

EDUCATION AND TRAINING Improving ‘The Core’ aspects of medical training: a trainee-led innovation

Authors: Melanie Nana^A and Holly Morgan^B

ABSTRACT

Introduction

The successful achievement of training requirements at core medical training level is central to gaining the competence and confidence to progress to higher specialty training. Achieving such requirements is, however, challenging in the context of busy medical rotas and numerous rota gaps.

Solution/methodology

To develop an online resource for core medical trainees which would facilitate the completion of such training requirements and provide information and support for those progressing to higher specialty training.

Outcome

The online resource has been well received in Wales with 478 users and regular use of the site being reported using Google Analytics. Qualitative feedback has also been favourable.

Conclusion

The use of digital resources, flexible training and focus on trainee-led innovation can positively affect the training of medical trainees. In the advent of internal medicine training, the support of the Royal College of Physicians is greatly appreciated in expanding this trainee-led innovation across the UK such that it can support a larger number of trainees.

KEYWORDS: Training, CMT, technology, trainee-led

Introduction

The results of the Joint Royal Colleges of Physicians Training Board (JRCPTB) survey highlight areas where core medical trainee (CMT) satisfaction is low.¹ Key themes for concern include inadequate clinic attendance, preparation for membership examinations, opportunity for clinical skills training and preparation for the transition to medical registrar.¹ On a day-to-day level, these challenges in meeting training requirements contribute towards reduced morale, resulting in risk of increased drop out from medical training programmes and failure for trainees to commit to further specialty training.² The Royal College of Physicians (RCP) has published a number of documents recently reiterating the

importance of addressing these concerns in order to support the future workforce.^{2–4}

In view of an ageing population and significant rota gaps, the workload faced by trainees is unlikely to decline in the coming years and therefore the challenges in fulfilling training requirements are not forecast to improve. Despite the challenges faced, efforts are required to continue to recruit into physicianly training to ensure that the future workforce meets demand. In certain geographical areas of the UK, such as Wales, this is a particular concern with only 75% of specialty training level 3 posts currently filled.⁵

In an era of smart phones and web-based technologies, a novel approach to fulfilling training requirements which empowers trainees to enhance their own training must be sought to address these concerns. This is particularly relevant with the imminent advent of the internal medicine training (IMT) curriculum, which demands increased attendance at clinics and other training opportunities in order to ensure that physicians of the future are equipped with the relevant skills needed to manage patients presenting with a wide range of medical and complex social needs.⁶

We aimed to develop an online resource for CMTs in Wales which would facilitate successful completion of training requirements and educational opportunities to support transition into higher specialty training.

Solution/methodology

Trainee needs were confirmed by carrying out an online survey of CMTs in Wales (see supplementary material S1) and evaluating the results of the JRCPTB survey.¹ An online platform was then developed which was funded by a grant awarded by the Wales Deanery’s Trainees Transforming Training initiative and supported by a medical student with an interest in website design. Focus groups involving the head of the school of medicine, consultants with an interest in education and associate college tutors (ACTs) were held with discussions influencing the site content.

Over an 18-month period, a secure website was developed which was launched in September 2016. The key features included an online booking system which allows consultants to upload clinic opportunities which trainees can browse and ‘book’. The rationale behind this was to allow trainees to attend a variety of clinics at times that were convenient for them, allowing them to attend clinics which would be beneficial for their membership revision and also to explore specialties outside of those in which they were

Authors: ^Aspecialist registrar in diabetes and endocrinology, Royal Glamorgan Hospital, Llantrisant, UK; ^Bspecialist registrar in cardiology, Royal Glamorgan Hospital, Llantrisant, UK

Box 1. Key features on the website

- > An online booking system for clinics and practical procedures.
- > Information about applying for core medical training.
- > Easy access to the Annual Review of Competence Progression (ARCP) decision aid.
- > Membership examination advice and a feature to 'find a study buddy'.
- > Advice about carrying out quality improvement and research.
- > Key dates and conferences.
- > Selection of educational evening events in convenient locations.
- > An area where all teaching material is uploaded for trainees to review at a time convenient for them.
- > Information about further training and applications.
- > Access to mentors from each of the higher specialty training programmes.
- > Access to contact details for royal college tutors and other pastoral support.
- > Discussion forms for trainees to discuss topics concerning training.
- > An online journal club.
- > Interesting cases/electrocardiography.

rotating. Consultants are able to upload clinics that they deem relevant to trainees and in which they have time to teach. A similar 'booking' model was developed for trainees to select regional CMT teaching days to attend, being offered a selection of dates aiming to improve their likelihood of attending. Ability to book on to advertised local events, practical skills and simulation sessions was also made possible. Other features were developed to support trainees applying for CMT, prepare for membership examinations and apply for further specialty training; summarised in Box 1.

The site would be maintained and expanded with the support of the ACTs and a committee of trainees with representation from north, west and south Wales.

Google Analytics would be used to gain quantitative feedback about the use of the site and gain an insight into the most used

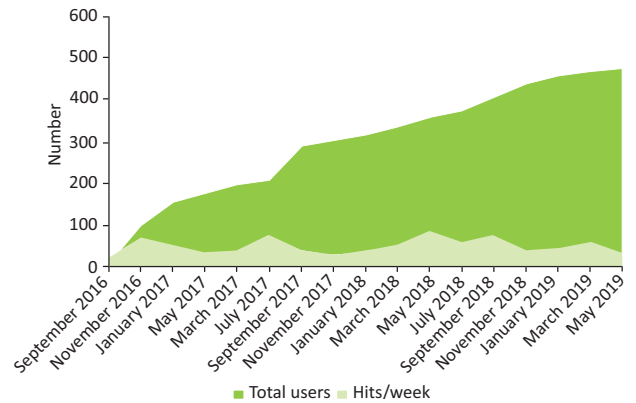


Fig 1. Total users and hits per week over time.

pages. Qualitative feedback would also be gained by carrying out trainee surveys at regular intervals to ensure the site remained relevant to their needs.

Outcome

The website (<https://thecore.wales>) was launched in September 2015 and has seen increasing numbers of users over time (Fig 1). There are currently 478 users with 74% of these being core medical trainees and the remaining users including specialty registrars, consultants, foundation doctors and non-training grade doctors. The site receives, on average, 50 hits per week with peaks being associated temporally with membership examination seasons, Annual Review of Competence Progression and the booking of local events that are advertised on the site (Fig 1).

The site can be accessed on either a computer, tablet or mobile phone and has 10 main domains which encompass the features in Box 1. Three pages of the site are demonstrated in Fig 2. Most frequently visited pages of the site include the clinic booking facility, CMT study days, MRCP(UK) part 2 clinical examination (practical assessment of clinical examination skills) resource hub, local events and higher training interview tips.

There are currently 23 consultants engaged in the project offering approximately 350 available clinics at one time. The site

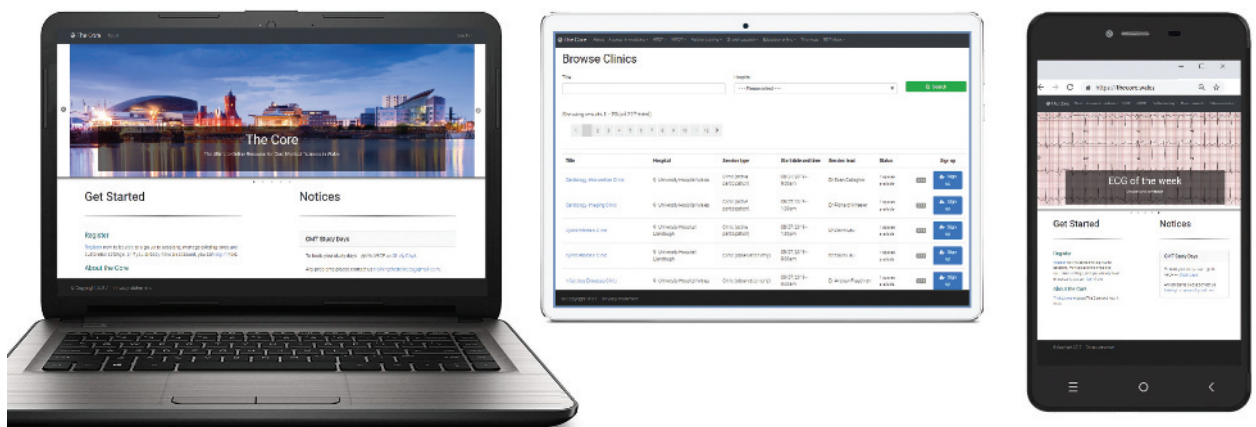


Fig 2. Visual demonstration of the website on various electronic devices.

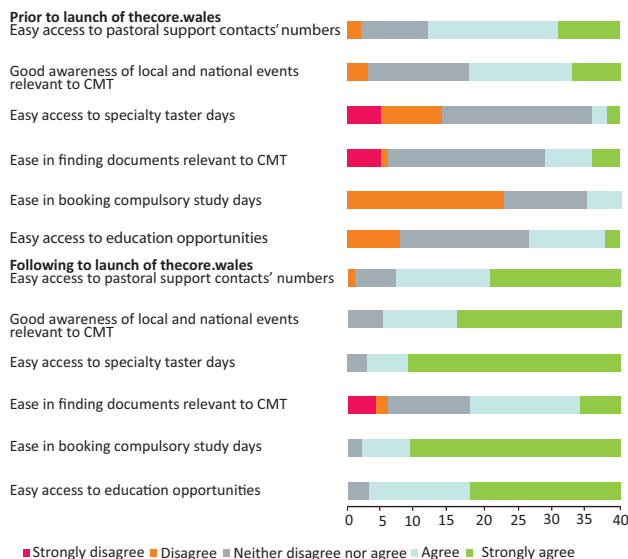


Fig 3. Stacked bar chart showing improved access in each area.

has been well integrated into core medical training in Wales and is now used to book all compulsory study days.

Surveys have been collected at 6-monthly intervals since inception. In the most recent survey, which was completed by 40 users, all of which were CMTs, trainees were asked to rank how easy they found it to access a number of opportunities, documents and pieces of important information. The responses are presented in a stacked bar chart and shows improved access in each of the areas when the website was launched in September 2015 (Fig 3).

Qualitative analysis was performed using an inductive content approach. Two members of the committee independently reviewed free text responses and listed key themes. Responses were then coded according to agreed themes and results collated as frequencies (Table 1). Key individual themes with highest

Table 1. Qualitative analysis using inductive content approach

Major	Minor	Frequency
Usability of website	Easy to use	26
	All relevant documents on one platform	10
	Easy to sign up	6
Site content	Booking system works well	6
	Relevant	16
	Kept up to date	10
Events	Find out about local events	16
	Relevant to core medical trainees	5
	Opportunities to network	7
Training	Run at convenient times	6
	Increased training opportunities	19
	Attending clinics that I wouldn't have previously	4

frequency of reporting included 'easy to use' (reported by 26 trainees) and 'increased training opportunities' (reported by 19 trainees).

A committee of trainees has been formed to support the maintenance of the site with representation from north, west and south Wales. With the support of the committee, a number of educational events have been developed and advertised on the site including a cardiology update, a medical problems in pregnancy evening and a 1-day course designed to help prepare trainees for the transition to medical registrar.

The project has been presented at eight conferences and was shortlisted for the RCP Excellence in Patient Care Awards. Presentation on a national scale provoked interest from several

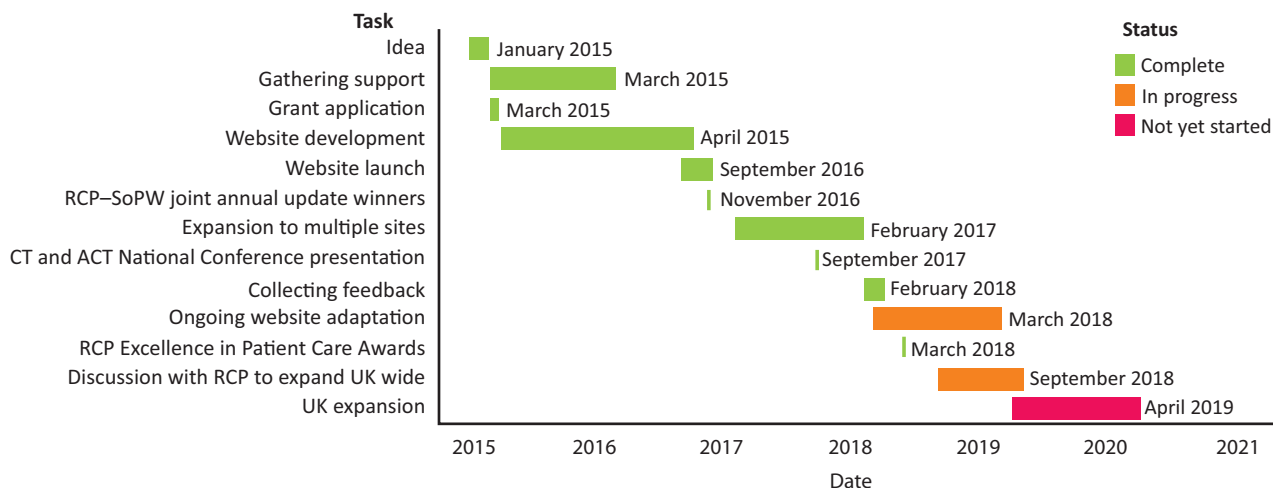


Fig 4. Gantt chart demonstrating events leading up to UK expansion. ACT = associate college tutor; CT = college tutor; RCP = Royal College of Physicians; SoPW = Society of Physicians in Wales.

different deaneries who expressed that expansion of the site into their area would allow the site to benefit a greater number of trainees. Consequently, the RCP has agreed to support the work by providing the support and funding to expand the site throughout the UK. Events in the lead up to UK expansion are demonstrated in a Gantt chart (Fig 4).

Conclusion

The online resource is now fully established in Wales with all CMTs engaging in the site to book at least their compulsory study days. There is also evidence to suggest that the site is being used to 'book onto' other learning opportunities which have been qualitatively demonstrated to enhance trainee experience. The site is also used by a number of trainees who are interested in exploring future physician training and the site is being used where possible to showcase the specialty of general medicine.

The benefits of using digital resources are now well documented and it is acknowledged that these technologies should play a role in improving medical training.⁷ In a recent survey, 98.9% of doctors were found to own a smartphone and 92.6% found their smartphones 'very useful' at work.⁸ It would therefore appear that such technology has become omnipresent to our day-to-day living and, as such, if we are to make educational opportunities easily available, using the medium of web-based technology represents a favourable option.

The basis of the website focuses on trainees functioning as adult learners and being able to select learning opportunities that they believe will enhance their progression through training.⁹ Seeking trainees' views on their own training has been demonstrated to be vital in ensuring that their training is effective and translated into quality patient care. This concept of promoting flexibility in training is one of the themes advocated by the new internal medicine training programme and we hope that the site can further develop to compliment this new programme and support the trainees undertaking it.⁶

The potential for the site to be used by a greater number of trainees has been highlighted and, as such, the founders,

now medical registrars ourselves, have agreed for the site to be expanded across the UK with the support of the RCP with a heavy emphasis on the ongoing input of current trainees in the maintenance of the site to ensure that the resource remains relevant for current trainees. ■

Supplementary material

Additional supplementary material may be found in the online version of this article at www.rcpjournals.org:

S1 – Survey.

References

- 1 Lynch W, Simpson A. *2017 National Trainee Survey results*. Joint Royal Colleges of Physicians Training Board, 2017.
- 2 Royal College of Physicians. *Being a junior doctor: Experiences from the front line of the NHS*. London: RCP, 2016.
- 3 Royal College of Physicians. *Physicians on the front line: The medical workforce in Wales in 2016*. London: RCP, 2016.
- 4 Royal College of Physicians. *Keeping medicine brilliant: Improving working conditions in the acute setting*. London: RCP, 2016.
- 5 Royal College of Physicians. *Doing things differently: Supporting junior doctors in Wales*. Cardiff: RCP Wales, 2019.
- 6 Joint Royal Colleges of Physicians Training Board. *Shape of Training and the physician training model*. JRCPTB, 2019. www.jrcptb.org.uk/imt
- 7 Visram S, Temple M. Smart phones at the ready! *FHJ* 2017;4:156–7.
- 8 Mobasheri MH, King D, Johnston M *et al*. The ownership and clinical use of smartphones by doctors and nurses in the UK: a multicentre survey study. *BMJ Innov* 2015;1:174–81.
- 9 Royal College of Surgeons. *Making the most of trainee doctors' insights: a discussion paper*. RCS, 2016.

Address for correspondence: Dr Melanie Nana, Department of General Medicine, Royal Glamorgan Hospital, Ynysmaerdy, Llantrisant CF72 8XR, UK.

Email: trainingthetrainees@gmail.com