

Understanding Junior Doctors' Experiences of Teaching on the Acute Take: A Mixed-Methods Study.

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Abstract

Background New medical graduates report significant unpreparedness in managing acutely unwell patients, due to limited first-hand clinical exposure in the undergraduate curriculum. Supporting undergraduate learning around acute admissions can be challenging for junior doctors balancing teaching and clinical responsibilities. We aimed to explore junior doctors' first-hand experiences of supporting undergraduate education in the acute admissions setting (take).

Methods Fourteen junior doctors in one teaching hospital in South West England took part in a short web-based questionnaire exploring frequency, duration, efficacy, planning and delivery of teaching in the clinical environment. Participants subsequently took part in semi-structured focus groups (4-6 participants in each) which were audio-recorded and transcribed verbatim before being thematically analysed.

Results Quantitative results demonstrated junior doctors reported difficulties finding time to teach, with many feeling their teaching was ineffective and rarely planned, with challenges finding suitable resources to support teaching delivery.

Key qualitative themes were organised into six key areas: junior doctor, medical student and clinical team factors alongside clinical service, educational service, and resource factors. Junior doctors perceived themselves as novice clinical practitioners and lacked confidence in their ability to teach. Medical students were felt to be poorly engaged with clinical learning due to variable learning value of acute take experiences. Participants recognised value of the clinical team in ensuring student integration and noted a shared responsibility for teaching, driven by senior team members.

Clinical service was prioritised over delivery of education, though workload variations were common, and patient acuity often affected the degree to which students could actively participate. Educational experiences in this environment are frequent but highly varied; teaching must be adapted in response to opportunities that arise. Participants noted scarcity of resources to support teaching and these were prioritised for patient care. Improvements are suggested in defining an active role for students, supporting junior doctors to deliver education, and providing appropriate resources.

Conclusions Educational opportunities for undergraduate students on the acute take are varied, yet highly valuable. This study provides insight into provision of workplace education and its challenges from a junior doctors' perspective and offers focus for targeted improvement for educational providers.

Background

Acute and emergency care is a dynamic, fast-paced environment treating increasing numbers of complex patients with a wide range of conditions, which presents challenges to provision of care and education¹⁻³. New medical graduates feel unprepared to work in the acute environment, citing limited exposure to

acute care⁴⁻⁶ and describe current teaching delivery as too theoretical with a lack of practical, clinical-based teaching^{4,7}.

Early clinical experience and shadowing opportunities positively impact on feelings of student preparedness for future practice⁸ and furthermore, students that actively interact with the clinical environment whilst on clinical placements feel better prepared for managing acutely unwell patients^{9,10}. Educational theorists recognise the need for learners to contextualise classroom-based learning through active participation in the workplace¹¹⁻¹³ and the key role of clinicians in supporting engagement and facilitating learning¹⁴.

Whilst many of the learning practices in the workplace are opportunistic and informal¹⁵⁻¹⁹, medical students may expect to be educated through more structured teaching interactions²⁰. Clinicians are expected to provide supportive yet challenging educational experiences¹⁴ whilst balancing responsibilities of intensive, timely clinical care and ensuring patient safety^{11,20,21}. Junior doctors enjoy teaching and generally perceive themselves as knowledgeable and competent clinical teachers²². However, finding the time to teach students effectively in this busy clinical environment is a significant challenge^{12,23}. This may also compromise the nature of the interactions between students and clinicians, thereby affecting learning experiences; positive interactions are constructive for student engagement²¹ whilst negative student-teacher interactions have been shown to hinder learning^{12,23}.

Whilst there is significant literature exploring student experiences of acute care placements, evidence is lacking on junior doctors' perceptions of teaching in the acute setting. Our study aimed to explore junior doctors' experiences of teaching undergraduates on the acute take; specifically what is currently being taught, how it is taught, barriers to teaching and to identify areas for possible improvement.

Methods

Setting and participants

Clinical teaching fellows and junior doctors with an interest in medical education, based in one teaching hospital in the South West of England, were invited by email to take part in this study.

Data collection

Participants completed a short web-based questionnaire consisting of three questions exploring frequency and duration of teaching in the acute admissions environment followed by eight Likert-based questions around efficacy and relevance of teaching delivered, alongside resources, planning and feedback. All participants subsequently took part in a semi-structured focus group facilitated by one researcher (CH) based on the topic guide (Figure 1). Focus groups were audio recorded and transcribed verbatim.

The term 'teaching' is used throughout this study to encompass broader concepts such as supervision and coaching alongside more didactic teaching as it was felt to be more relatable to junior doctors who the researchers felt may not perceive themselves as clinical supervisors, but could relate to the term clinical 'teachers'.

Data analysis

Qualitative data were analysed thematically as defined by Braun and Clarke²⁴ using NVivo® software (QSR International, Massachusetts, USA)²⁵. Transcriptions were read and independently coded by two researchers (CH and AO) before overarching themes were sought by CH. Final thematic structure and hierarchy was reviewed, defined and named collaboratively by discussion between CH and AO. Data collection was limited by number of respondents, though many themes reached data saturation.

Ethics

Ethical approval for this study was granted from the University of Bristol Ethics Committee (Application ID 93362) on 16th August 2019. Electronic written consent was provided by participants before taking part in this study.

Results

Participants

Twenty-six clinical teaching fellows and junior doctors were invited to take part, of which 12 did not respond or declined to participate. The fourteen doctors who took part ranged from FY2 to ST3 (equivalent) level currently worked in a broad range of inpatient specialties across medicine, surgery, paediatrics, emergency and critical care (Figure 1). Ten were working in a split clinical and educational role.

Three focus groups were carried out, each with between 4-6 participants lasting around 20 minutes in total.

Quantitative data

Most junior doctors (85.7%, n=12) reported 'often' or 'sometimes' having medical students attached to them for clerking shifts. Participants reported that students typically spent between 1-2 and 2-4 hours (92.9%, n=13) with them per shift, though they were reportedly only engaged in 'active teaching' for around half this time.

Only a quarter of participants felt they taught a lot on the acute take (28.6%, n=4), with many reporting difficulties finding time to teach (76.6%, n=11) and few felt their teaching was effective (35.7%, n=5). Teaching on the acute take is rarely or never planned (78.6%, n=11) and participants found accessing relevant resources difficult (85.7%, n=12); most favouring online resources over paper resources (50.0%

vs. 21.4% respectively reported using them 'sometimes' or 'often'). Despite these challenges, most participants still felt they delivered relevant teaching (57.1%, n=8), though fewer (28.6%, n=4) report receiving feedback for their teaching on a regular basis.

Qualitative data

Key themes were identified and organised within six key areas. Firstly, issues relating to how junior doctors perceived themselves, described as 'clinical teacher factors'; how they perceived medical students described as 'medical student factors'; and factors relating to interactions between themselves, students and the wider clinical team termed 'team factors'. In addition, junior doctors described issues affecting their teaching relating to delivery of clinical care ('clinical service factors'), educational provision ('educational service factors') and availability of resources for teaching, termed 'resource factors'.

Clinical teacher factors

Junior doctors often questioned their own ability in managing acutely unwell patient (1.1a), with some citing their lack of exposure an important contributing factor. They perceived pressures to clerk enough patients and deliver timely patient care (1.1b).

"...when there's quite a lot of complex things going on usually and sometimes half of them I might not know myself if it's a really complex patient, and want to discuss it with someone else and that also creates a bit of a barrier to teaching as well if you're not sure yourself." – P8 (FG2)

"Time pressures, guilt. [...] it slows you down a lot if you have a student with you for a whole clerking and you're having to explain your work" – P2 (FG1)

Many participants lacked confidence in their ability as competent clinical teachers (1.2a). In addition to clinical demand, they perceived competing pressures from students to deliver relevant and engaging learning activities (1.2b).

"...you're taking responsibility and if you're going to say to your med student 'right, go off and spend an hour clerking [...] without necessarily having done a bit of pre-work yourself and just sussed it out a little bit, sometimes I feel a bit nervous sending them away.'" – P6 (FG1)

"In terms of workload, so being really busy, it was like an extra pressure to try and make sure that the students were getting what they wanted" – P7 (FG2)

They recognised that delivery of student-focused teaching required an understanding of students' ability and learning needs (1.2c).

"I think knowing their learning objectives and kind of knowing exactly what they want to get out of the day right at the start would probably be quite good because that could then, you could direct them to where they're going to learn the most." – P9 (FG2)

Medical student factors

Participants reported students' presence within the acute medical team was highly variable and attributed this to lack of student engagement (2.1). They felt students' perceptions of the educational value of time on the acute take was varied, because of their diverse experiences (2.2).

"the other limit that I sort of, you know, no one really talks about is the students just don't turn up"- P10 (FG2)

"I think as a med student previously I felt like I wasn't learning that much and I could get so much more if I sat down reading a book in the same amount of time versus that amount of time in a hospital" – P8 (FG2)

"...there's other specialties that they can't find their consultant or there's nothing going on so like, [the] acute take's their first port of call." – P13 (FG3)

Many junior doctors recognised the need for students to be aware of their own learning needs goals (2.3).

"I did a gynae rotation and they seemed to have a specific idea of what exactly they wanted to achieve which as better when they came to you, so you could facilitate that." – P7 (FG2)

Team factors

Key themes relating to the wider clinical team included a perception that senior clinicians were a source of pressure to deliver timely patient care (3.1).

"I am aware that sometimes people are less keen for you and they do kind of, hound a bit and be like, not 'stop teaching', but 'you need to prioritise a bit differently'." – P4 (FG1)

Participants felt that student integration into the clinical team, for example by attending the morning handover, was important for their experiences of participation (3.2).

"It's easier to find the students, so if you're enthusiastic about teaching, they'll be at the surgical handover and the on call SHO will be in the handover." – P10 (FG2)

Junior doctors felt that senior colleagues determined the acceptability of teaching and shaped the culture within the team (3.3a); many were role-models for junior doctors

"I think the general principle is when the consultants have more involvement in the academics or more involvement in teaching in general, they're going to be more engaging and they're going to promote it more." – P11 (FG3)

Though some junior doctors perceived the physical presence of seniors whilst teaching intimidating.

"it's also a bit intimidating as an F1 to be teaching a medical student in front of your registrar" - P7 (FG2)

They recognized that delivery of teaching was a shared responsibility and a professional requirement for doctors (3.3b), though participants reported that junior doctors tended to be more involved with teaching students than senior colleagues (3.4).

"[the student has] been basically taking it in turns with me or doing a clerking at the same time as me and then presenting it back to me and sometimes even presenting it to the post take consultant because they've been quite engaging as well" – P11 (FG3)

"the med students tend to gravitate towards the F1s" – P8 (FG2)

Clinical service factors

Doctors prioritized their time to provide clinical care, teaching students was often seen as a secondary activity (4.1). They described this perception as more intense when workload increased and there was increased pressure to provide patient care (4.2), though their workload varied throughout the day and between specialties (4.3).

"I guess because teaching is a...[pause]...it's a nicety isn't it, but I guess your job at that point in time is not to spend two hours with a case and getting someone beautifully educated on it, your job is to get through the work isn't it? And that's your priority." – P2 (FG1)

"if your staffing levels are low and waiting times are high then you don't want to slow" - P14 (FG3)

"in something like ortho where it was just wildly variable - you could have two referrals a day or twenty!" – P9 (FG2)

The clinical acuity of patients affected the educational opportunities the students could participate in (4.4a) and the degree to which clinicians had to actively engage in supporting them. Participants also described the complexity of patients, particularly between specialties, significantly affected their ability to deliver focused teaching around the case (4.4b). This was noted in particular by more junior participants.

"I sometimes feel nervous about the acuity of the patients as well, so if you're going to put your name next to that person, you're taking responsibility" – P6 (FG1)

"with surgical and paediatric patients in my opinion [...] tend on the whole to be a little younger, a little bit fitter and be less comorbid, [...] they're presenting with A problem which then it's quite nice for a medical student to approach that as one problem" – P9 (FG2)

Educational service factors

Junior doctors highlighted the breadth of learning opportunities that arise on the medical take – from clinical skills and knowledge around specific conditions to more abstract concepts such as clinical reasoning and prioritization (5.1)

"we'd go through x-rays, ECGs, gases, differentials, more resource-based than actually at the bedside, unless someone had something really interesting, I was like 'oh come and look at this sign'. Yeah. Kind of bits around [the case]." – P4 (FG1)

They stressed the need for flexibility in delivery of teaching in response to these opportunistic moments (5.2) and that the value of learning on the acute take was through active participation and experiences (5.3).

"I do think that because probably on the take and with on the wards it's slightly pot-luck as to whether something that's of educational value happens to happen that day or when that happens [...] it's just a different type of education and actually those opportunistic moments are really, really important and yeah. You can't get them from a book." – P9 (FG2)

"forcing them to think rather than be passive listeners which they would be in a ward round or a clinic. If you get them to clerk on the acute take or get them to go and look things up on the acute take I think it's much more real and relevant and stimulating. – P10 (FG2)

Participants felt a degree of continuity of supervision was beneficial to learners' experiences to ensure progression of learning (5.4a) and that a longer duration of attachment would be a valuable experience (5.4b).

"without sounding falsely nostalgic, the loss of the firm structure [...] you'd get to know them and they would be able to teach you stuff much more consistently and build on the previous teaching sessions." - P10 (FG2)

"If you come in for five days you'll see one of everything on the paediatric take and you're all set for finals [...] if you stay the whole day for five days." – P10 (FG2)

Resource factors

Scarcity of resources was a factor in the delivering of teaching, with participants noting that whatever resources were available were consistently prioritized for patient care (6.1).

"you often wouldn't be able to get to a computer to order your investigation let alone get up resources for them to learn from so...that was a big problem" – P11 (FG3)

Physical resources such as computer facilities to cross-reference or research topics were hard to come by (6.2a) as were protected teaching spaces (6.2b). Some noted that educational resources would be valuable to reinforce educational concepts and allow clinicians time to deliver care (6.2c).

"in AMU the clerking office is literally like a cupboard and if you were to get a student in to look at an x-ray or you know go through a case with them, somebody else is trying to come in and use the label printer, someone else is trying to come in and carry on with their clerking and actually it's just not a good space to learn in." – P7 (FG2)

Having resources available - quick things that are quick access that will help and, like if there is any way that you can like send them away to do things while you still get on with something else, that will still be valuable for their time and that would be useful". - P11 (FG3)

Other resources noted to be influential included the provision of protected time for clinical teaching (6.3a) and variability in the number of appropriate patients to engage in real-patient learning (6.3b).

"You could have a half hour slot or something where you can say 'I'm taking myself out of the take, this is going to be purely education', so you're a shop-floor teacher for that time - just so you don't have to then worry about the other things and everyone knows that's what you're doing at that time, so you're not to be hounded for charts and all these other things." - P4 (FG1)

"I think on surgery that we're actually quite lucky in a sense that actually sometimes it's quite quiet and often you don't have patients to take the students around" – P1 (FG1)

Discussion

Key findings and relation to literature

The acute take is perceived as a highly pressurised clinical environment with increasingly comorbid patients presenting with complex problems^{3,24}, which presents clinical challenges to deliver safe and timely clinical care¹. However, this environment presents unique learning opportunities across a broad range of presentations alongside development of essential tacit skills such as clinical reasoning, decision making, prioritisation, interprofessional working and communication with colleagues. Extensive literature describes feelings of unpreparedness of new medical graduates in managing acutely ill patients⁴⁻⁸, which is reflected in our participants' uncertainty of their ability to provide good clinical care in a timely and organised manner, as doctors with five or fewer years post-graduate experience. This may reflect difficulties learning from the informal and hidden curricula in an environment where non-technical competencies are as important as textbook knowledge²⁵. Several papers have described the diverse nature of student experiences in emergency care, where clinicians' attitudes and enacted behaviours impact both positively and negatively on students' perception of medical professionals²⁶⁻²⁸. Our participants are perhaps more aware of their own competencies and behaviours when observed by students. Existing work recognises the importance of acute clinical placements in building the necessary skills for competent and confident practice in the acute admissions environment^{4,7,8}, suggesting investment in improving education now, will foster more competent clinicians who go on to become more competent clinical teachers in the future.

Junior doctors have recognised challenges balancing clinical needs of patients with delivery of quality clinical teaching and described tensions arising between balancing their roles of medical practitioner and clinical teacher which are noted in other studies^{29,30}. Few participants perceived their teaching to be effective, with many citing concerns over lack of time to provide engaging, focused activities which

echoes previous work^{31,32}. Our quantitative data corroborate findings from focus groups, reinforcing that junior doctors find it difficult to make time to teach on the acute take, that this teaching is rarely planned, and resources are challenging to find. Evidence suggests that students value placements in emergency care^{6,33} and previous work is reassuring in that student satisfaction is no worse when clinical workload is higher^{2,34}, instead noting that teachers who are willing to teach, welcoming into the team and discuss their own decision making are much more influential^{2,21,35}.

Our participants highlighted a need for shared consensus over learning goals from acute admissions placements though they recognise teaching is opportunistic and clinical teachers need to formulate learning activities in response³⁶. Many researchers have described the need for student engagement in active, well-supported experiential learning^{12,14,37}. Active learner participation in patient care can be hugely valuable in areas such as diagnostic reasoning and patient safety^{38,39} and they should be encouraged to engage with the wider clinical team⁴⁰. Our work adds that junior doctors feel unprepared for this supervisory role and the challenges balancing caring and teaching responsibilities and suggest that continuity of attachment to the same clinical team may mitigate this. Junior doctors make effective near-peer tutors³², though studies recognise that doctors' perceived lack of competence influences their supervisory behaviours⁴¹⁻⁴³. Others advocate for formalised training to support development of clinical teaching skills^{31,44} which may also help to form an institution-wide culture where teaching is valued⁴⁵. Such programmes have been shown to develop student-centredness and promote enthusiasm for teaching⁴⁶.

Our study reinforces junior doctors' awareness of this teaching culture and its' impact on their behaviours. Participants felt that this culture is driven by senior clinicians, consistent with previous theoretical work¹² and should be better recognised by local service providers – reflecting the view of professional regulators⁴⁷. This includes appropriate provision of easily accessible resources to support clinical teaching delivery to underpin and reinforce experiential learning.

Strengths and limitations

This study offers a rich narrative, offering novel perspectives on clinical teaching in the workplace, with participants drawing on their experiences of clinical teaching across a range of specialties and hospitals, underpinned by their own experiences of learning. Given most participants' background in a split educational-clinical role, they are actively engaged with local educational providers, with some understanding of formal teaching theories and methods, though this may be limited as the study was conducted within 6 weeks of commencing their placements. This purposive sampling means we lack insight from those less inclined to teach, nor do we gain much appreciation of any significant barriers to engagement in undergraduate clinical teaching.

Implications for practice

Opportunities for improvement were identified in three in three key areas. Firstly, educational providers and clinical teams should work collaboratively to facilitate an active role for medical students on the acute take, under appropriate supervision. Secondly, to support junior doctors within a culture that encourages teaching and enables them to balance clinical and educational roles, underpinned by appropriate training. Finally, we support the provision of resources to facilitate teaching in the acute admissions environment, accounting for the breadth and variability of opportunities that present themselves. This may include designated time for teaching, though recognising this may impact on authenticity of learning.

Conclusion

The acute admissions environment presents myriad opportunities for undergraduate learning and many challenges for junior doctors in managing responsibilities of patient care with clinical teaching. This exploratory study provides focus for targeted improvement to the delivery of near-peer clinical education through highlighting learning opportunities for students' supported participation, fostering junior clinicians' teaching skills with provision of necessary resources, to maximise learning yield from authentic experiences. Through this insight, we hope to encourage development of a supportive culture for clinical teaching and undergraduate education within a busy, but rich learning environment.

Abbreviations

FG1, FG2 etc: Focus Group 1, Focus Group 2 etc.

FY2: Foundation Year Two (doctor)

P1, P2 etc: Participant 1, Participant 2 etc.

ST1: Specialty Trainee Year 1

ST2: Specialty Trainee Year 2

ST3: Specialty Trainee Year 3

Declarations

Ethics approval and consent to participate

Ethical approval was granted from the University of Bristol Ethics Committee (Application ID 93362) on 16th August 2019. Electronic written consent was provided by participants before taking part in this study.

Consent for publication

Participants in this study gave electronic written consent to publication of their anonymised data.

Availability of data and materials

A full summary of the main thematic framework with supporting quotes can be found in Appendix I.

Competing interests

The authors declare that they have no competing interests.

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There was no specific funding required to undertake this study. Both CH and AO completed this study as part of their Clinical Teaching Fellow programme at the Bristol Royal Infirmary.

Authors' contributions

CH conceived this study and led in data collection, analysis and writing of the paper. AO contributed to data analysis and contributed to writing the paper. JRa performed the background literature review and contributed to writing the paper. JRe contributed to writing the paper. All authors read and approved the final manuscript.

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Tables

Table 1

Participant demographics. *For those participants not in a training job, grade is presented as equivalent training grade. For reference: FY2 = 1–2 years postgraduate experience, ST1 = 2–3 years, ST2 = 3–4 years, ST3 = 4–5 years. †For those participants in part-time education roles, education component ranged from 0.5–0.8 full-time equivalent.

Participant	Grade*	Specialty	Current role†
1	ST1	Surgery: general and specialty	Full-time clinical role
2	ST2	Medicine: general or acute specialty	Part-time education role
3	ST2	Medicine: general or acute specialty	Part-time education role
4	ST3	Emergency and critical care	Part-time education role
5	ST1	Medicine: general or acute specialty	Part-time education role
6	FY2	Surgery: general and specialty	Full-time clinical role
7	ST1	Surgery: general and specialty	Part-time education role
8	FY2	Surgery: general and specialty	Full-time clinical role
9	ST1	Paediatrics	Part-time education role
10	ST1	Medicine: general or acute specialty	Part-time education role
11	ST1	Emergency and critical care	Part-time education role
12	FY2	Emergency and critical care	Full-time clinical role
13	ST3	Medicine: other specialty	Part-time education role
14	ST1	Medicine: general or acute specialty	Part-time education role

Table 2

Junior doctors' reported perceptions of how frequently they teach students on the acute take.

	Always (n, %)	Often (n, %)	Sometimes (n, %)	Rarely (n, %)	Never (n, %)	Total (n, %)
How often students are taught on the acute take	0 (0.0%)	6 (42.9%)	6 (42.9%)	2 (14.3%)	0 (0.0%)	14 (100.0%)

Table 3

Junior doctors' perceptions of how long students are present on acute take shifts and how long they spend being actively taught.

	Less than 1 hour (n, %)	Between 1–2 hours (n, %)	Between 2–4 hours (n, %)	More than 4 hours (n, %)	Total (n, %)
Total duration of students' clerking shift	1 (7.1%)	6 (42.9%)	7 (50.0%)	0 (0.0%)	14 (100.0%)
Reported time spent actively teaching students	7 (50.0%)	7 (50.0%)	0 (0.0%)	0 (0.0%)	14 (100.0%)

Table 3

Junior doctors' perceptions of their own teaching including amount, use of resources, efficacy, and relevance of teaching.

	Strongly Agree (n, %)	Agree (n, %)	Neither agree nor disagree (n, %)	Disagree (n, %)	Strongly disagree (n, %)	Total (n, %)
I teach a lot on the acute take	1 (7.1%)	3 (21.4%)	3 (21.4%)	7 (50.0%)	0 (0.0%)	14 (100.0%)
I find it easy to find time to deliver teaching whilst on the acute take	0 (0.0%)	1 (7.1%)	2 (14.3%)	8 (57.1%)	3 (21.4%)	14 (100.0%)
I teach effectively on the acute take	0 (0.0%)	5 (35.7%)	4 (28.6%)	4 (28.6%)	1 (7.1%)	14 (100.0%)
I deliver teaching relevant to the student's need	1 (7.1%)	7 (50.0%)	5 (35.8%)	1 (7.1%)	0 (0.0%)	14 (100.0%)
I find it easy to access resources to deliver teaching on the acute take	0 (0.0%)	0 (0.0%)	2 (14.3%)	8 (57.1%)	4 (28.6%)	14 (100.0%)

Table 4
Junior doctors' perceptions of the planning and delivery of teaching including feedback.

	Always (n, %)	Often (n, %)	Sometimes (n, %)	Rarely (n, %)	Never (n, %)	Total (n, %)
I plan my teaching that I deliver on the acute take	0 (0.0%)	1 (7.1%)	2 (14.3%)	7 (50.0%)	4 (28.6%)	14 (100.0%)
I use paper resources to deliver teaching on the acute take	0 (0.0%)	1 (7.1%)	2 (14.3%)	6 (42.9%)	5 (35.7%)	14 (100.0%)
I use online resources to deliver teaching on the acute take	0 (0.0%)	5 (35.7%)	2 (14.3%)	2 (14.3%)	5 (35.7%)	14 (100.0%)
I receive feedback for my teaching on the acute take	1 (7.1%)	3 (21.4%)	3 (21.4%)	2 (14.3%)	5 (35.7%)	14 (100.0%)

Figures

Focus Group Topic Guide
<ol style="list-style-type: none"> 1. How much do you teach on the acute take? 2. How easy is it to teach on the acute take? 3. What kind of teaching do you deliver on the acute take? 4. What do you believe students need to learn from being on the acute take? 5. What are the barriers to teaching on the acute take? 6. How could you improve your teaching on the acute take?

Figure 1

Focus group topic guide.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [AppendixI.docx](#)
- [UnderstandingjuniordoctorsexperiencesQuestionnaire.docx](#)