The ageing surgeon

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INTRODUCTION

We all grow old. Even surgeons. We slow down, we weaken and our skills diminish. Although individuals differ and chronological age may not be an accurate guide to biological age, we cannot hold back the advancing years.

How long should we allow surgeons to keep operating? If public safety is the priority, as it must be, should there be a mandatory retirement age, as there is for pilots in the airline industry? Or is there a fair and equitable way of assessing those nearing the end of their career to ensure their competency is maintained?

The ageing surgeon poses daunting challenges. For the individuals concerned, the idea of ageing may trigger fears about loss of status, identity and livelihood. Patients may worry about the quality of their care. For healthcare systems struggling to meet growing demand, this issue raises questions about capacity.

THE SCOPE OF THE PROBLEM

Medical regulators in Australia and Canada are implementing additional checks on doctors from the age of 70 years,[1 2] but most countries have no mandatory retirement age for surgeons and those where it once existed have moved away from such a prescribed approach.[3] Globally, the surgical workforce is ageing, with figures of those above 65 years ranging from as high as 25% in the USA,[4] and 19% in Australia and New Zealand,[5] to 9% in the UK.[6] Cognitive decline is evident in older surgeons, as in ageing adults generally. The 2008 Cognitive Changes and Retirement among Senior Surgeons study found a deterioration in attention, reaction time, memory and sensory changes in vision, visual processing speed and hearing.[7] A further study, however, found the decline was slower in surgeons than in age-matched controls.[8] Importantly though, the assessment in that study did not encompass all surgical skills.

Some studies have shown that older surgeons have lower patient mortality rates than younger ones,[9] but others have shown the reverse, and it is unclear whether it is decreased case loads or performing more complex procedures that result in worse outcomes.[10] An Australian study[11] reported that patient complaints increase with surgeon's age, although the analysis did not take into account case complexity.

It is also relevant that surgery in the modern era encompasses more than operating. Patients facing complex procedures for cancer or similar problems need to be full partners in the decision to treat. That requires an open dialogue with the surgeon and the provision of evidence to allow the patient to make a decision with full autonomy. A more experienced surgeon may be able to draw on greater experience to provide fuller information about complications and outcomes.

DO OLDER SURGEONS KNOW WHEN TO STOP?

As surgical specialities advance, and we see the rise in novel technologies and techniques, there are fears that ageing surgeons may struggle to keep up. Older surgeons may also face challenges with unexpected complications, especially when using technologies with which they are less familiar. Other safety critical professions, such as the aviation industry, have formal assessments and retirement policies for the ageing workforce. In surgery, this is the exception. Some countries, such as Germany and the UK, which used to mandate retirement for surgeons, have phased out such policies in recent years. At the time of this writing, as far as we know, only Australia, Canada and Ireland have mandatory retirement or require age-related assessments of doctors (typically once they reach the age of 70).

While such assessments make sense and probably require no justification to the public, little evidence exists to support the specifics of these assessments or any other policies related to overseeing the continued practice of ageing physicians.

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In the context of this largely data-free zone, in this issue, Sherwood and Bismark[5] interviewed experts in surgical governance with experience working with late career surgeons to solicit their opinions on how to assure acceptable ongoing quality of performance and strategies for supporting safe transitions to retirement. The interviews demonstrated a clear need for a more prescriptive approach with over a quarter of participants noting that they could remember a case where they personally believed that patient safety was put at risk because of age-related changes. This not only applied to the actual surgery but also included poor ward-based care such as misdiagnosis, or using out-of-date prescribing practices.

As a means towards mitigating these risks, a number of participants favoured a whole-of-career approach, with similar triage, testing and responses for all surgeons. They argued this would avoid age discrimination and reinforce standards across surgical careers, with better opportunities for early remediation. Others preferred a more targeted approach for older surgeons, but consensus on the age threshold was poor. Both groups, those who favoured a whole-of-career approach and those who saw merit in age-based assessment, stressed the need for a staged process, where an initial assessment would be followed by more detailed evaluation and remediation or restrictions as appropriate.

Supporting those experts who favoured a whole-of-career approach, a study from Singapore showed that stakeholders rejected a mandatory retirement age in favour of selective strategies to ensure that the role of the surgeon was optimised in the workforce.[12] This allows for standards to be reinforced throughout a surgeon's career, and ensure that not only older surgeons but also younger surgeons alike stay abreast of rapidly evolving technologies. Other studies suggest that regular physical and cognitive examinations are a potential method of mitigating against the greatest risks. However, a study at Sinai Hospital that offered a voluntary self-assessment programme saw very few surgeons (as few as 8) take up the opportunity.[4]

Sherwood and Bismark suggest that the evidence shows most older surgeons do know when to stop operating and do not continue to practise beyond their capabilities. Most older surgeons make decisions on career transitions with self-awareness and concern for patient safety, they say. There is little support however, for surgeons navigating these difficult transitions, and, on account of this, little protection for patients.

The framework proposed by Sherwood and Bismark suggests a tiered approach, which starts with voluntary action by the surgeon, followed by more structured action by the employer or college, and finally resorting to enforced action by the employer or regulator. Frameworks such as this, in many if not most cases, will guide individual surgeons in responding to their own diminished capacity, and support departments to assist colleagues through this difficult transition. One risk however, when adopting this approach, lies with those few surgeons who lack insight and awareness of their declining abilities. In these rare cases, if the surgical profession is to police itself while maintaining the dignity of the surgeons involved and the safety of patients, further finesse is required.

Across interviews and surveys with 52 experts from Australia, New Zealand, Canada and the UK, consistent challenges in this process were raised including taking into account the many reasons that influence an individual's decision to retire such as financial and governmental policy levers. The difficulty in identifying the perceived cause and impact of ageing in individual cases was also identified, and the importance of introducing simple measures for treatable causes.

WIDER CONSIDERATIONS

These measures must be considered against the background of continuing workforce pressures around the world. As demands on healthcare systems mount and levels of burnout in the clinical professions rise,[13] it is paramount that we strive to maintain professional well-being which is critical to preserving patient safety and active workforce engagement. Central to this are the efforts to strengthen organisational leadership and improve culture as a whole which must take account of both doctor and patient needs.

Governmental policy also impacts decisions made by senior physicians. Take, for example, the UK where healthcare professionals have seen the publication of The Interim National Health Service People Plan 2019,[14 15] setting out the need for growth in all established specialities in future years, increasing the pressure for doctors to work longer. However, only a few months earlier, the public announcement of cuts to pension tax for high earners,[16] sparked debate on the impact this may have on senior physicians—either encouraging them to reduce their NHS commitments or encouraging them to retire early. A successful approach must aim to be as unified and coherent as possible. Junior doctors in particular represent an important but under-represented voice in this debate, and any widespread adoption will significantly affect their late careers. They need to be engaged in the process and be able to see an achievable end goal.

Surgery is a career that is all-encompassing and core to an individual's identity. Physical and mental well-being must be considered to ensure that the decision is not only right for the patient but also for the individual surgeon in question. Senior surgeons have a wealth of knowledge, and an innovative approach to leveraging this expertise and supporting them through their later careers is necessary. One such consideration is building teams with varied levels of experience and expertise to increase safety standards in the operating room. Indeed, fatigue in the younger surgeon who has a heavy case load and works long hours may pose a

greater safety threat than that presented by the ageing surgeon. Bringing younger and older surgeons together could improve safety, especially in complex cases.

CONCLUSION

Patient safety and surgical outcomes are the most important factors when considering the multifaceted challenge posed by the ageing surgeon. Sherwood and Bismark are right to call for a competency-based approach rather than a fixed retirement age especially in an era of constantly emerging technologies and heightened global workforce pressures. The introduction of a mandatory retirement age for surgeons in some areas of the world may well pose a greater threat to patient safety, than not doing so. Methods such as the proposed framework start to provide 'the robust processes to assess performance, remediate deficits and adjust scopes of practice'. However, there is a still a demand to gather further evidence of validated tools that can be used to ensure this is a comprehensive process. There is no simple answer to this challenge, and any framework adopted must not forget to recognise both past and future contributions of our colleagues.

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