Social inclusion or social engineering? The politics and reality of widening access to medicine in the UK

Kirsty Alexander and Jennifer Cleland
Centre for Healthcare Education Research and Innovation (CHERI), School of Medicine, Dentistry and Nutrition, University of Aberdeen, Aberdeen, UK

Abstract

Although driven by policy and investment, the available data suggests that, to date, UK efforts to minimise the barriers into professions such as medicine have had mixed success. We explore the myriad social, individual and structural reasons why the resources invested in widening access (WA) activities have not significantly increased the representation of applicants from lower socio-economic groups within medical schools. We discuss the different discourses of widening access/increasing diversity in the UK context – notably those of 'social mobility' and 'increasing diversity to improve workforce efficiency' – and how these are interpreted and enacted "on the ground". This includes examining the synergies and tensions between widening access and maintaining quality, and the gap between political directives and policy enactment within medical schools. We discuss if the different discourses of widening access can be reconciled, and if so, whether this can be done in a way to support widening access.

Keywords: widening access, discourse, policy enactment

Introduction

The movement to 'widen access' (WA) to those who have not traditionally participated in Higher Education is a global issue, and currently a 'hot topic' for educators, politicians and policy-makers in the UK. The focus of WA is in part determined by each country's historical and current social issues. For example, US WA initiatives may particularly aim to attract students from under-represented minority (URM) ethnicity and racial groups (Castillo-Page, 2012; Lakhan, 2003), whilst in Canada and Australia medical schools also aim to recruit those from rural or Indigenous communities (Behrendt, Larkin, Griew, & Kelly, 2012; Dhalla et al., 2002; Hay et al., 2016; Puddey, Mercer, Playford, Pougnault, & Riley, 2014). In the UK, the medical profession has been applauded for widening access to include greater ethnic and gender diversity (Milburn, 2012) and for creating increasingly 'fair' selection procedures for these groups (Mathers, Sitch, & Parry, 2016b). However, medicine remains under the spotlight with regards to the lack of progress in widening the profession's socioeconomic diversity.

Currently home applicants and entrants to UK medical schools remain clustered in higher socioeconomic groups. Only 5.1% of UK applicants come from the least affluent 10% of households, with that number being as low as 1.8% in some regions. These percentages drop further when it comes to achieving a place in medical school (Steven, Dowell, Jackson, & Guthrie, 2016). Other indicators suggest that the percentage of medical students from 'working class' backgrounds (those with parents in semi-skilled or unskilled occupations) may even be falling (Cleland, Dowell, McLachlan, Nicholson, & Patterson, 2012).

Medical schools work in a multifaceted landscape of competing pressures – many of which are in tension with greater inclusion. In this chapter we explore the reasons why medical schools are under pressure to diversify their cohorts and the initiatives they currently deploy to attract and support applicants from under-represented or disadvantaged groups. We discuss why these initiatives have had limited success, including schools' concerns about maintaining a reputation for excellence and a lasting adherence to the principles of academic meritocracy. We conclude by discussing whether some of the tensions which block progress within WA might be reconciled, and how this might be done. In so doing, we call for medical schools, as well as the wider educational contexts in which they are situated, to consider systemic and cultural change to tackle WA.

Context

In the UK, the vast majority of tertiary education is provided by state-funded universities. (There is only one, small, private medical school in the UK at the time of writing this chapter). The vast majority of students enter medicine after high school (i.e., with school-leaving

qualifications) onto a 5-year course, with this considered the 'standard' route into medical education. In an effort to increase the diversity of the medical school population, a number of accelerated (four-year) graduate entry medicine (GEM) programmes have been established since 2000 (Medical Workforce Standing Advisory Committee, 1997). These now train 10% of the UK's medical students (Kumwenda, Cleland, Greatrix, MacKenzie, & Prescott, 2017b).

As in all countries, entry to medicine is highly competitive. While competition or selection ratios vary by medical school, on average around half of those who apply as school-leavers receive an offer/place (Mathers et al., 2016b). The selection ratios are higher for those applying to GEM programmes at approximately 4:1 (Kumwenda et al., 2017b). Successful applicants must demonstrate very high educational achievement; strong performance in aptitude tests, application statements and interviews; and, increasingly, must demonstrate that they possess personality traits befitting a career in medicine such as compassion, team working skills and integrity (Medical Schools Council, 2017).

Collectively UK medical schools currently accept approximately 6500 new students each year (of which over 90% are UK-domiciled at the time of application (MacKenzie, Cleland, Ayansina, & Nicholson, 2016)). Medical student numbers are regulated by the government and are expected to rise by approximately 23% in the next few years (with most, but not all, of these additional places being available in England) (Roberts & Bolton, 2017). This increase has been proposed partially in response to the dual concerns raised later in this chapter: the lack of participation of those from lower socio-economic groups in medicine; and the challenge for the state education system (medical schools) to meet the needs of its state-funded and state-controlled National Health Service (NHS).

Barriers to widening access in UK Medicine

It is widely acknowledged that applicants from URMs/disadvantaged groups may face additional challenges when considering, preparing, or submitting a competitive application to medicine. These additional challenges may therefore place some applicants at an unfair disadvantage in comparison to others during the selection process. For WA initiatives to be successful, it is first important to understand how a complex and intertwining network of factors may contribute to an applicant's disadvantage and how these challenges might be addressed.

Disadvantage is initially evident when examining the inequalities between applicants' pre-university educational experiences (Chowdry, Crawford, Dearden, Goodman, & Vignoles, 2013; Nicholson & Cleland, 2015). Worldwide, high academic achievement is a key requirement of all competitive medical courses, and worldwide, students in higher

socioeconomic groups outperform students in lower groups in school exit examinations (Bowes, Thomas, Peck, & Nathwani, 2013; Chowdry et al., 2013; Gorard et al., 2006). In the UK, inequalities in attainment by socioeconomic group are already evident in primary school (Chowdry et al., 2013), showing that differentiated achievement starts early. As a result, a selection process centred strongly around academic attainment can be biased in favour of those in higher socioeconomic classes, who generally have access to higher achieving and better resourced schools (Cleland, Dowell, et al., 2012). For example, primary and high schools may be able to access different amounts of material resources and information, which influences how much support they can offer students who wish to apply to competitive professional subject such as medicine (Southgate, Kelly, & Symonds, 2015). As a result, many students who are able and motivated may still lack important knowledge about the admissions procedures or requirements (Kamali, Nicholson, & Wood, 2005; Robb, Dunkley, Boynton, & Greenhalgh, 2007).

Moreover, a school's culture regarding academic attainment, work ethic and aspiration to certain careers also plays a large role in students' choices (Archer & Leathwood, 2003; DFES, 2003; Gorard et al., 2006; Reay, Davies, David, & Ball, 2001; Slack, 2003). There is increasing evidence that students in some UK state schools may be discouraged from considering or applying to medicine by school factors, including school culture and teachers' expectations (McHarg, Mattick, & Knight, 2007; Medical Schools Council, 2014a; Robb et al., 2007; Southgate et al., 2015).

These inequalities are starkly evidenced in schools' application rates to highly selective universities and to competitive subjects such as medicine (Hemsley-Brown, 2015; Medical Schools Council, 2014b). In England, 100 'elite' schools (3% of all schools) provided 11.2% of admissions to highly selective universities, and 31.9% of admissions to Oxford and Cambridge (Sutton Trust, 2011). Applications to medicine are also highly differentiated by school: 80% of UK applicants come from only 20% of UK schools, and half the schools in the UK sent no applicants to medicine in recent years (Medical Schools Council, 2014b).

Of course, schools are just one piece of the jigsaw, as larger societal influences, peer and familial expectations, as well as a student's beliefs about their own ability also strongly influence students' educational and career choices (Bridges, 2006; DFCSF, 2008; Hill et al., 2004; Miller & Cummings, 2009; Robb et al., 2007).

Financial concerns about the cost of tuition fees and living costs whilst a student may also deter capable applicants, and particularly those from poorer backgrounds who are more likely to be worried by the burden of 'debt' (Callender & Jackson, 2008; Minty, 2015). Although tuition fees for medicine are equivalent per year to studying any other subject at

university (due to government subsides), the course is considerably longer, and may require additional costs (Cleland, Dowell, et al., 2012). There is substantial evidence that students from poorer backgrounds may also prefer to stay in the family home whilst studying to limit costs (Hughes, Mangan, Vigurs, Slack, & Davies, 2008; Mangan, Hughes, Davies, & Slack, 2010), which may severely restrict the medical schools available to them, especially if they live rurally.

Overall, the choice to attend university generally, and medicine particularly, may be seen as presenting more risk for a student from a non-traditional background, both culturally and financially (Archer & Hutchings, 2000; Archer & Leathwood, 2003). As discussed, a complex and intertwining set of factors may lead students to this conclusion. Justifiably, UK medical schools feel they are unable to counterbalance the large inequalities in applicants' pre-entry experiences through their efforts alone (Cleland, Nicholson, Kelly, & Moffat, 2015). Large-scale and joined-up interventions and investment at a political level are needed for real improvements to inequality and social mobility (Sutton Trust, 2017). Nonetheless, some of the negative perceptions held about medicine may be justified, as studies suggest medical school is not always welcoming to diverse students (Beagan, 2005; Greenhalgh, Seyan, & Boynton, 2004; Orom, Semalulu, & Underwood, 2013), nor do systems provide them with enough support to concentrate on their studies (BMA Medical Student Committee, 2015). As a result, there are still potential applicants who feel that medicine is not a suitable career choice for someone from their background (Greenhalgh et al., 2004; Mathers & Parry, 2009) and this must continue to be addressed.

Why is widening access important in medicine?
In the UK, there are two main arguments to justify WA to medicine: the first is to increase social mobility; the second to improve healthcare provision. These drivers mirror those in many other countries which face similar challenges regarding a lack of diversity in the medical profession.

In relation to the first, the UK has long-standing and increasing levels of inequality in income (Eurofound, 2015), health (RCPCH, 2017) and education (Jerrim & Shure, 2016), coupled with limited social mobility (Sutton Trust, 2017) – considered the means to break "the transmission of disadvantage from one generation to the next" (Nicholson & Cleland, 2015, p231).

The concept of social mobility is closely tied to ideas of meritocracy. 'Meritocracy' can be defined as "a social system, society, or organization in which people have power because of their abilities, not because of their money or social position" (The Cambridge English Dictionary, 2017). Meritocratic systems are strongly cherished for their perceived fairness,

productivity, and for the opportunities they offer individuals within all social strata. However, although the meritocratic approach is the preferred philosophy of education in the UK (Sheeran, Brown, & Baker, 2007), there are limits to its effectiveness.

As discussed above, the level of educational, social, cultural and financial resources and opportunities an applicant possesses, or is able to access, before they apply to medicine may set still them at a considerable disadvantage in a competitive, and apparently 'meritocratic' application system. Despite much investment in WA activities to address these disadvantages, to remove barriers, and to attract and support able but disadvantaged students into medicine, the proportion of medical students from lower socio-economic groups has remained static over many years (BMA, 2009) (see later for further discussion). Indeed, a high profile report for the Social Mobility and Child Poverty Commission stated that: "medicine … has a long way to go when it comes to making access fairer, diversifying its workforce and raising social mobility" (Milburn, 2012).

The second reason to 'widen access' to the medical profession addresses the need to build a healthcare workforce that reflects and understands the needs of patients from diverse cultures and in diverse locations.

There is increasing recognition that a more diverse student cohort may benefit the workforce and medical school learning environment. Amongst other strengths, diverse students are understood to contribute a better understanding of diverse populations (Guiton, Chang, & Wilkerson, 2007; Morrison & Grbic, 2015; Saha, Guiton, Wimmers, & Wilkerson, 2008; Whitla et al., 2003), multilingualism (Flores, 2000), as well as resilience and persistence to overcome barriers (Cleland & Medhi, 2015; Jardine, 2012). Diversity in the workplace may not only improve the competence of staff, but also provide the workforce with more practitioners who choose to work in underprivileged communities, locations and specialties (Bailey & Willies-Jacobo, 2012; Cooter et al., 2004; Dowell, Norbury, Steven, & Guthrie, 2015; Komaromy et al., 1996; Larkins et al., 2015; Puddey et al., 2014; J. H. Walker, Dewitt, Pallant, & Cunningham, 2012; K. O. Walker, Moreno, & Grumbach, 2012).

The topic of workforce planning is currently high on the political agenda in the UK as there are significant doctor shortages in many specialties and localities (NHS Improvement, 2016; UKFPO, 2016). As in many western countries, demands on healthcare provision in the UK are changing as the population becomes increasingly multicultural and ageing (Office of National Statistics, 2011), and technological advances increase the level of care it is possible to offer and 'disrupt' traditional roles with potentially dramatic reforms (Gorman, 2017). The UK faces additional challenges when matching doctor supply to community needs, especially as medical graduates' choice of progression routes through training no

longer fit predicted models (Cleland, Johnston, Watson, Krucien, & Skåtun, 2016; Scanlan et al., 2017). In 2016, almost half of medical graduates either took a 'break' or left the workforce after completing the UK's two year 'Foundation Programme' (the broad training programme medical school graduates are required to undertake before they are eligible for general practice (family medicine) or specialty training) (UKFPO, 2015). Although in the past graduates commonly took a 'break' at this point (especially to work overseas) (Smith & Low, 2012), the current scale of the phenomenon, and the increasing number who do not return to the UK health service (NHS) (UKFPO, 2016) has naturally led to concerns over a 'brain drain' within the UK and disrupted service provision. Moreover, the government's planned rise in medical student numbers alone may not be a solution to this issue – increasing the supply of doctors does not, in itself, better match that resource to accommodate areas of need (Gorman, 2017).

A greater understanding about how socioeconomic factors (amongst many others) might relate to willingness to stay and practice in the UK is therefore becoming ever more pressing. It is worth noting however, that the relationship between lower socioeconomic status and higher desire to work in underserved areas is complex and often compounded by a multitude of factors (Griffin, Porfeli, & Hu, 2016; O'Connell, Ham, Hart, Curlin, & Yoon, 2017). Moreover, programmes that most successfully provide for rural areas have had three crucial support mechanisms: government investment; strong leadership; and lack of training places in neighbouring big cities (Gorman, 2017), as well as a focus on exposing their students to underserved localities (Phillips, Wendling, Fahey, & Mavis, 2017).

The UK undergraduate medical education landscape is thus in a period of significant change, as it adapts to shifting population demographics and demands, significant political changes and decisions, as well as to changes in the preferred career paths of graduates. WA to the profession is thus seen as one way to meet and help improve the skills, efficiency and distribution of the workforce into the future.

How are these calls for diversity played out in the UK?
It is important to understand how the different arguments for WA are conceptualised by UK medical schools as these concepts influence the design and implementation of WA initiatives, as well as how they are presented and judged to be successful (Jones & Thomas, 2006; Sheeran et al., 2007; Stevenson, Clegg, & Lefever, 2010).

First, it is crucial to acknowledge that there is a tension between the political drivers to WA and the (equally politically driven) competitive nature of neoliberal university education in the UK. The UK Higher Education system is becoming increasingly competitive, and universities must compete for funding, students and prestige within a stratified marketplace. This puts

increasing pressure on universities and medical schools to promote a reputation of excellence, high quality experience and exceptional standards (see for example: Fairclough, 1993; Molesworth, Scullion, & Nixon, 2011). Yet, concurrently UK devolved governments are also putting increasing pressure on universities to widen access, setting them ambitious diversity targets (DBIS, 2016; Scottish Government, 2016). WA, with its aims of broader inclusivity and participation, can thus be seen at odds with the market pressure to convey more mainstream forms of excellence and of exclusivity and selectiveness in admissions.

When considering UK Higher Education as a whole, studies found large differences between the portrayals of WA given by more 'elite' institutions, in comparison to less selective or more recently established universities (Bowl & Hughes, 2013; Graham, 2013). Overall, selective institutions chose to continue to promote themselves as 'elite' with only vague statements about key WA activities (Bowl & Hughes, 2013). Moreover, institutions' self-presentations with regard to inclusivity were seen to change over time in response to sector and policy changes: in the years between 2007 and 2011 the selective universities in Graham's study seemed to adopt a slightly more welcoming tone towards underrepresented groups, whereas less selective institutions moved away from promoting themselves as a 'WA institutions' to foregrounding their 'excellence' and 'quality' (Graham, 2013).

Like the wider universities to which they belong, UK medical schools vary in terms of their culture, history, location and capital and use their reputations and resources strategically to differentiate themselves from their competitors (Brosnan, 2010). There are clear differences between UK medical schools' curricula, image and aspirations, which also impact on their stance towards, and enactment of widening access. For example, a UK-wide study interviewing medical school Admissions Deans revealed significant differences in the schools' attitudes towards, and interpretations of, WA policy (Cleland et al., 2015). Many felt that they could not reconcile the political goals of WA (often referring to calls to improve the workforce through diversity), with their school's aims and interests (selecting through academic meritocracy). Maintaining the highest standards of academic excellence and thereby selecting the 'best' students and doctors was thus seen in tension with efforts to increase diversity, particularly in the current medical education system that does not sufficiently compensate for, or reward, WA efforts which pose both cost and risk to the institution (Cleland et al., 2015) (see later for further discussion).

A subsequent discourse analysis of UK medical school WA webpages found similar tensions (Alexander, Fahey Palma, Nicholson, & Cleland, 2017). The argument (discourse) of widening access for social mobility through academic meritocracy was very strongly promoted, especially when linked to the use of WA as a tool to find and select 'the best and

brightest' from a wider range of applicants. More traditional forms of excellence, such as academic achievement and ability, were promoted. Although all schools predominately used this argument, differences remained between the ways it was conceptualised and used. Some schools claimed that introducing WA initiatives did not reduce quality standards, whilst others argued that initiatives increased the effectiveness of selection through widening the application pool, and improved fairness by removing barriers to 'level the playing field'. Schools thus differed in whether they proposed that WA initiatives for social mobility did not diminish, or actually improved, the quality of admissions through academic meritocracy.

In contrast, the argument (discourse) for widening access as a means to improve the efficiency of the workforce was significantly marginalised on UK medical school WA webpages and the alternative strengths that diverse or underrepresented students might bring to the profession were not discussed. As a result, these attributes were not communicated as valuable (Alexander et al., 2017). Overall, a differentiated field of opinions towards WA was revealed, although once again, UK medical schools strongly espoused their belief in academic meritocracy and were hesitant to propose the benefits of a diversified workforce.

How do medical schools implement WA policies?

In this section we will briefly review some of the WA initiatives currently utilised by UK medical schools and discuss their effectiveness. We will also consider how these initiatives link to the concepts of WA for 'social mobility within academic meritocracy' or for 'workforce improvement through diversity', and how they relate to the tensions described in the previous section.

Pre-entry Activities

All UK medical schools undertake 'outreach' activities to raise awareness and interest in medicine among communities that would not traditionally produce large numbers of applicants. Typical outreach initiatives include university staff visiting high schools to provide information about subject choices and application procedures to pupils and teachers. Other outreach schemes involve near-peer 'mentoring', or events in which pupils are invited to the medical school for a 'taster' of life as a medical student, for example by student shadowing or summer schools. Overall, pre-entry activities aim to address some of the disadvantages and challenges students from lower socioeconomic backgrounds may experience when considering medical school (for a good overview see (Medical Schools Council, 2014a)).

UK medical schools' goals for pre-entry activities appear to centre on increasing the social mobility of their participants (Alexander et al., 2017). By aiming to compensate for the

disadvantage of targeted individuals from URMs/disadvantaged groups, these initiatives encourage WA participants to acquire additional or more 'appropriate' skills, knowledge and aspirations to make them 'suitable' for admission to medicine. These activities are framed as necessary 'top-up opportunities' to allow selected individuals to succeed within the current system of academic meritocracy.

However, these activities have been criticised for using a 'deficit model' which concentrates on the deficiencies of individual learners rather than fully acknowledging or tackling the barriers in their environments, including those posed by medical schools themselves (Jones & Thomas, 2006; O'Shea, Lysaght, Roberts, & Harwood, 2015; Sheeran et al., 2007; Smit, 2012). Emphasising the deficiencies of those from underrepresented backgrounds may unintentionally further reinforce individuals' perceptions of difference and disadvantage, and in fact counter efforts to encourage them, or to help them to recognise their suitability for the profession (Alexander et al., 2017; Fahey Palma & Cleland, 2017; Frost & Regehr, 2013; Gartland, 2014; Greenhalgh et al., 2004; Razack, Hodges, Steinert, & Maguire, 2015).

Although sufficient evidence exists to indicate these pre-entry activities do have a positive effect on the recruitment of diverse students to medicine, their impact has typically been poorly evaluated and existing studies do not "expand the understanding or provide generalizable messages" in relation to what works and what does not (Nicholson & Cleland, 2015, p. 234).

Widening Access through Admissions Procedures

In recent years, UK medical schools have made changes to their admissions procedures with the stated goals of reducing bias and increasing fairness in selection. The most obvious change has been a move away from a reliance on academic achievement as the primary, or only, selection method. This has been replaced by use of a variety of tools to judge potential and ability to become a doctor (see MacKenzie et al., 2016) for a good overview of medical selection processes, and (Patterson et al., 2016) for a review of the effectiveness of various tools).

Attaining the required grades remains the first hurdle in medical admissions, and failure to do so is the most common cause of rejection. Yet – as discussed earlier - just looking at educational attainment may not accurately identify potential, given the association between systemic and social factors, and attainment (Williamson, 2004).

In part to address this dilemma, UK medical schools first introduced the UKCAT test in 2006. The UKCAT test is an aptitude test which aims to measure whether an applicant possesses the cognitive ability, as well as the attitudes and behaviour, desirable for a clinician (UKCAT, 2017). Aptitude tests are used globally for selection to medicine - for example in: Ireland (HPAT, 2017); Australia (UMAT, 2017); Canada and the USA (AAMC, 2017) – as well as for a range of other professions (Bertua, Anderson, & Salgado, 2005).

Aptitude tests were considered to be a useful tool to assist WA to medicine, as outcomes were thought to be influenced less by the socioeconomic and educational background of applicants, and because tests could not be 'coached' for to the same extent as traditional school exams (Cleland, Dowell, et al., 2012). Although initial, smaller scale studies indicated this might be the case (Tiffin, Dowell, & McLachlan, 2012; Tiffin, McLachlan, Webster, & Nicholson, 2014), emerging longitudinal work has not shown benefits to WA (Mathers, Sitch, & Parry, 2016a).

Medical schools are now encouraged to use 'contextual admissions' (CA) during the selection process (Medical Schools Council, 2014b; Panel on Fair Access to the Professions, 2009). The use of CA is intended to assess an applicant's potential to succeed in higher education by taking into consideration the context and circumstances in which their attainment to date has been achieved. In theory at least, this heralds a significant step towards seeking to select on ability rather than purely attainment and has considerable potential to reduce bias towards those in lower socioeconomic groups. However, in practice 'ability' is much harder to identify than 'attainment' is to assess – a major concern for many schools (Boliver, Gorard, & Siddiqui, 2015; Cleland et al., 2015; Cleland, Patterson, Dowell, & Nicholson, 2014).

As a result, the national picture is complex and multifaceted: various different types of CA have been proposed for use by UK universities (see (Boliver et al., 2015; Moore et al., 2013) for further detail) and large differences remain in how medical schools select their students. Moreover, these processes have been criticised for lacking transparency and clarity (Cleland et al., 2014). To date, there have been no studies examining the impact of CA on medical school admissions and there is much concern as to the reliability of the markers being used (Thomas et al., 2009). Moreover, the (unacknowledged) potential value of applicants selected via CA may be overshadowed by a focus on the worry of opening doors to students who have achieved slightly less well in terms of prior attainment, a perceived 'lowering of standards', and the potential negative impact this may have on school performance in league tables (Cleland et al., 2015). Unfortunately, given (in the UK at least) medical

schools are notoriously poor at tracking their students in terms of evaluating the relative performance of students from different backgrounds, this attitude remains an unevidenced fear. Interestingly, recent evidence suggests that those entering with slightly lower academic tariffs and significantly lower outcomes on standard aptitude tests actually go on to outperform their more qualified counterparts from more privileged backgrounds (Kumwenda et al., 2017a). Further research and evaluating is need to assess the "added benefit" of medical school, and whether this differs by group.

Finally, similarly to pre-entry activities, CA initiatives may be subject to criticism for their focus on compensating for the 'deficit' of applicants from URMs/disadvantaged backgrounds (see for example (Sheeran et al., 2007)). Moreover, although these initiatives do initiate superficial systemic change, they are largely still underpinned by the argument of selection through academic meritocracy and advocate little cultural change towards WA.

Widening Access through Alternative Entry Routes

Another approach to WA taken by UK medical schools, has been to create specific routes of entry for URM/disadvantaged groups. These include: 'foundation years', or tailor-made preparation programmes (Curtis, Blundell, Platz, & Turner, 2014a); extended programmes (Garlick & Brown, 2008); and graduate entry programmes (Medical Workforce Standing Advisory Committee, 1997).

Foundation and extended programmes serve the dual purpose of offering an extra year of academic study, aimed at helping participants address gaps in their science knowledge and attainment, as well as a chance for students from diverse backgrounds to acclimatise to a university environment (Curtis Blundell, Platz, & Turner, 2014b; Garlick & Brown, 2008). These courses are generally considered to be successful and to add diversity to the schools' student cohort, however, they are costly to run and the number of places available are very small (Mathers, Sitch, Marsh, & Parry, 2011). In addition, these programmes tend to be offered by less selective schools, suggesting that may continue to be seen to be incompatible with a reputation for 'excellence' (Cleland, Dowell, et al., 2012). Finally, once again, these programmes may be seen as problematic, as they also seek to compensate for the 'deficit' of individuals within a system based on academic meritocracy.

Another 'alternative entry route' designed to WA has been the establishment of graduate-entry courses. These courses were founded on the premise that, as applicants with more varied life experience, higher numbers of graduate students would improve diversity within

medicine, and perhaps they would be willing to work in underserved areas (Carter & Peile, 2007; Dowell et al., 2015; GP Taskforce, 2014; Wilkinson, Wells, & Bushnell, 2004). In contrast to the aforementioned initiatives, justifications for these courses do appear to consider the argument (discourse) of WA for workforce improvement through diversity. As a result, they foreground the potential benefits mature students with prior degrees may bring to the profession and a number particularly promote career pathways towards generalists, rural medicine and healthcare improvement (for example (Scottish Government Newsroom, 2016).

The effectiveness of graduate-entry initiatives may be questioned however. Although student cohorts in graduate-entry only courses may be slightly more socioeconomically diverse, the small intake on these courses (10% of total UK medical students) means that they do not significantly aid WA to medicine (Mathers et al., 2011). Moreover, graduates who enter through 'standard entry routes' are not more socioeconomically diverse than school-leavers (Garrud, 2011; Kumwenda et al., 2017b).

Enduring issues and a new way of thinking about widening access to medicine?

WA is a deeply contested area in educational policy and politics (Archer, 2007; Francis, Mills, & Lupton, 2017) and the philosophical rationales supporting WA are not aligned (Sheeran et al., 2007). Uncertainty and conflicting messages have inevitably led to confusion 'on the ground' in medical schools and universities as to what WA should be 'for', how it should be 'done' and what the measures of 'success' should be (Cleland et al., 2015; Stevenson et al., 2010). These unresolved tensions are themselves a barrier to WA: restricting the responsibility for WA to a few committed individuals, causing frustration and the attribution of blame on others, and preventing widespread cultural change across the institution (Stevenson et al., 2010).

In this chapter we have discussed two competing arguments (discourses) for WA and explored how they are currently enacted in UK medical schools. Meritocratic selection on the basis of academic attainment and ability remains a cherished cornerstone of medical schools' selection procedures, and to date, WA efforts seem to have been predominately shaped to around this model, emphasising the need to enhance the social mobility of disadvantaged individuals in this system. Such initiatives have, however, failed to significantly change the socioeconomic profile of UK medical school students.

We suggest this may be, at least in part, because these initiatives are primarily designed to fit into established models of selection, and do not embrace the required shift in attitudes at a cultural, professional, political or systemic level which would enable real progress in WA. The discourse of "it ain't broke, so why fix it" in relation to medical admissions perpetuates within established approaches and attitudes, yet the reality of a polarized society and underserved health service loom large as indications of systems at crisis point (NHS Improvement, 2016; Sutton Trust, 2017). WA is certainly not the only solution to these issues, but emerging evidence suggests it may be an important part of the puzzle (see for example (Dowell et al., 2015; Larkins et al., 2015; Milburn, 2012)). Medical schools must play an important role in shifting behaviour, attitudes and norms, however they cannot do this in isolation or without other parties moving in parallel - the impact of WA initiatives ultimately depends on stakeholders and systems aligning (Gorman, 2017).

As in healthcare workforce planning (Gorman, 2017), if no consensus on the desired endpoint for WA is reached, then pre-entry or entry level changes to medical school are difficult to assess or plan. Governmental targets requiring increased admission to underrepresented groups may be unavoidable, but medical schools are still relatively free to interpret and enact these as they choose (Cleland et al. 2015; Ball, 1994, p. 19). Therefore, a consensus across all key stakeholders, including but not limited to medical schools, should be sought to clarify the desired overall endpoint for WA. Students are also stakeholders, so parents and applicants also need to 'buy-in' to any repositioning of medical education. This may be challenging in a society such as the UK - medical school is still considered to be for the elite and medicine to offer substantial personal choice and flexibility in terms of an ultimate career, rather than as a vocational course which aims to produce professionals who will meet the healthcare needs of the population.

Medicine is currently oversubscribed with qualified applicants, and many more who do not meet the current requirements aspire to this subject. In their role as gatekeepers, medical schools are able to prioritise who will join the profession. Despite ongoing research, choices about who to accept must be made with severely restricted information – relatively little is still known about how each selection procedure might affect eventual performance or choices as a doctor (Cleland, Dowell, et al., 2012, p6). Nonetheless, fundamental choices can still be made. For example: Should applicants who are more likely to graduate at the top of their class academically be prioritised? Or should applicants who are more likely to work in underserved areas be selected? Are these mutually exclusive or not? Where is the appropriate balance? The answers to these questions will determine the means as to how the answers are achieved, with consequences for both the processes and outcomes of WA.

The answers to these questions will also be strongly determined by the context in which medical schools operate and where most support from key stakeholders can be found. For example, if league tables reward schools that admit and graduate the highest academically achieving students (as they currently do) then the goal of academic excellence will be prioritised. If however, funding and prestige is available for courses that prioritise training medical students to ultimately work in underserved posts/regions (see for example, the graduate entry course discussed above), then promoting these courses may become more attractive.

Although there is some evidence within policy/governmental discourses that signal a move away from a deficit model of WA (see for example (Scottish Government, 2016, p31)), for lasting change political targets for WA must be met by support financially, and by removing the perceived risks to repetition loss through WA within a competitive marketplace.

Finally, changes must be made within the profession itself to tackle current attitudes and hidden curriculums that dismiss or degrade general practice (family medicine), underserved specialties or rural posts as 'second best' (Baker, Wessely, & Openshaw, 2016; Edgcumbe, Lillicrap, & Benson, 2008). Medical schools can affect practical change here, as they exert significant influence on their graduates' choice of specialties and locations (Brosnan, 2010; Cleland, Johnston, French, & Needham, 2012; J. H. Walker et al., 2012).

Conclusions

In this chapter we have explored the key drivers for WA, their comparative influence, enactment on the ground, and evaluated their success. We have also suggested systemic and cultural changes that could help preserve the good in the established system whilst embracing the changes necessary to better address the needs of UK society. This may be considered "social engineering" but then, so could allowing the powerful in society, (those who have access to good schools, professional cultures and ample finances), to dominate the status quo to the exclusion of others.

Innovative change sometimes only arises out of necessity. The UK is now experiencing severe levels of inequality (Eurofound, 2015; Jerrim & Shure, 2016; RCPCH, 2017), a stagnation of social mobility (Sutton Trust, 2017), and a growing healthcare workforce crisis (GP Taskforce, 2014; NHS Improvement, 2016). An effective model of WA may be one way to partially address these issues. We encourage a move away from an approach that

selects certain individuals (targeted primarily because of their demographic traits) and aids them to better 'fit' and compete within academically orientated selection procedures. Instead we advocate a model of WA that redefines the parameters of 'merit' so that it is not only more inclusive and encompasses the benefits diversity brings to a workforce, but can also better serve the needs of the UK healthcare system. Achieving this depends on the Higher Education market adequately recognising and rewarding widening access initiatives, as well as medical schools and the wider healthcare system working together to drive change (Cleland et al., 2015; Gorman, 2017; Thompson, 2008).

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Kirsty Alexander is a doctoral candidate at the Centre for Healthcare Education Research and Innovation (CHERI), University of Aberdeen, Scotland.

Kirsty's PhD research investigates how the medical school admissions process is understood and negotiated by those within in it – by medical schools, secondary school teachers and potential applicants. She is particularly interested in the influence these perceptions may have on initiatives to widen access to medicine, an important and current issue within the area. The research is qualitative, and primarily uses thematic and discourse analysis approaches. The first article from her work appears in *Medical Education* and was runner-up in the ASME Best Original Research Paper Award 2017.

Before starting the PhD Kirsty completed an MA at the University of St Andrews in International Relations and German. After graduating she worked in a widening access role at two different UK universities, which sparked her interest in this fascinating area.

Jennifer Cleland is John Simpson Chair of Medical Education Research, and Director of the Centre for Healthcare Education Research and Innovation (CHERI), University of Aberdeen, Scotland; Chair of the Association for the Study of Medical Education (ASME); Director of the Scottish Medical Education Research Consortium (SMERC); Lead for the Association for Medical Education Europe (AMEE) Research Committee; Chair of the Board of Management for *Medical Education*; Associate Editor for *Perspectives in Medical Education*; an Invited Member of the Wilson Centre, Toronto; and Adjunct Professor of Medicine at the Uniformed Services University of the Health Sciences, USA.

With nearly 200 peer-reviewed journal articles and book chapters, she has published widely in a broad range of journals including the *BMJ* and *Medical Education*.

Jen's particular research interests are selection, assessment and performance, and medical careers decision making. Her research spans the continuum of undergraduate, postgraduate and continuing medical education and training.