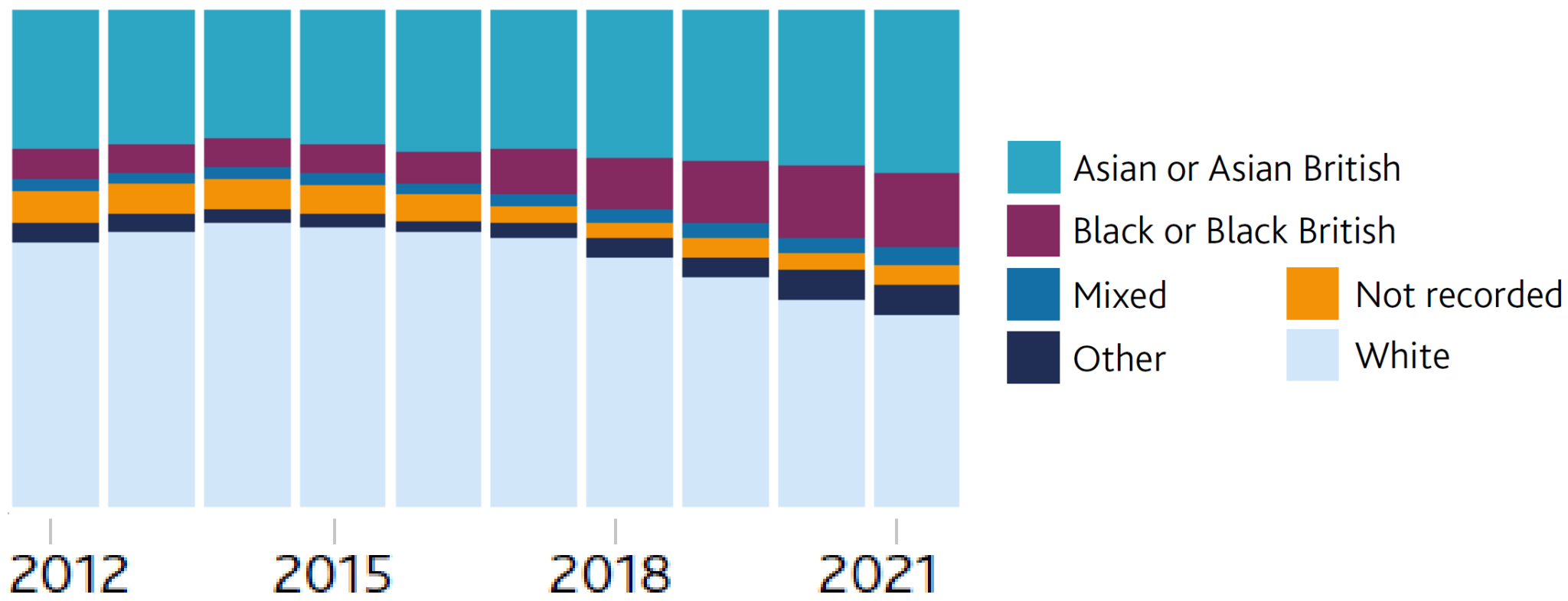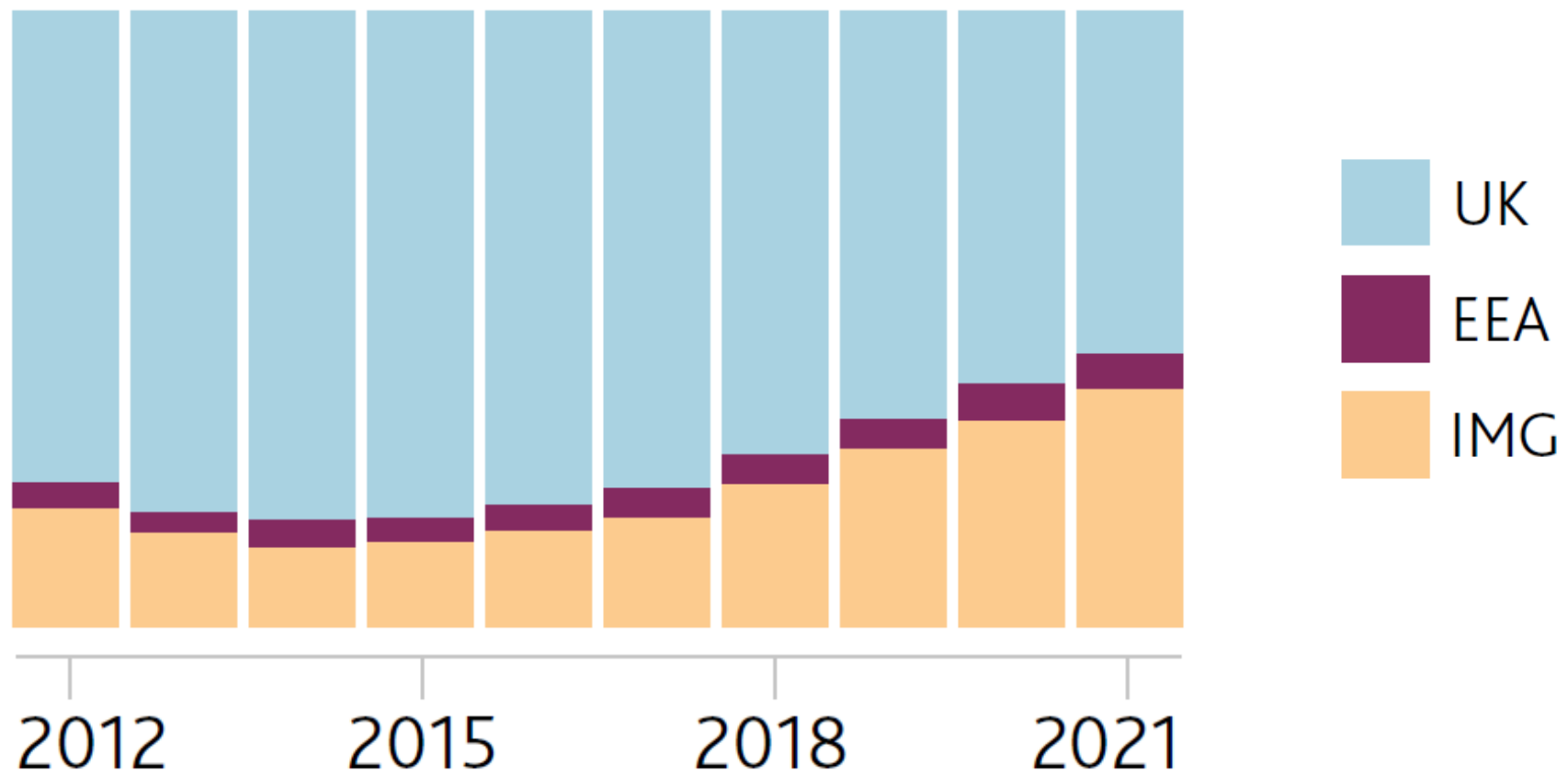
The workforce report

2022

"If we do not take tangible action to make support, inclusivity and fairness the norm, we will be doing a disservice not only to the doctors who want to work here, but also to the patients in need of their care."

Female   Male

2012   2015   2018   2021

Asian or Asian British
Black or Black British
Mixed
Other
Not recorded
White

2012   2015   2018   2021

Legend: UK, EEA, IMG

2012   2015   2018   2021

12,439 licensed doctors (4%) declared one or more disabilities. Considering that the Department for Work and Pensions' Family Resources Survey states that 22% of the general population and 21% of adults report being disabled, our number could be an underestimate.
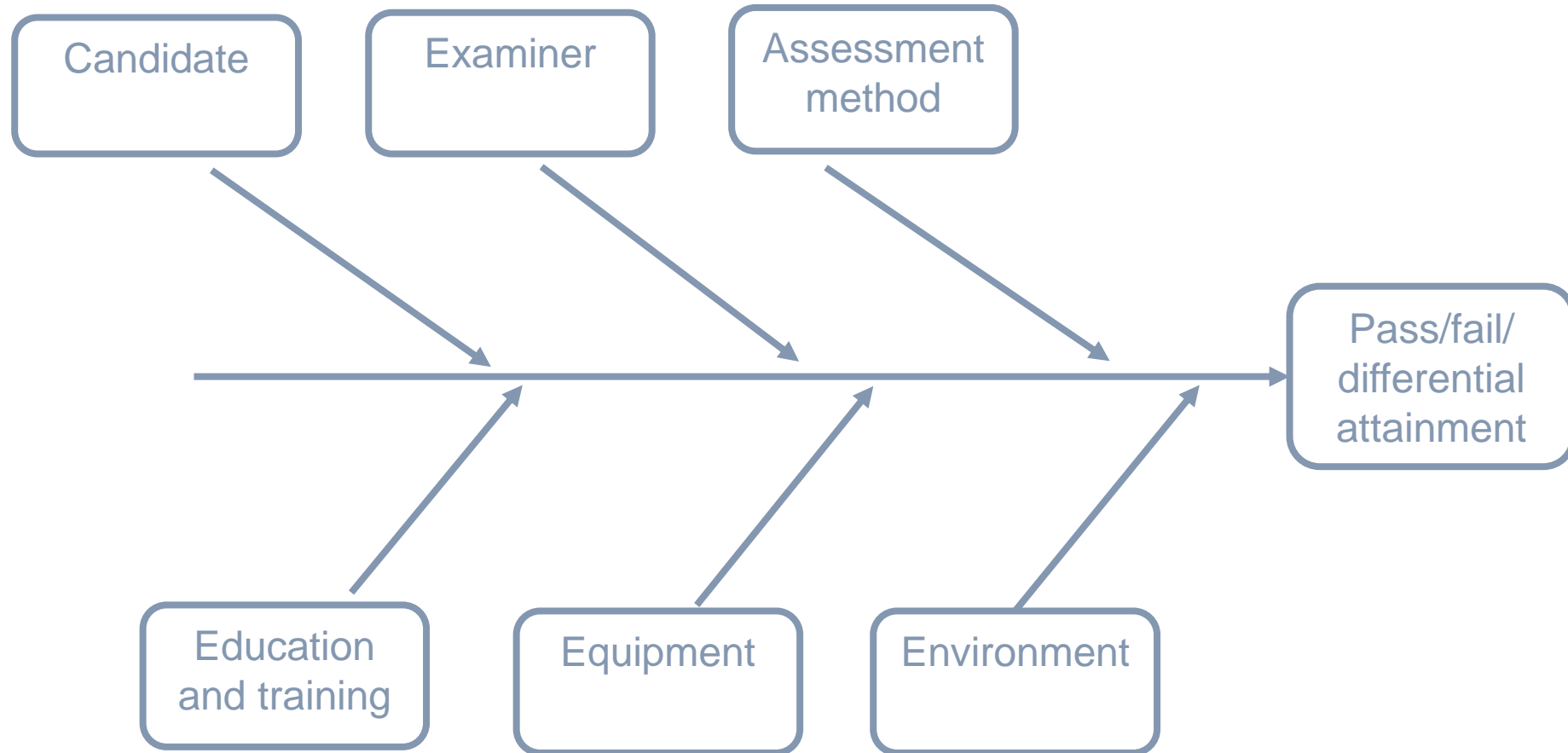
Differential attainment

- Differences by candidate (protected) characteristics: sex, ethnicity, disability

- Important, controversial

- Ethical and legal issues

- No clear explanations but theories of why it exists and what to do about it abound

For every complex problem
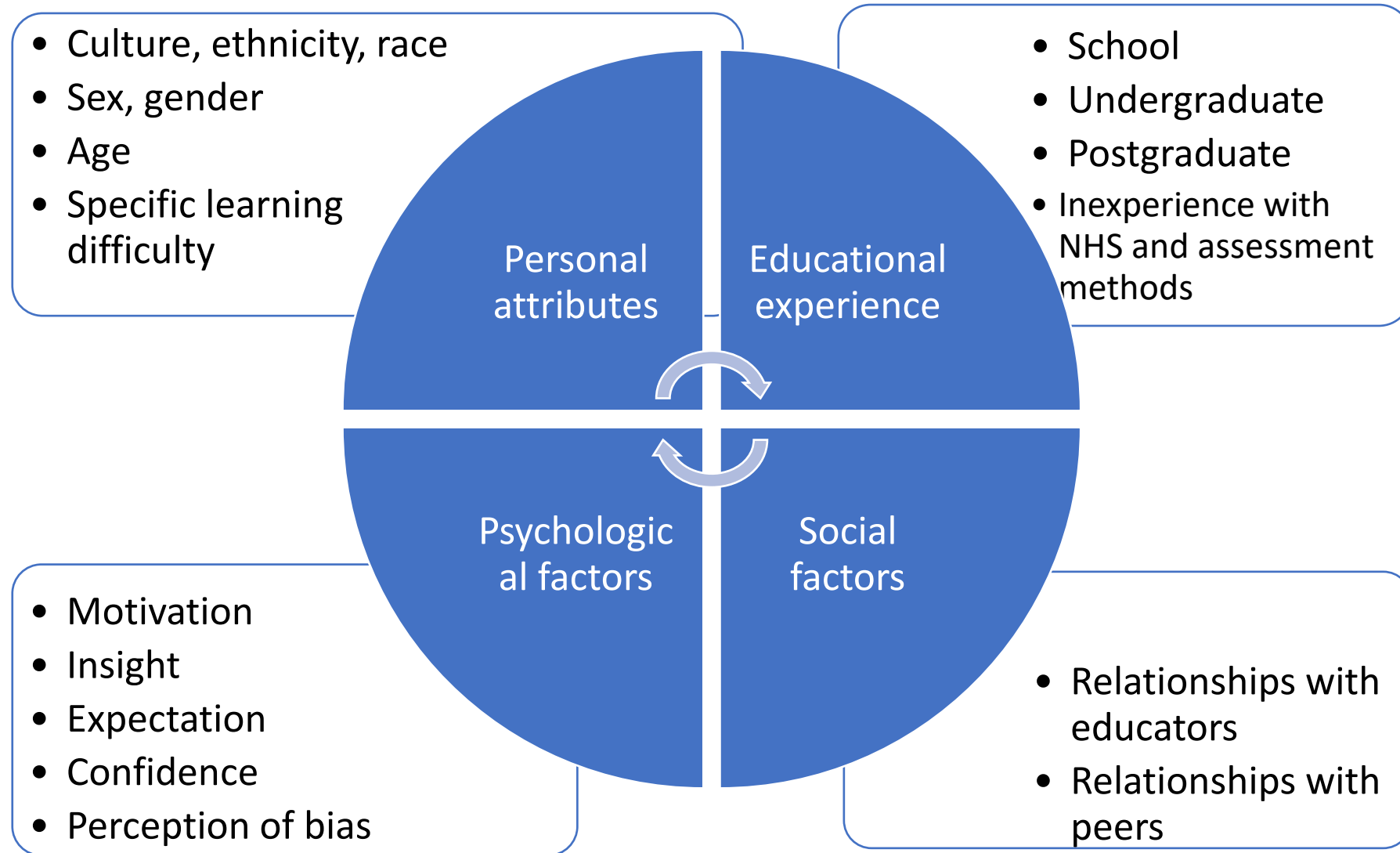there is an answer that is clear,
simple, and...

wrong

H. L. Mencken

Factors contributing to performance

Trainee and educational factors

- Culture, ethnicity, race
- Sex, gender
- Age
- Specific learning difficulty

- School
- Undergraduate
- Postgraduate
- Inexperience with NHS and assessment methods

Personal attributes

Educational experience

Psychological factors

Social factors

- Motivation
- Insight
- Expectation
- Confidence
- Perception of bias

- Relationships with educators
- Relationships with peers

Woolf K. et al. Fair training pathways for all: understanding experiences of progression GMC, 2017.

Assessment factors

Examiner bias?
Unconscious bias?

- Role players unrepresentative?
- Role players biased?

Examiner factors

Role-player factors

Case/item factors

Psychometric factors

- Case or item bias?

- Bias in standard setting?

Performance of candidate groups
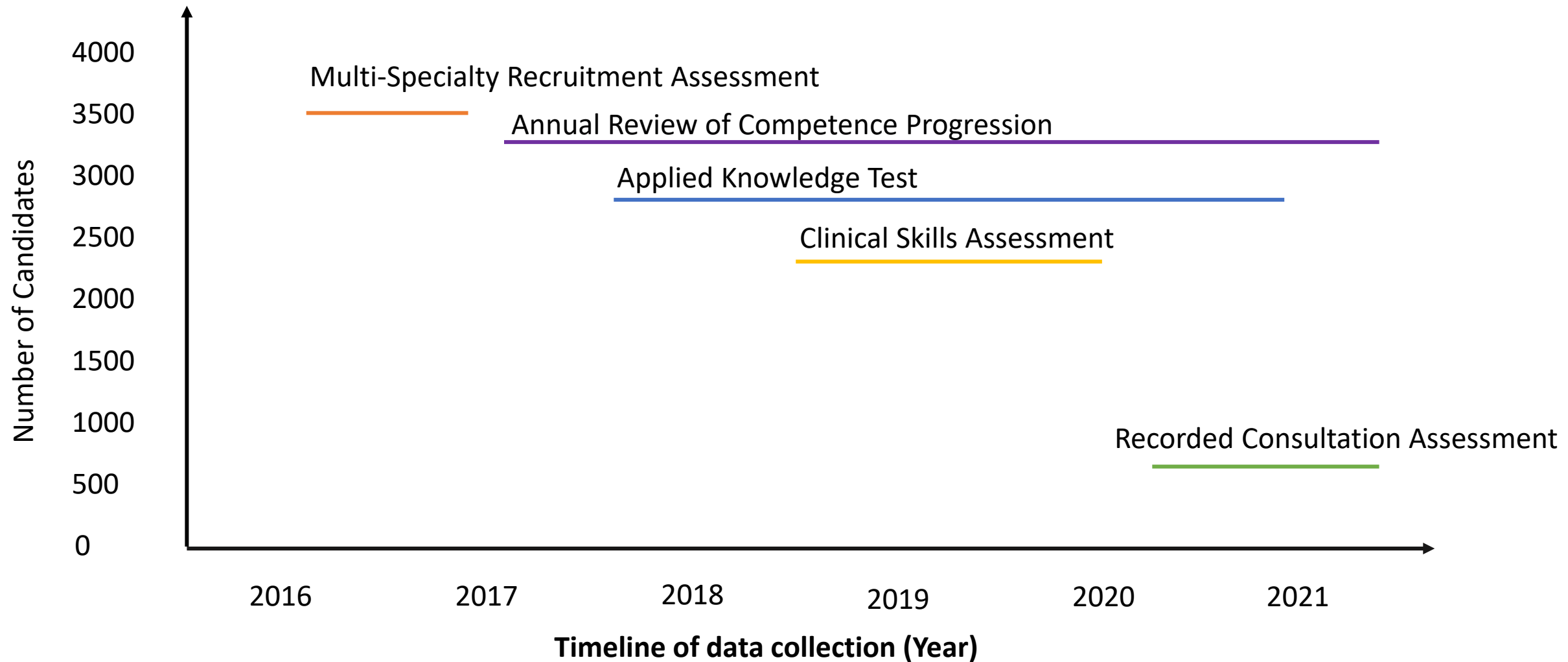
Factors associated with passing the Applied Knowledge Test

Predictor	Odds Ratio (OR)	95% CI of OR	P-value
Sex (Female)	1		
Male	1.29	0.70, 2.36	0.41
Ethnicity (White)	1		
Ethnic minority	**2.05**	**1.03, 4.10**	**0.042**
Mixed	1.20	0.14, 10.00	0.87
Qualification Country (UK)	1		
Not-UK	1.17	0.54, 2.54	0.69
Declared Disability (No)	1		
Yes	0.86	0.42, 1.77	0.69
MSRA Bands (under 400)	1		
400 – 419	3.47	1.28, 9.36	0.014
420 – 439	4.29	1.42, 12.94	0.010
440 – 459	6.86	2.40, 19.11	<0.001
460 – 479	9.93	3.18, 31.03	<0.001
480 – 499	15.34	4.35, 54.08	<0.001
500 – 519	37.53	8.37, 168.40	<0.001
520 – 539	53.30	9.58, 296.52	<0.001
540 – 559	104.06	11.28, 959.69	<0.001
Cons	1.69	0.55, 5.21	<0.001

Factors associated with passing the Clinical Skills Assessment

Predictor	Odds Ratio (OR)	95% CI of OR	P-value
Sex (Female)	1		
Male	0.58	0.39, 0.86	0.007
Ethnicity (White)	1		
Ethnic minority	**0.72**	**0.43, 1.20**	**0.20**
Qualification Country (UK)	1		
Not-UK	**0.27**	**0.16, 0.45**	**<0.001**
Declared Disability (No)	1		
Yes	**0.38**	**0.24, 0.61**	**<0.001**
MSRA Bands (under 400)	1		
400 – 419	0.92	0.40, 2.10	0.85
420 – 439	2.58	0.97, 6.88	0.059
440 – 459	1.04	0.47, 2.33	0.92
460 – 479	0.99	0.44, 2.22	0.97
480 – 499	1.48	0.61, 3.60	0.39
500 – 519	4.00	1.31, 12.23	0.015
520 – 539	2.47	0.85, 7.15	0.097
560 – 579	11.58	1.36, 98.83	0.025
580 – 599	6.86	0.80, 58.98	0.080
Cons	17.76	6.83, 46.20	<0.001

Factors associated with passing Recorded Consultation Assessment

Predictor	Odds Ratio (OR)	95% CI of OR	P-value
Sex (Female)	1		
Male	0.74	0.37, 1.45	0.38
Ethnicity (White)	1		
Ethnic minority	**0.48**	**0.18, 1.32**	**0.16**
Mixed	0.14	0.20, 0.94	0.043
Qualification country (UK)	1		
Non-UK	**0.30**	**0.11, 0.80**	**0.017**
Declared Disability (No)	1		
Yes	0.58	0.27, 1.23	0.16
MSRA bands (under 400)	1		
400 - 419	5.46	1.61, 18.51	0.006
420 - 439	5.98	1.27, 28.18	0.024
440 - 459	5.00	1.50, 16.65	0.009
460 - 479	2.60	0.81, 8.24	0.11
480 - 499	6.24	1.50, 25.95	0.012
500 – 519	5.95	1.16, 30.47	0.032
520 – 539	9.89	0.89, 109.88	0.062
560 – 579	9.97	0.71, 142.06	0.090
580 – 599	8.03	0.67, 95.92	0.100
Cons	7.69	1.55, 38.28	0.013

Factors associated with annual progression through training

Predictor	Odds Ratio (OR)	95% CI of OR	P-value
Sex (Female)	1		
Male	0.50	0.37, 0.68	<0.001
Ethnicity (White)	1		
Ethnic Minority	0.70	0.49, 1.01	0.057
Mixed	0.62	0.26, 1.46	0.27
Qualification Country (UK)	1		
Not-UK	0.50	0.34, 0.74	0.001
Disability (No)	1		
Yes	0.33	0.23, 0.49	<0.001
MSRA Bands (under 400)	1		
400 – 419	0.81	0.34, 1.94	0.64
420 – 439	1.14	0.47, 2.76	0.78
440 – 459	1.14	0.50, 2.61	0.75
460 – 479	1.56	0.67, 3.60	0.30
480 – 499	1.58	0.68, 3.69	0.29
500 – 519	1.72	0.72, 4.07	0.22
520 – 539	4.18	1.59, 11.01	0.004
540 – 559	3.30	1.24, 8.83	0.017
560 – 579	3.32	1.20, 9.21	0.021
580 – 599	12.06	2.39, 60.87	0.003
600 and over	5.65	1.10, 29.06	0.038
Cons	8.04	3.39, 19.05	<0.001

Conclusion

Identified causes of differential attainment amenable to intervention:

- Selection (MSRA) scores
- Early assessment of dyslexia, provision, and reasonable adjustments
- Education and training, particularly for candidates performing less well at selection and IMGs

Lacking evidence

- Bias in assessment
- Relationships with educators and peers
- Expectation/insight

Further research needed: Impact of educational interventions on performance for different groups

Thanks for listening!

Q: How do you ensure diversity in your primary care workforce?

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