#### LETTER

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# The value of mobile tablet computers (iPads) in the undergraduate medical curriculum: an Imperial College medical student view

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#### **Dear editor**

We read with great interest the article by Patel and Burke-Gaffney exploring the benefits and potential drawbacks of using mobile tablet computers as part of the curriculum and discussing the use of devices across Imperial College School of Medicine (ICSM).<sup>1</sup> As ICSM students involved in the scheme, we feel we might be able to offer unique perspectives on the daily use of devices and the use of devices for teaching.

First, we would like to thank the authors for the broad identification of the benefits. Having used iPads in clinical and preclinical settings, we strongly agree that iPads offer improved organizational opportunities for students. For example, clinical placement sign-offs are easy to access in one app, as well as offering further authenticity as a copy of the form is emailed to the signee. This is fundamentally as a result of the medical school wirelessly "pushing" applications to students' iPads. Organizational benefits of having all the required apps and information on one device outweigh the ability to access these resources on other devices as the article mentioned.

The article did not however recognize opportunistic signposting of nonacademic resources. Shortcuts to well-being resources pushed to students' iPads improve access to pastoral help and mental health advice. There is also the added environmental benefit of pushing lecture resources, which would traditionally be printed.

The article discussed improving expertise in using online resources for clinical decisions.<sup>1</sup> As students, we feel the devices improve proficiency and confidence when online resources are used on the wards. This skill, essential to today's medical practice, is not currently developed elsewhere in the curriculum.<sup>2,3</sup>

However, as mentioned in the article, there are various drawbacks to the use of iPads. The article discusses that the device can often be a distractor during teaching.<sup>1</sup> For students, it is a useful device to quickly read up on a topic; however, sometimes the use of device must be avoided as it may raise doubts among the clinical staff that the students are disengaged, given the current perceptions of these devices.<sup>4</sup> Formal briefing to clinicians in teaching hospitals, such as an email, may improve perceptions.

The article touches upon patient data confidentiality and encryption issues.<sup>1</sup> Back-ups to Apple's iCloud system, which is not encrypted, can pose a problem due to the inter-device fluidity that enables transfer to other devices, even those not used

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Furthermore, the article does not discuss the financial implications for students. Although the school provides the device, repair costs and insurance may pose difficulty. The possibility of theft must also be considered, particularly as public awareness on this scheme has increased. It is important to assess the life of the devices and whether they will be reliably performing till the end of the 6-year course.

Feeling privileged to have received these iPads, we hope we have highlighted some further key benefits and drawbacks not mentioned in the article. We would like to work with the authors to run student focus groups to establish further benefits and drawbacks.

## Disclosure

The authors report no conflicts of interest in this communication.

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## Authors' reply

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## **Dear editor**

We would like to thank the authors for their response to our article. The group has good insight into the daily use of iPads within the medical curriculum. As both a final-year MBBS student (SP) and teacher within Imperial College Faculty of Medicine (ABG), we feel we might be able to add a dual perspective on iPad use within the undergraduate medical setting and would like to take this opportunity to respond to some of the points raised by Tahir et al.

The authors of the letter quite rightly mention the ability to wirelessly "push" resources – an effective modality to disseminate information to students in an environmentally friendly manner. From an educational perspective, the iPad also helps to reduce extraneous cognitive load by centralizing key information and allowing easy access to all teaching and learning materials.

The authors also highlight that iPads may contribute to student welfare by providing shortcuts for pastoral help resources and mental health advice. While we acknowledge that the added holistic angle that iPad use can offer is of great importance, the original article was written with the core medical curriculum in mind, as opposed to welfare issues. That said, Imperial College London, recognizing that these aspects of student life are integrally linked, is now trialing a new role of academic tutor for Year 1 and Year 2 MBBS students. These tutors will be responsible for all aspects of student learning (developing effective study skills, time management, active learning and engaging with feedback) as well as student well-being. No doubt the iPad will be a key tool in this new endeavor.

We strongly agree that clinicians in teaching hospitals could be made more aware of the role and benefits of iPads as tool for medical student teaching. Despite the potential to be distracting, iPads offer great utility in clinics and ward rounds, especially with the capacity to transcribe case reports, key learning points and examination details. The use of iPads in this setting should be encouraged by all involved in medical student education, to help transform what can often be a passive learning environment to a more active one.

The authors of the letter also address the financial implications that iPads could pose for students such as insurance and repair costs. As a student of the MBBS course, I (SP) feel that they are heavily offset by the free provision of the iPads. The AppleCare+ insurance scheme also provides an affordable solution over a 2-year period to cover accidental damage and battery depletion. We do, however, recognize the potential for loss or theft of iPads and would urge students to read Apple's support page for potential safeguarding methods should situations like these arise.

Finally, we welcome the authors' proposals for student focus groups and would also suggest that medical educator focus groups with student presence could facilitate deeper exploration of the topic and provide valuable new insights and angles into the ever-increasing role of the iPads within the medical curriculum.

## Disclosure

The authors report no conflicts of interest in this communication.

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