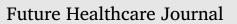
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# An evaluation of the West of Scotland in-programme Chief Resident role

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ARTICLE INFO	A B S T R A C T		
Keywords: Support Training Clinical leadership Medical leadership Continuous improvement	<i>Background:</i> Postgraduate leadership education is an evolving field. Locally we have an established 'Chief Residency' programme where centres have two to four senior trainees completing leadership duties alongside clinical workload, supported by local directors of medical education. This is twinned with a 4-day central training programme and peer-support network. <i>Methods:</i> To assess perspectives of the CR role, we adopted a qualitative case-study design using an electronic questionnaire delivered to previous chief residents between 2020 and 2023. Results were analysed using thematic analysis.		
	<i>Results:</i> Trainees valued involvement within quality improvement and trainee support, demonstrating successful multi-departmental projects. Leadership education was viewed ubiquitously positively but participants felt further work is needed to address role legitimacy locally. A proposed solution was junior doctor leadership teams to address workload and emotional challenges. <i>Conclusion:</i> This model provides further evidence of the value in investing in trainee leadership positions, demonstrating organisational impact. Future work will research hospital peer leadership teams.		

# Background and literature review

There is evolving literature examining the role of leadership development in UK postgraduate medical education.<sup>1-4</sup> Many centres offer trainee leadership positions, with demonstrated system efficacy and popularity.<sup>3-7</sup> However, there is considerable heterogeneity between models, variable senior leadership integration, quality improvement (QI) expectations and seniority of eligible trainees.<sup>1,4,5</sup>

Current models are often non-clinical, and potentially extend training-time.<sup>1,4,5</sup> In-programme models are theoretically appealing, offering a distributive leadership approach with greater continuity with patient-facing junior doctors.<sup>1,3,4</sup> This can offer novel improvement opportunities less apparent to non-clinical staff, offering real-time solutions to clinical areas.<sup>1,4,7</sup> For example, Dr Home's leadership reflection describes successful QI originating from junior clinical staff.<sup>8</sup> However, they are less prominently studied in the literature.

To address knowledge gaps on trainee experiences, we analysed the in-programme West of Scotland (WoS) Chief Resident (CR) role. Although termed CR, the role varies considerably to namesakes.<sup>3-5</sup> This model utilises a local deanery network, centrally organised training and peer support for junior doctors developing leadership skills. Typically, doctors are appointed to a 12-month role during specialty training (GPST2/ST3 and above) and fulfil duties in-programme alongside clinical work(appendix 1). They receive no ringfenced time or additional renumeration. Appointment and supervision are overseen by local directors of medical education that coordinate individual training needs, such as QI or managerial meeting experience. Most centres recruit one to two medical and surgical CRs. Teaching and peer support is arranged centrally through NHS Lanarkshire where trainees can attend 4 full day sessions over 6 months.

**Research** questions:

- 1. What role do WoS CRs think they should play in their hospital context?
- 2. What factors do WoS CRs relate to success in the role?
- 3. What challenges do WoS CRs face in enacting their role?

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# Approach

We, a group of former WoS CRs, utilised a qualitative case-study design, surveying doctors who completed the CR role between August 2020 and 2023. Our electronic survey asked three free text questions derived by author group consensus. Data was gathered anonymously with informed consent for publication. We utilised the National Health Service Research and Development services for ethical approval.

## Evaluation

All free-text comments were analysed using Braun and Clarke's Thematic analysis.<sup>9</sup> Braun and Clarke's Thematic analysis is a well-researched flexible approach readily applied to various data sets.<sup>9</sup> Answers were pulled into a combined data set before coding for recurrent concepts and generating themes that best represented shared understanding. Themes were refined with multiple authors, enabling investigator triangulation. This form of thematic analysis best represents an inductive stance.<sup>9</sup>

# Results

We received 22/43 survey responses (12/25 2020–2021; 10/18 2022–2023). Respondents ranged from ST3 to ST7. Table 1 demonstrates choice quotes representing the wider dataset.

## Thematic analysis

Q1: 'What role do you think the chief resident should play in your hospital context?'

Theme 1a: CRs should be an advocate for QI (Table 1, Q1-3)

Terminology for CRs in QI was ubiquitously positive. Comments suggested CRs could act as QI role models with leadership roles. It was suggested that CRs can act as effective conduits to link 'on-the-floor' projects to senior management and facilitate resources needed to develop change culture. This was qualified by descriptions of CR led QI, suggesting trainees associate the role alongside change projects. Described QI included trainee wellbeing and education.

Theme 1b: CRs should be seen as leaders for trainee support (Table 1, Q4–5)

Feedback supported CRs reflective stance as leaders for wellbeing and advocacy. CRs described wellbeing initiatives through partnership with trust directors and anecdotal evidence of trainee empowerment. Concerns over junior doctors' mental health were portrayed and linked to a desire for greater trust-wide wellbeing input. Comments described a belief that, with near-peer congruence, CRs were best able to represent and address junior doctor wellbeing concerns. Trainee advocacy centred around CRs as role models to raise concerns independent to management, facilitating conflict resolution and mediation. Concepts of 'safety' and 'trust' were associated with near-peer interactions.

Theme 1c: The CR should be an educational role to develop personal leadership and managerial experience (Table 1, Q6–7)

It was appreciated that CRs associated the role towards gaining leadership experience and accreditation. CRs suggested leadership training was 'essential experience' with qualifying comments surrounding wider specialty training or future job applications. Value was seen in gaining a non-clinical understanding of senior management processes and their impact on clinical services.

# Q2: 'What experience and personal characteristics would you view as valuable for a chief resident to succeed?'

Theme 2a: the CR should be resilient (Table 1, Q8). CRs value organisational skills. Time pressure and competing clinical priorities were viewed as caveats to resilience, suggesting post-specialty exam CRs may perform better. CRs suggested there was difficulty achieving balance against clinical responsibilities. CRs wished to remain approachable to trainees despite workload.

Theme 2b: the CR should be part of a team (Table 1, Q9–11). Contrasting the question's premiss of personal characteristics, it was suggested that CRs should be team-based. This was justified by a description of CR peer teams, adopting committee-like approaches to complex issues. CRs adopted social justice constructs such as 'fair' and 'inclusion' in their team-based descriptions. Teams were suggested to better represent the broad range of trainees across specialties.

Commentary supports CRs valuing individual departments contributing concerns through a wider sub-committee. This was felt to promote inclusiveness and be less labour intensive than individualised approaches. Heterogeneity was viewed as a determining factor in establishing a successful team-based approach, both regarding specialisms represented and specific roles, such as QI lead. CRs with a range of specialty exposure were viewed to have greater face validity as CRs.

Seniority was a contentious issue amongst respondents. Arguments were made preferring senior or junior CRs, citing competing priorities and relatability to their own stage of training as contributory factors. The collective narrative supports a team-based approach, a balance of junior and senior CRs adopting synergistic roles, with representation across multiple departments.

Q3. 'What challenges did you face in enacting the role of chief resident?' Theme 3a: CRs feel competing priorities are a significant challenge (Table 1, Q12). Feedback suggests difficulty achieving work-life balance. High fluctuating levels of clinical work negatively impacted motivation towards QI. CRs held high expectations for their role and some expressed frustrations at not achieving more.

Theme 3b: CRs identify support as a challenge when enacting their role (*Table 1*, Q13–17). CRs expressed conflict with managers during their tenure. Comments suggested there were different priorities and expectations of the role between consultants, contributing to an unsustainable workload. For example, unappealing top-down initiated administration tasks were allocated to CRs in some centres.

Feedback supported CRs adopting autonomy in their role, with enthusiasm towards projects they were passionate about. CRs valued the training and guidance of the 4-day course, describing tones of empowerment, but feel local guidance is insufficient. This contributed to overtones of a lack of role legitimacy. One interpretation is that some CRs lacked transparency in their role, including their hierarchical position, resources, and available support. It is unclear from the feedback if this originates from direct supervisors or misconceptions by the wider senior community. Solutions to improve role legitimacy addressed the trainee image of the role, such as dedicated offices and email addresses.

Although the 4-day teaching course and informal peer-support network was described ubiquitously positively, CRs felt additional local educational and emotional support was needed. Some CRs described symptoms of burnout, with tones of being overwhelmed and cynicism.

# Discussion

WoS CRs found value across a variety of roles including QI, wellbeing, and education, with successful multi-departmental projects, comparable with current literature.<sup>10-14</sup> Junior doctors, as leaders, can offer unique perspectives, yet are often underutilised.<sup>12,13</sup> This example further supports the educational and institutional benefits of investing in such roles.

Although adopting a centralised teaching and peer-support approach is viewed beneficial by trainees, and thus of value to other centres, it

#### Table 1

Thematic analysis supportive quotes from free text answers.

Q1, 'What role do y	/ou think the chief resident should play in your hospital context?'
Theme 1a: Chief re	sidents should be an advocate for QI.
1.	'CRs can showcase successful change projects that will benefit doctors at the ward level whilst linking between junior doctors and senior management.'
2.	'Chief residents can link between management and trainees, inspiring them to complete real change in their ward and offer support including resources and experience to make these into reality'.
3.	'As a chief resident I found value in QI. I was able to get groups of trainees together and work together on larger QI projects between departments with funding and support from managers. As part of this I ran Teams sessions for QI education which were well received and maintained momentum.'
Theme 1b: Chief re	sidents should be seen as leaders for trainee support.
4.	we launched a peer-support network to help trainees exhausted with COVID workload. This was well received and with funding we were
5. 6.	able to offer training and psychological support.' 'CRs should represent the trainee voice as a safe place to raise concerns. Juniors may relate to someone who's been through it themselves' 'utilising the CR role to promote and progress trainee related issues and perhaps even proactively identify them before they become a
	problem. It offers a much needed and approachable link between trainees and senior decision makers.'
	should be an educational role to develop personal leadership and managerial experience.
7. 8.	'I think the CR role should be a development opportunity for junior doctors to gain insight into management'. ' allowed me to prepare for becoming a consultant. Gave me an insight into how the hospital worked.'
Q2. 'What experien	ce and personal characteristics would you view as valuable for a chief resident to succeed?'
Theme 2a: The CR	should be resilient
9.	'it can be challenging trying to balance lots of different plates. I feel resilience is important and being proactive when I'm trying to keep momentum in-between on call weeks.'
10.	'I think the CR needs to be enthusiastic and highly driven. It takes a lot of effort and with not much available time to action CR demands at times It takes confidence to raise concerns/issues with senior staff, putting your head above the parapet.'
11.	'You need time to focus on the role and bounce back from some of the challenges. I think CRs should be post interviews/post-specialty exams to get the most from it, I can't imagine being able to focus on the role and studying for my MRCP!'
Theme 2b: The CR	should be part of a team
12.	'Teamworking was an important part of the role and different people added different perspectives'
13. 14.	'CRs should have a personal investment and care for the department and juniors that you work with, representing concerns of the team.' 'Chief residents should have a good level of experience working as a doctor, if possible, covering a range of specialties.'
Q3. 'What challeng	es did you face in enacting the role of chief resident?'
Theme 3a: CRs feel	competing priorities are a significant challenge
15.	'I felt there wasn't much guidance on what my role was and difficult to say no when given extra jobs I really struggled to find a balance. I
16.	ended up doing a lot of resident work in my own time.' 'I found the main challenge to be finding time to carry out the role, no specific SPA time so trying to get things done was often in-between on calls [All CRs] found it difficult to meet together due to shifts – therefore difficult to attend meetings'
Theme 3b: CRs ide Subtheme: Lack of	ntify support as a challenge when enacting their role local support
Subtheme: Central	peer-network provided support and motivation
17.	'Often the [CR] role felt like a dumping ground for jobs senior doctors don't want to do e.g., clinic rotas.'
18.	'I struggled with motivation to consistently be doing 'extra' things on top of the day job with no resources and little to no senior support'
19. 20.	'I felt there was a lack of understanding of the role from seniors and management' 'If it wasn't for the sessions by xxx I wouldn't have known where to start I often struggled to find the right person to escalate to'
20. 21.	"I found the session by xxx really inspiring and motivated me to complete my project. Was good to hear other residents' projects and gave m ideas to overcome some of the barriers I was facing'

appears not to fully subvert concerns over role legitimacy. Role identity was discussed within the free text comments and is a point of contention in CR literature experienced by trainees and consultants.<sup>6,7</sup> Lack of awareness and misconceptions can hinder development, furthered by heterogeneity of trainee-leadership roles.<sup>10,11</sup> While increased awareness, including accreditation, could be instrumental in addressing role identity, a potential solution may be creating specific local roles such as QI or well-being leads. This was explored in the free-text comments with CRs demonstrating success adopting focused roles. Simplifying CRs into contextual leadership positions may improve role identity and address concerns experienced across program.<sup>6,7,11</sup>

One potential caveat of the CR role is insufficient mentoring and senior support. Local CR teams may offer a solution. Certainly, existing junior doctor teams within a leadership capacity has demonstrated success.<sup>7,12,15</sup> Our model further supports this through the informal peersupport network. Fung and Sayma (2020) have argued for the incorporation of junior doctor leadership teams within hospitals, suggesting novel benefits to individuals and organisations through divergence from the status quo.<sup>12</sup> Team approaches to the CR role would be appealing to trainees, benefiting from a larger skill mix.<sup>12</sup> In addition, this subverts the individual time commitment of the role and allows flexibility to adapt to fluctuating clinical demands. Notably, the difference in CR numbers between cohorts can be attributed to one centre trialling a distributive departmental trainee leadership approach following 2020– 2021 feedback.

We would recommend clear standardised descriptions of CR roles and responsibilities to widen role legitimacy amongst trainees and managers. Our second recommendation is to promote a formal peer support network, inclusive of alumni, to offer needed informational and instrumental support. A final recommendation is incorporating a period of protected time for CRs to minimise the risk of burnout and maximise leadership training opportunities.<sup>5,6,11,13</sup>

# Conclusion

In conclusion, the WoS CR role offers an alternative in-programme leadership role for junior doctors. Benefits include leadership education, QI involvement, maintenance of clinical exposure and preserves training length. In keeping with the literature, we experienced issues with role identity which may negatively impact junior leaders. To address this, our future work will examine specific WoS CR roles in peer leadership teams and further impact of peer-support in leadership.

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- 3. We would like to thank the Directors of Medical Education and Medical Directors across NHS Scotland for supporting the development and running of the chief residency programme.

# Declaration of competing interest

No member of the team received any direct or indirect financial incentive.

# Ethics

Discussed with the National Health Service Research and Development services, as this qualifies as Quality Improvement evaluating a teaching programme with anonymised data, it was deemed formal ethics committee review was not required.

#### **Contribution statement**

All authors (CR, RM, KB, HF, KYP, SO) were significantly involved in the concept and design of the research study. CR/RM/HF/KYP were involved in the thematic analysis of the research. CR, RM, KB, HF, KYP, SO contributed to the write up including revision prior to approving the attached version for consideration of publication. CR, RM, KB, HF, KYP, SO agree to be accountable for the work submitted. We believe that all authors listed qualify under the guidance of authorship and have elsewhere included acknowledgements for others.

Appendix 1: One example of a CR job application template sent locally. Notably there is considerably heterogeneity between centres

Job Title:	Chief Resident		
Department:	Medical Education		
Location:	Xxxxx	Travel Required:	None
Level:	ST3/GPST2 or above	Position Type:	Fixed Term Max 12 months
Date Posted:	XXXXX	Closing Date:	XXXXXX
Applications Accepted By:			
Email: xxxxxxxxxxxx		Mail:	
Subject Line: Chief Resident		N/A	
Body: Short Supporting Statement for the role			

**Role and Responsibilities** 

- Represent the interests of all training grade doctors in xxxxxxxx and provide a link for training ideas/concerns with the Assistant Directors of Medical Education
- · Liaise with Senior CDFs in xxxxxx to work cohesively and avoid duplication and overlap
- Run a trainee forum where interests and concerns of all junior and middle grade medical staff can be heard and shared appropriately
- · Advise/participate/contribute to quality improvement initiatives
- Provide trainee representation on hospital management groups as discussed and agreed with DME/ADMEs/CDs
- Feedback/debrief with ADMEs on a bimonthly basis.

#### **Person Specification**

Ideally you will be a senior trainee ST3/GPST2 grade or above (or equivalent). You will be able to identify a minimum of 1–2 h per week/4–8 h per month within your timetable, which will not be to the detriment of your clinical responsibilities/educational requirements, to devote to the duties and development of this role.

#### **Preferred Skills**

You will be an active listener with clear and confident communication skills. In addition you must be easily approachable, accessible and flexible. Individuals with a desire to improve the training environment for themselves and others by utilising a proactive approach to training needs and challenges would be preferred.

A working knowledge of Quality Improvement Methodology with an ability to share/promote/signpost this amongst colleagues is desirable. Problem solving skills and a 'can do' attitude would be beneficial.

#### Additional Notes

Administrative support can be provided.

Reviewed By:	DME/ADMEs	Date:	xxxxxx
Approved By:	DME/ADMEs	Date:	XXXXXX
Last Updated By:	XXXXXX	Date/Time:	XXXXXX

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