

# The mentoring toolkit: Mentoring and the attainment gap

This document details what we know about mentoring and its potential role in reducing the attainment gap in postgraduate medical education.

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This document is part of a toolkit to help organisations set up and run mentoring schemes.

Other documents in the toolkit:

- *Setting up a formal mentoring scheme*
- *Barriers to delivering a formal mentoring scheme and how to overcome them*

To access these and other resources [visit the toolkit on the GMC website.](#)

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## Summary

### What is mentoring and what are the benefits?

- Mentoring is a learning relationship where the mentor shares their knowledge, skills, and experiences to help the mentee progress.
- The benefits of mentoring for mentees, mentors, and organisations:
  - **Improved performance, career success, self-esteem, and job satisfaction for mentees.**
  - **Improved performance and job satisfaction for mentors.**
  - **Better staff retention and morale and may improve patient safety in organisations.**
- Mentoring is beneficial for the mentee at all career stages, and particularly around times of transition. Mentoring is promoted in *Good Medical Practice* as part of continuous professional development (CPD).

### What is known about access to mentoring for people from diverse backgrounds?

- Informal mentoring is more difficult to access for women and people from ethnic minority backgrounds.
- Formal mentoring schemes are more accessible for people with these protected characteristics.
- Mentoring is most enthusiastically taken up by women and people from ethnic minority backgrounds, if offered.

### What is the role of mentoring in reducing the attainment gap?

- The attainment gap exists within postgraduate medical education, but this phenomenon is also seen in other sectors.
- Mentoring has been shown to increase diversity at senior positions in organisations.
- Mentoring, as part of a package of measures, has been highlighted in postgraduate medical literature as a key way to help reduce the attainment gap.

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## Definition

- A **mentor** is a person who shares their knowledge, skills, and experiences to help another person progress.
- **Mentoring** is the process of a mentor helping and giving advice to a younger or more inexperienced person.

The use of the term increased steadily from the 1980s and took off around the turn of the century, indicating the increased interest in mentoring in the last twenty years.

- Within medicine, **traditional mentoring** usually involves a senior clinician (such as a consultant, specialty or specialist doctor, or general practitioner) as the mentor to a more junior colleague (for example, a trainee or locally employed doctor).
- **Peer mentoring** involves two individuals of a similar level (for example, two trainees) where one has more experience and knowledge of a particular aspect of medicine or work.

Examples of this may include a registrar in a specialty mentoring a foundation doctor to help with their application to that specialty, or an experienced international medical graduate (IMG) mentoring another IMG who is new to the UK.

The term 'mentor' comes from Greek mythology. Odysseus entrusted his son Telemachus to his friend and advisor Mentor before setting out on his voyage. Telemachus was guided and advised by Mentor while his father was away.

The term 'mentoring' was used to describe a relationship where an experienced person advises and trains a less experienced person from the middle of the 18<sup>th</sup> century.

## Types of mentoring



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## Related concepts: Coaching, reverse, and reciprocal mentoring

The term mentoring is often confused with other similar concepts, such as coaching.

**Coaching** uses many of the same skills as mentoring but is different in that it is used to solve specific performance issues in a quick and sustainable way.

The agenda is usually set by the organisation that the person receiving the coaching works for, and the coach needs formal qualifications.

A coaching relationship is usually short-lived, with several meetings scheduled in a brief period. Mentoring relationships may last longer, and meetings may be more infrequent, depending on the needs of the mentee.

**Reverse mentoring** is like traditional mentoring but its aims and outcomes are different.

Reverse mentoring is when the hierarchy of a traditional mentoring relationship is reversed, with a more junior person acting as a mentor to a more senior member of an organisation.

The aim is for the mentor to better understand the lived experiences of a particular demographic through the mentee, most commonly a protected characteristic such as ethnicity or gender.

This aims to bring about cultural change within the organisation and improve equality, diversity and inclusion.

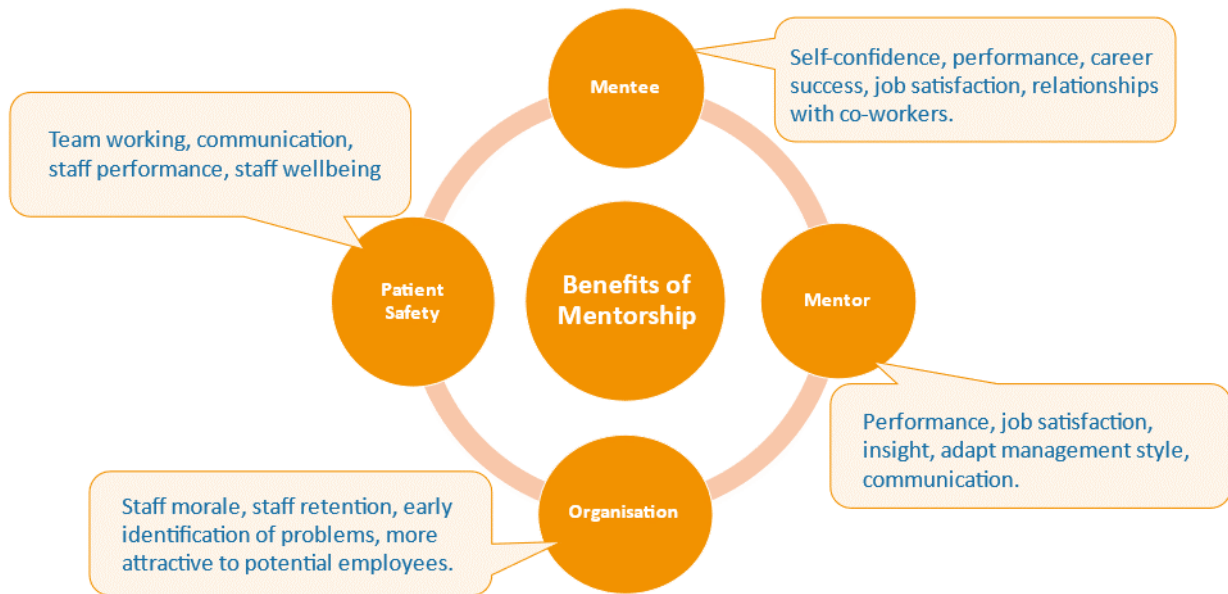
**Reciprocal mentoring** is like reverse mentoring, but the focus is on an equal relationship between the mentoring pair. Both members contribute as mentor and mentee to each other at different times and around different issues.

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## Benefits of mentoring

Mentoring has been shown to benefit mentees, mentors, and organisations, and is particularly common in the business sector. In 2023, it was estimated that 92% of Fortune 500 companies were running formal mentoring schemes, compared with 84% in 2020\*.

Below we show evidence for these benefits from academic literature.



### Benefits for mentees

- Mentoring has been associated with positive behavioural, attitudinal, health related, interpersonal, motivational, and career outcomes for mentees<sup>†</sup>. These include improved performance, increased job satisfaction, improved self-esteem, improved relationships with co-workers, increased career recognition, and success.
- An analysis of studies on the impact of mentoring in the workplace showed improvement in objective and subjective career outcomes between mentored and non-mentored individuals, although the beneficial effect for subjective outcomes was more significant<sup>‡</sup>.
- Workplace mentoring positively impacts personal learning for the mentee, and this positively correlates with job satisfaction and staff retention<sup>§</sup>. Additionally, psychosocial support from

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\* Mentorcliq (2023) 2023 [Mentoring Impact Report: Mentoring Helped Businesses Survive the Great Resignation](#)

<sup>†</sup> Eby, LT, Allen TD, Evans SC, Ng T, Dubois D. (2008). [Does Mentoring Matter? A Multidisciplinary Meta-Analysis Comparing Mentored and Non-Mentored Individuals](#). *Journal of Vocational Behaviour*.

<sup>‡</sup> Allen TD, Eby LT, Poteet ML, Lentz E, Lima L. (2004). [Career benefits associated with mentoring for protégé: a meta-analysis](#). *Journal of Applied Psychology*.

<sup>§</sup> Lankau M, Scandura T. (2002). [An Investigation of personal learning in mentoring relationships](#). *Academy of Management Journal*.

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mentors has been shown to help mentees cope with the stress of career management and hold positive attitudes to the work environment\*.

## Benefits for mentors

- Contact with mentees allows mentors to refresh their knowledge, adapt their management styles, and gain insight into how they are perceived by others<sup>†</sup>.
- An analysis of career benefits for mentors showed that they were more satisfied with their jobs and more committed to the organisation than non-mentors, although a causal link was not proven<sup>‡</sup>.

## Benefits for organisations

- Mentoring has been shown to improve staff morale, improve output, and reduce staff turnover<sup>§</sup>.
- Mentoring improves organisational understanding in new starters who are more able to grasp organisational nuances and practices than non-mentored newcomers\*\*.
- More knowledge gathering and sharing is also a benefit of mentoring for organisations<sup>††</sup>.
- Organisations with formal mentoring schemes in place may be seen as more attractive to prospective employees, particularly for those who are learning goal orientated<sup>‡‡</sup>.

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\* Scandura TA. (1997). [Mentoring and organizational justice: An empirical investigation](#). *Journal of Vocational Behavior*.

† Baluku MM, Matagi L, Otto K. (2020). [Exploring the link between mentoring and intangible outcomes of entrepreneurship: the mediating role of self-efficacy and moderating effects of gender](#). *Frontiers in Psychology*.

‡ Ghosh R, Reio Jr TG. (2013). Career benefits associated with mentoring for mentors: A meta-analysis. *Journal of Vocational Behavior*.

§ Wanberg C, Welsh E, Hezlett S. (2003). Mentoring research: A review and dynamic process model. *Research in Personnel and Human Resources Management*.

\*\* Ostroff C, Kozlowski S. (1993). [The Role of Mentoring in the Information Gathering Processes of Newcomers during Early Organizational Socialization](#). *Journal of Vocational Behavior*.

†† Bryant SE. (2005). The impact of peer mentoring on organizational knowledge creation and sharing: An empirical study in a software firm. *Group and Organization Management*.

‡‡ Allen TD, O'Brien KE. (2006). [Formal mentoring programs and organizational attraction](#). *Human Resource Development Quarterly*.

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# Mentoring in medicine

Mentoring is increasingly seen as important for the personal development of trainees and senior clinicians. It provides benefit to mentees, mentors, and healthcare organisations, and possibly benefits patient safety<sup>\*†</sup>.

## Benefits for medical mentees

- Medical mentors help mentees with specific needs at different stages of career. For example, they may help identify career goals, advise about exams or courses, advise about research opportunities, help with CVs, and offer interview practice<sup>‡</sup>.
- Mentees can learn about their work environment, better understanding 'unwritten rules' like customs, networking, negotiating, academic writing, presentation skills, and team working.
- Mentoring has been shown to have a positive impact on career planning and development, personal growth, professional development, self-confidence, and communication skills<sup>§</sup>.
- In a study of six mentoring schemes across NHS England, medical mentees reported improvements in their professional practice, including consultation skills and team work, which they felt had a direct impact on patients<sup>\*</sup>.

Medical mentees describe finding new tools to tackle problems, and increased self-confidence. Overall, the study found the main benefit of mentoring for the doctor mentee is an improvement in problem solving and change management, both from a professional and personal standpoint<sup>\*</sup>.

- A long-term study of career success in a group of Swiss doctors found that those participating in mentoring had objective and subjective career success compared to those without a mentor<sup>\*\*</sup>.
- Mentoring is likely to be particularly useful for doctors that are new to their organisation or position, those concerned with career transitions, and those being developed for future leadership positions.

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\* Steven A, Oxley J, Fleming W. (2008). [Mentoring for NHS doctors: perceived benefits across the personal-professional interface](#). *Journal of the Royal Society of Medicine*.

† Wu AW. (2022). [Mentoring in patient safety: Do we need a new approach?](#) *Journal of Patient Safety and Risk Management*.

‡ Taherian K, Shekarchian M. (2008). [Mentoring for doctors. Do its benefits outweigh its disadvantages?](#) *Medical teacher*.

§ Asuka ES, Halari CD, Halari MM. (2016). [Mentoring in Medicine: A Retrospective Study](#). *American Scientific Research Journal for Engineering, Technology, and Sciences*.

\*\* Stamm M, Buddeberg-Fischer B. (2011). [The impact of mentoring during postgraduate training on doctors' career success](#). *Medical Education*.

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## Benefits for medical mentors

- A general benefit to mentors is satisfaction of seeing their mentee progress while acquiring new knowledge and skills themselves.
- Mentors may benefit from the enthusiasm and ideas of a mentee and can find new enjoyment in their career.
- Mentors can use the skills they develop through mentoring, such as active listening, in their clinical roles\*.
- Mentors report increased confidence in managing difficult consultations with patients, exploring complex presenting complaints, and dealing with patient complaints – and this leads to improved job satisfaction\*.

## Benefits for healthcare organisations

- Benefits include an improvement in workforce morale and an increased awareness of clinical governance among trainees. The early identification of problems may be improved, allowing prompt and targeted intervention, and preventing escalation of concerns.

There may be an overall improvement in patient safety\*†. A review of six mentoring schemes within the NHS found that participants felt their professional practice improved and, by extension, patient safety. Participants said it helped them to see their patients as individuals and improved their team work skills\*.

- Mentoring may reduce the number of adverse events and near misses reported by doctors. A study of 1,755 doctors showed the likelihood of being involved in an adverse event or a near miss was reduced by around 12% for doctors with a mentor†.

## The current state of mentoring in medical training

- Formal mentoring is not as widespread in medicine as other professions. This may be because, before 2008, informal mentoring was more common (with quality described as variable‡).
- Promoting formal mentoring as part of CPD from the first year of medical school could encourage greater uptake by doctors throughout their careers and help to dispel the notion

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\* McCrossan R, Swan L, Redfern N. (2020) [Mentoring for doctors in the UK: what it can do for you, your colleagues, and your patients](#). *British Journal of Anaesthesia Education*.

† Harrison R. (2021). [Is physician mentoring associated with the occurrence of adverse patient safety events?](#) *Journal of Patient Safety*.

‡ Rimmer A. (2019). [The firm: Does it hold the answers to teamworking and morale?](#) *British Medical Journal*.

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that mentoring is for those that are struggling or experiencing personal problems. High performing students are in fact more likely to participate in mentoring at medical school\*.

- Mentoring has been promoted as an important part of medical training for many years. A 2003 paper by the Doctors' Forum, *'Improving working lives for doctors'*, highlighted its benefits and analysis at the time found over 50 schemes in place across the UK.

The paper recommended that access to mentoring schemes should be widened, remain voluntary, and that there should be a point of contact for schemes within training organisations†.

- Lack of time is commonly identified as a significant issue for mentoring scheme within medical training.

Time constraints in busy clinical practice has been highlighted as a major issue for doctors in the UK which results in mentoring and other 'soft skills' not being prioritised\*.

- Despite strong support for mentoring, many schemes end due to a lack of visibility and struggle to gain or maintain momentum. Scheme often require financial and personnel investment which can be challenging in the current NHS environment\*.

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\* Dimitriadis K, von der Borch P, Störmann S. (2012). [Characteristics of mentoring relationships formed by medical students and faculty](#). *Medical Education Online*.

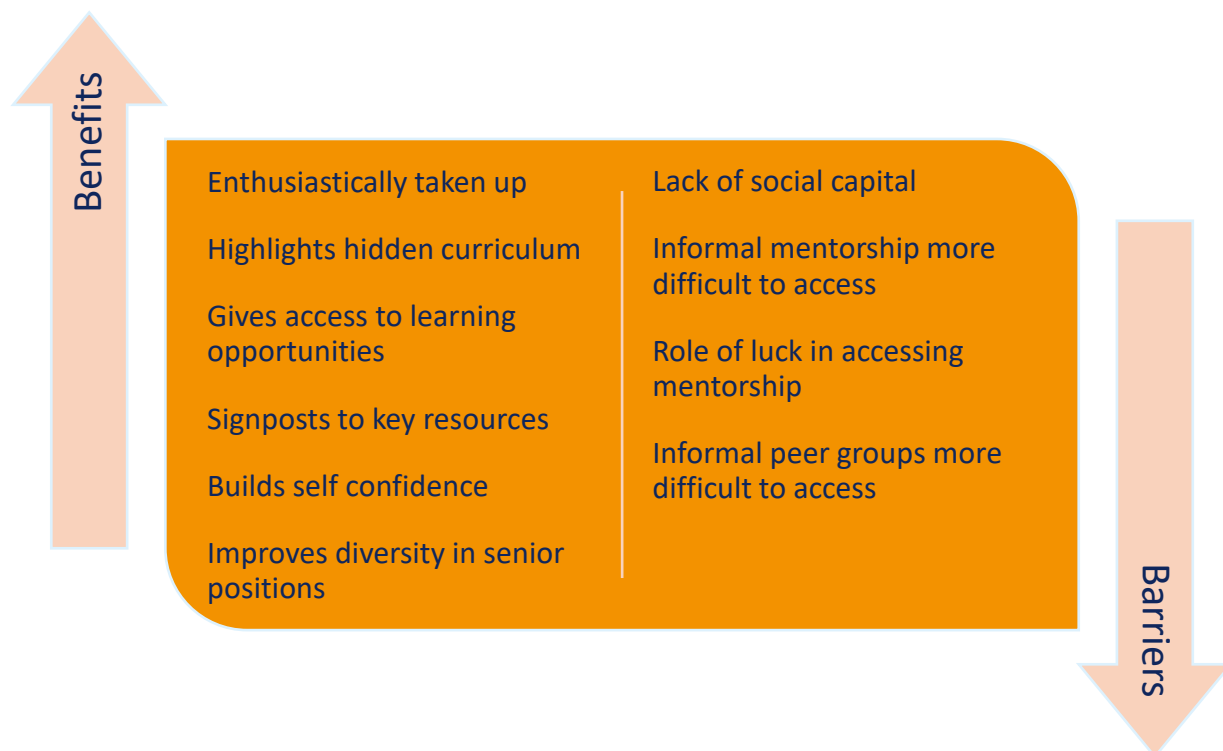
† Oxley J, Fleming B, Golding L, Pask H, Steven A. (2003). [Mentoring for doctors: enhancing the benefit](#). *Academic Medicine*.

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## Mentoring and diversity

Accessing mentoring can be more difficult for people with certain protected characteristics. Studies show that it is especially valued by these individuals and can provide benefits over and above the intrinsic benefits of mentoring in the workplace.

### Mentoring for women and people from ethnic minority backgrounds



### Barriers to mentoring

- Research finds that women and people from ethnic minority backgrounds feel they face more barriers to obtaining a mentor compared to their white male colleagues\*.
- Mentees often prefer mentoring from a mentor that matches one or more of their characteristics, for example race or gender. While mentees may prefer this, outcomes in terms of academic performance and satisfaction with the experience showed no difference when comparing pairs matched by characteristic with those that were not†.

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\* Dobbin F, Kalev A. (2016). [Why Diversity Programs Fail And what works better](#). *Harvard Business Review, Behavioral Science*.

† Blake-Beard S, Bayne ML, Crosby FJ, Muller CB. (2011). [Matching by race and gender in mentoring relationships: Keeping our eyes on the prize](#). *Journal of Social Issues*.

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- While women and people from ethnic minority backgrounds find it more difficult to find a mentor, it has been shown that mentoring for these individuals can have significant benefit and is enthusiastically taken up when offered.

A study of emergency medicine trainees showed that women and those from ethnic minority backgrounds were particularly enthusiastic about the mentoring they had received, and felt it was useful for preparing them for assessments and appraisals\*.

- Mentees preferring mentors similar to themselves presents a barrier to accessing informal mentoring, while this preference for similarity may also be present in mentors themselves.
- Planned or formal mentoring schemes may therefore increase the opportunity for mentoring among doctors with these protected characteristics.

## Benefits of mentoring for reducing the attainment gap

- The benefits of mentoring for people with certain protected characteristics, include all the intrinsic benefits of mentoring, as well as further specific benefits. These include increased representation at senior levels within organisations and increased staff retention.
- On an organisational level, evidence from the business sector shows that mentoring for people from ethnic minority backgrounds increases diversity at senior management level. For example, a study of career trajectories for staff from ethnic minority backgrounds at three major US corporations showed that those who advanced the furthest shared one characteristic: They had a strong network of mentors and corporate sponsors<sup>†</sup>.
- A study of over 800 US companies found mentoring schemes boosted the representation of Black, Hispanic, and Asian people in the workplace by between 9% and 24% over 5 years.
- A 2017 government review on *Race in the workplace* emphasised the effect of mentoring and sponsorship in reducing barriers faced by people from ethnic minority backgrounds in progressing through the workplace. It recommended that employers offer mentoring schemes internally to anyone who wants them<sup>‡</sup>.
- Mentoring can also be an important factor in improving organisational commitment of staff from ethnic minority backgrounds. A study into retention of ethnic minority and international staff in academia found that retention was significantly greater in individuals participating in a formal mentoring programme compared with those who were not<sup>§</sup>.

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\* Okereke CD. (2000). [Mentoring—the trainee's perspective](#). *Emergency Medicine Journal*.

<sup>†</sup> Thomas DA. (2001). [The truth about mentoring minorities](#). *Race matters*. *Harvard Business Review*.

<sup>‡</sup> McGregor-Smith R. (2017) [Race in the Workplace: The McGregor-Smith Review](#). *HM Government*.

<sup>§</sup> Phillips SL, Dennison ST, Davenport MA. (2016). [High Retention of Minority and International Faculty through a Formal Mentoring Program](#). *To Improve the Academy*.

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## Mentoring and the attainment gap

GMC data shows that there is an attainment gap in the outcomes for doctors from ethnic minority backgrounds in relation to postgraduate exam pass rate and annual review of competency progression (ARCP) outcomes. Research has found that the issue is also present across many other sectors.

Mentoring could be an important tool in reducing the attainment gap between undergraduate students from white and ethnic minority backgrounds.

A literature review cites case studies from different institutions where mentoring is included in a package of measures to help reduce the attainment gap, although the direct impact of mentoring in helping reduce the disparity cannot be assessed\*.

### Benefits of mentoring for reducing the attainment gap

Mentoring playing a role in reducing the attainment gap in postgraduate medical education is supported by research.

A qualitative study in 2020 entitled *What supported your success in training?* interviewed trainees from regions and specialties where there was no attainment gap and defined 'working with inspirational senior colleagues' as one of the key success factors<sup>†</sup>. This highlights the importance of senior colleagues who can act as role models, mentors, or career coaches to help learners develop.

Trainees in the study spoke of the positive influence of senior colleagues distinct from their clinical or educational supervisors, including those who formally or informally mentored them. The trainees felt that the main positive outcome of these relationships was in receiving advice on 'where next' and 'how to get there'. They also helped improve self-confidence and belonging, particularly at times of low confidence (such as at the beginning of a training programme). The senior colleague helped with signposting and guidance to demystify the system and enable learners to decide where to invest their efforts.

Another success factor highlighted in the report was 'having the support and validation of peers'. Trainees reported that peer mentoring helped in benchmarking and validating their experiences, and provided reassurance about particular situations or problems. Trainees felt that peers provided mutual support and helped drive and motivate them in their careers. These relationships were particularly important in helping learners bounce back after negative experiences.

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\* Miller M. (2016). [The Ethnicity Attainment Gap: A Literature Review](#).

<sup>†</sup> Roe V, Patterson F, Kerrin M, Edwards H. (2020) '[What supported your success in training?](#)' *Work Psychology Group and General Medical Council*.

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## Barriers to mentoring for trainees from ethnic minority backgrounds

Trainees in the report mentioned above also stated that their relationships with senior colleagues were largely down to being in the 'right place at the right time'. Trainees from ethnic minority backgrounds felt that access to this sort of senior support was more difficult for them to gain when compared with other trainees.

In the GMC report *Fair training pathways for all; Understanding experiences of progression*, doctors reported inequity in informal mentoring relationships, with some trainees reporting favouritism due to particular characteristics, such as gender and ethnicity\*. This suggests that formal mentoring schemes would increase access to these positive relationships, making them less reliant on 'luck' and subject to less discrimination.

Another factor leading to inequity in mentoring opportunities for ethnic minority trainees is reported to be the relative lack of senior role models from ethnic minority backgrounds.

Some trainees in the 2020 study entitled *What supported your success in training?* emphasised that the senior colleague that inspired them shared their ethnicity or gender, and they felt this to be important for the relationship. They felt that this helped the senior colleague to understand their specific experiences as a learner. However other trainees did not feel the background of the mentor was of importance.

Access to informal peer networks was seen as difficult for learners from ethnic minority backgrounds, especially if they had to move to a different region for training. Strategies organised by the learning provider to allow peer networking, such as training days or through buddy systems, were seen as valuable.

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\* General Medical Council (2017). [Fair Training Pathways for All: Understanding Experiences of Progression](#).

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## Conclusion

Many reports into the attainment gap in postgraduate medical training reference access to mentoring in their recommendations for improving outcomes for trainees from ethnic minority backgrounds.

- *What supported your success in training* recommended that organisations should provide trainees from ethnic minority backgrounds with access to a range of mentors.
- When asked about factors that could reduce the attainment gap in *Fair training pathways for all; Understanding experiences of progression*, trainees and trainers mentioned mentoring, particularly for IMGs.
- The BMA report *Differential attainment: Making medical training fair for all* highlights the importance of mentors and role models as one of their tips for trainers and providers\*.

It is clear from the literature that formal mentoring schemes would improve access to mentoring for trainees from ethnic minority backgrounds compared informal mentoring<sup>7</sup>. Formal schemes would therefore be most recommended.

### Key conclusions

- Mentoring schemes benefit trainees at all stages of training, particularly during times of transitions and career planning.
- Mentoring also benefits mentors and the organisations in which they work.
- Mentoring may lead to improvements in patient safety.
- Mentoring is more difficult for women and people from ethnic minority backgrounds to access.
- Mentoring is likely to be particularly beneficial for women and trainees from ethnic minority backgrounds and is likely to be enthusiastically taken up by them.
- Formal mentoring schemes are likely to be more inclusive for trainees from ethnic minority backgrounds and reduce barriers in access to mentoring.

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\* British Medical Association (2017). [Differential Attainment Making Training Fair For All](#).