

Developing a Renal Starter Club Program to Promote a Career in Nephrology



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INTRODUCTION

The number of nephrologists is insufficient to meet the demands of the international population with kidney disease, and this problem is expected to grow. The global burden of chronic kidney disease is increasing, with a disproportionately high impact on low-and-middle income countries. The Global Kidney Health Atlas survey, performed in 2018, highlights inequality in nephrologist density, with a 30-fold greater trainee density per million population in high-income countries.¹ These findings demonstrate the current gaps in the nephrology workforce, with inevitable potential to impact on patients with kidney disease internationally. Furthermore, without a robust workforce, providing adequate training opportunities and experiences to the next generation is challenging, in turn limiting the ability to develop a sustainable workforce for the future.

In addition to the shortage of a skilled nephrology workforce, a decline in interest in becoming a nephrologist has been observed, evidenced by recruitment challenges and unfilled nephrology training posts. In the United Kingdom (UK), a nadir was reached in 2018 when 41% of training posts were unfilled, with similar figures reported in the USA (Supplementary Figure 1).^{2,3,S1,S2} A number of factors likely contribute to these observations. A lack of exposure to nephrology in the early stages of training, poor financial compensation, and perceived heavy workload have led to some trainees following alternative career paths.^{4,5} Poor access to role models and limited positive experiences during training rotations

also decrease the likelihood of junior trainees choosing a career in nephrology.⁶ Although UK recruitment has improved in recent years, fluctuations in applications are likely to continue, and appropriate competition for places will drive high standards within the nephrology workforce.

Our aim is to improve recruitment to nephrology specialty training in the UK, by creating a network of preregistrar doctors (prefellow; UK training pathway shown in Supplementary Figure 2)^{S3,S4} among whom we do the following: (i) deliver focused inspirational and educational events, (ii) facilitate networking and mentorship with local nephrology trainees, and (iii) signpost to relevant educational resources in the field of kidney medicine.

RESULTS

Renal Taster Day

The Renal Taster Day was first held in November 2017 in Bristol, UK, and was designed for preregistrar doctors who had not yet chosen a designated specialty training program. Our aims were as follows: to (i) highlight the benefits of a nephrology career, (ii) explore the day-to-day role of a nephrologist, and (iii) give advice on preparing successful applications to renal specialty training programs. The event has gradually expanded, and now attracts 50 to 60 participants per year. The COVID-19 pandemic encouraged a move from in-person to virtual format. Participants reported preferring the virtual option due to reduced travel time and cost. The program is outlined in Table 1.

We used postcourse feedback to refine further events and assess the effectiveness of the course in meeting its aims. Feedback from the 2023 event is outlined in [Table 2](#) (questions displayed in [Supplementary Table S1](#)). Fifty-five people attended from all 4 nations of the UK and ranged from medical students to those in their final year of prespecialty training (senior resident). Fifty-three participants completed the postcourse questionnaire. Thirty-six (68%) reported being more likely to pursue a career in nephrology, and 16 (30%) reported being equally likely to apply (who may have already been committed to the specialty). Free-text responses exploring barriers to nephrology highlighted the perceived requirement to complete a higher research degree, high-volume workload, and wish to maintain a work-life balance. Attendees commented that some perceived barriers were dispelled through the course ([Table 2](#)).

Renal Crash Course

Following the success of the Renal Taster event, in 2022 we introduced a course targeted at preregistrar doctors imminently starting designated nephrology training positions. This in-person, 1-day course, again held in Bristol, aims to ease the transition into nephrology training and facilitate peer networking in the wake of the COVID-19 pandemic.

Interactive talks covered common situations encountered in the first 6 months of training with a focus on what information to gather, giving safe advice, and when

and who to call for help. The program is outlined in [Table 1](#).

Thirty-five participants attended the course. Post-course feedback is outlined in [Table 2](#) (questions displayed in [Supplementary Table S2](#)). All attendees would recommend the course to others. The majority preferred the event to be held in-person (84%) and on a weekend (94%). In free-text responses, attendees commented they felt more confident about starting training posts. A follow-up survey 3 months after initiation of nephrology training was used to identify topics previous attendees had felt less prepared for, including supportive management of kidney disease and glomerulonephritis. These topics were added to the 2023 event. All attendees described increased confidence and knowledge which they attributed to attending the event.

Renal Starter Club

Launched in September 2022, the Renal Starter Club encompasses the above events, in addition to providing a support network and delivering free advice to preregistrar doctors with an interest in nephrology. Registration is free of charge. The group distributes a quarterly newsletter providing information about upcoming courses, prizes, and networking opportunities, and signposts individuals to relevant educational resources (websites, blogs, and training events). Individualized advice is available via the group's email mailbox throughout the year. The Renal Starter Club became affiliated with the UK Kidney Association in

Table 1. Summary of structure of renal taster event and crash course

Domain	Renal taster day	Renal crash course
Program	Why Nephrology?: <ul style="list-style-type: none"> The right career for you? A day in the life of a renal consultant A day in the life of a renal registrar What is nephrology?: <ul style="list-style-type: none"> Glomerulonephritis cases Renal transplantation Is this a "renal" cause of AKI? Making life choices in kidney failure Broadening horizons: <ul style="list-style-type: none"> Work-life balance Renal and intensive care medicine, research careers, working abroad, education (break-out sessions) Applying for renal training: <ul style="list-style-type: none"> Application process and training program run-through Boosting your CV Experience of application (panel discussion) 	Hemodialysis: <ul style="list-style-type: none"> Basics (small group work) Vascular access The acutely unwell hemodialysis patient Peritoneal Dialysis: <ul style="list-style-type: none"> Equipment (practical) Basics (small group work) Trouble-shooting Renal-specific Medications
Location	Initially in-person (Bristol, UK) Online since COVID-19 pandemic	In-person (Bristol, UK)
Cost	£10 (2023)	£25 (2023)
Length of course	1 day	1 day
Time	November–January annually	July annually: 1 month prior to the commencement of most specialty training posts

AKI, acute kidney injury; CV, curriculum vitae.

Table 2. Feedback received from renal taster event and crash course

Domain	Taster event (n = 53)	Crash course (n = 31)
Attendee grade (number)		
Medical student	1 (2%)	0
Foundation doctor	8 (15%)	0
Internal medicine trainee	41 (77%)	29 (94%)
Clinical fellow	3 (6%)	2 (6%)
Preference of event structure	In-person: 14 (26%) Virtual: 39 (74%)	In-person: 26 (84%) Virtual: 5 (16%)
Suggestions for future topics	Life experience talks Common referrals Tips on procedural skills	Supportive care Glomerulonephritis Signposting to useful resources
Free-text feedback	"Inspired me to apply for training and made me feel like it was more accessible to me" "I had been put off by the idea of the workload. This course was good for discouraging that misconception" "The parts about the life in renal medicine were illuminating and helped to confirm my decision to apply for renal medicine." "A great opportunity to have a closer look into Nephrology"	"Thoroughly enjoyed it and I feel much happier starting in August" "The best course I've been to this year - very relevant to our clinical practice" "I truly enjoyed the crash course - well organized, excellent presenters, interactive presentations and well fed with both knowledge and food" "Really great course, very useful, very enthusiastic speakers. All talks were relevant and gave good examples of clinical relevance"

December 2022 and a page on the organization's website is under development. The group has a current subscription of 130 members across the UK.

DISCUSSION

Fundamental to the duties of a doctor is the education and inspiration of the next generation of trainees. We describe the novel approach of a practical, peer-facilitated support program, designed to promote recruitment to nephrology specialty training.

Nephrology faces varied and complex workforce challenges, specific to region and resources.¹ The UK faces widespread medical staffing shortages, and nephrology experiences lower recruitment rates than other medical specialties. We therefore need to develop strategies to engage preregistrar doctors. A similar theme has been recognized in the 2022 American Society of Nephrology Task Force on the Future of Nephrology, which highlights the need for innovative and personalized nephrology education.⁷ The Renal Starter Club, integrating the Renal Taster Day and Renal Crash course, demonstrates a low-resource approach to support those interested in a nephrology career. The rapid growth of the Renal Starter Club highlights the demand for a peer-led network providing accessible support and guidance on the path into nephrology training. The hub-and-spoke configuration of nephrology services in the UK means specialty exposure is not always accessible to early career doctors. Individuals with specialty exposure and positive role models are more likely to progress to clinical careers in nephrology.⁸ We hope engagement with the Renal Starter Club will enhance commitment to specialty and translate to an increase in applications for specialty training.

Considering that the Renal Starter Club, and associated events, are still in their infancy, we have had limited opportunity to measure the direct impact of these programs on application rates to renal training positions in the UK. In postcourse surveys, almost all attendees stated they would recommend the events to others, and those who participated in the Taster Event reported that attending the day increased the likelihood of them applying for a renal training position.

When surveyed 3 months after attending the Renal Crash Course, those who had taken up renal training positions described increased confidence and knowledge as a result of the event. In future, we plan to assess impact as follows: (i) tracking change in annual applicant numbers and (ii) calculating the percentage of new renal trainees who have accessed our programs, as well as the percentage of people accessing the programs who do not go on to enter renal training in the UK. We also aim to survey nephrology units to ask for suggestions on key areas to cover in our Renal Crash Course.

There is scope for expansion of the Renal Starter Club. Affiliation with the UK Kidney Association has allowed us to benefit from the experience of their finance, events, and communications teams. This has allowed us to produce more professional materials, liaise with sponsors to fund activities, and increase our reach when advertising events. Webpage development is our next step in diversification, offering real-time access to job advertisements, project opportunities, and online resources ranging from an induction handbook for incoming trainees, to blog posts and exam information. We also hope to expand our work to include medical students, learning from the success of programs already running in other countries (e.g., Kidney STARS and Kidney TREKS in the USA) in developing interest in nephrology at this earlier stage.⁹

Sustainability and succession planning must be considered as the network grows, with the Renal Taster Day and Renal Crash Course both now annual events on the UK nephrology calendar. We are encouraging involvement from motivated trainees to join a committee overseeing the group's ongoing growth and development while maintaining its underlying values. During this process, we also aim to collate our experiences, successes, and challenges into a 'toolkit' for use by others who wish to create a similar society.

Limiting financial barriers to the Starter Club and its affiliated events may encourage wider application to nephrology training. We therefore offer free group membership, and not-for-profit events. Other opportunities to explore include membership discounts to larger events and conferences, travel budgets, and bursaries.

Several nephrology societies, including the International Society of Nephrology, European Renal Association, Australian and New Zealand Society of Nephrology, and the African Association of Nephrology, support active trainee sections. Although this shows growing support for young nephrology professionals, to our knowledge none of these groups have active networks for doctors yet to enter specialty training. We hope our experiences will be informative and transferrable to young nephrology committees internationally who are interested in establishing similar structures to encourage junior doctors into the nephrology workforce.

DISCLOSURE

All the authors declared no competing interests.

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AUTHOR CONTRIBUTION

MB, TM, AN, and JS all contributed to organization and delivery of events organized under the Renal Starter Club. All authors contributed to manuscript preparation.

SUPPLEMENTARY MATERIAL

Supplementary File (PDF)

Supplementary Methods.

Supplementary Reference.

Figure S1. Percentage of unfilled nephrology posts by year in the UK and USA from 2013 to 2020.

Figure S2. A summary UK-based postgraduate medical training.

Table S1. Taster Day feedback questionnaire.

Table S2. Crash Course feedback questionnaire.

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