Royal College *of* Emergency Medicine

Northern Ireland Emergency Medicine Workforce Census 2024

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List of abbreviations

ACP	Advanced Clinical Practitioner
CCT	Certificate of Completion of Training
CESR	Certificate of Eligibility for Specialist Registration
CT1-3	Core Training
DCC	Direct Clinical Care
ED	Emergency Department
EM	Emergency Medicine
ENP	Emergency Nurse Practitioner
FY1-2	Foundation Year
GP	General Practitioner
HC	Headcount
LTFT	Less than full time
MIU	Minor Injury Units
NIMDTA	Northern Ireland Medical and Dental Training Agency
PA	Programmed Activities
SAS	Specialist, Associate Specialist, and Specialty Doctors
SDM	Senior Decision Maker
ST1-7	Specialty Training
UEC	Urgent and Emergency Care
WTE	Whole Time Equivalent

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Acknowledgments

March 2024

This report was written on behalf of the National Board of Northern Ireland by Freddie Stoker, Senior Policy Officer. With the invaluable help of the Vice President and Vice Chair RCEM Northern Ireland, and the rest of the RCEM policy team.

The Royal College of Emergency Medicine would like to thank all individuals who took the time to contribute to this report over an extremely busy period for Emergency Departments. A special thanks must go to the Northern Ireland National Board for their support throughout this project.

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Foreword

Emergency Departments in Northern Ireland are under huge pressure and have performed worse than any UK nation since current waiting time metrics began in 2011. More than half of patients have waited longer than four-hours in an Emergency Department for every month since November 2021. 1 in 9 patients have waited 12-hours or more every month since July 2021, most recently in Quarter 3 2023/24, 1 in 6 waited this long. In 2022, more than 43,000 people waited more than 24 hours to be seen. These are shocking statistics. Long waits and overcrowding are not just an inconvenience for patients, they are strongly associated with an increased risk of patient mortality. A well-equipped workforce is vital to improving performance and ensuring patient safety. This is a recommendation of the RCEM Resuscitate Emergency Care campaign.

Over Autumn and Winter 2023/24, we surveyed 12 Emergency Departments in Northern Ireland to provide in-depth analysis into the state of the Emergency Medicine workforce. This analysis is vital to forecasting future workforce needs and identifying the gaps that are creating huge pressure on departments. Without proper staffing levels, patient safety is under threat.

Emergency Medicine is a demanding specialty and there are few areas in healthcare where colleagues experience the same level of pressure. The workforce in Northern Ireland works extremely hard to provide the best possible care for patients. However, the burden of keeping departments open 24 hours a day, seven days a week is significant and even more so without proper staffing. Work ethic is never the issue. We have a duty to ensure that all departments are properly equipped to provide the very best care they can. Recruitment and retention are huge problems for the Emergency Medicine specialty. There is a high level of burnout and staff often choose to leave the specialty, work less than full time, or choose to practice it elsewhere in the UK, in Ireland, or abroad. It is a vicious cycle. Without proper staffing levels, burnout for EM colleagues gets worse and more staff choose alternatives to full-time working.

RCEM looks forward to working closely with policymakers to ensure we build an NHS fit for the future in Northern Ireland. We call on the Department of Health, Members of the Legislative Assembly in Stormont, and senior leaders within the NHS in Northern Ireland to pay attention to the findings of this report. These findings should inform future healthcare planning in Northern Ireland so that our workforce is properly equipped to deal with demand and patients get the best care possible.

Dr Russell McLaughlin
Vice President of the Royal College of Emergency Medicine (Northern Ireland) and Emergency Medicine Consultant

Summary of Findings

- There are 126 Emergency Medicine CCT/CESR consultants working in Northern Ireland, 33% of which are female and 67% are male.
- In total, they deliver 732 DCC's per week which equates to 97.5 WTE equivalent consultants. This means that there is one WTE Consultant per 7786 annual attendances – nearly half the RCEM recommended number of consultants (1:4000).
- 95% of consultants are aged between 30 and 54. 63% are aged between 35 and 44.
- There are 69 Emergency Medicine Specialist, Associate Specialist, and Specialty (SAS) doctors in Northern Ireland. WTE of 66.5.
- There are 47 funded but unfilled SAS doctor posts.
- There were 71 medical and non-medical trainees working in EDs in Northern Ireland. 55 medical (ST1-ST6) and 16 non-medical.
- According to Clinical Leads/Directors, there are 16 consultants planning to retire in the next six years. Eight non-consultant senior decision makers are planning to retire.
- Emergency Medicine consultants work an average weekend frequency of one in every 7.4 weekends.
- There is 1 consultant rota gap, 46 SAS / SDM rota gaps and 43 Training rota gaps.
- There are 115 non-consultant locums currently in post.
- Departments were asked for their ideal staffing levels. To reach these, there would need to be an increase of 59% Consultants, 29% SAS / SDM, 138% Post-Graduate Doctor in Training, 69% ACP and PA staff, and 78% ENP staff.

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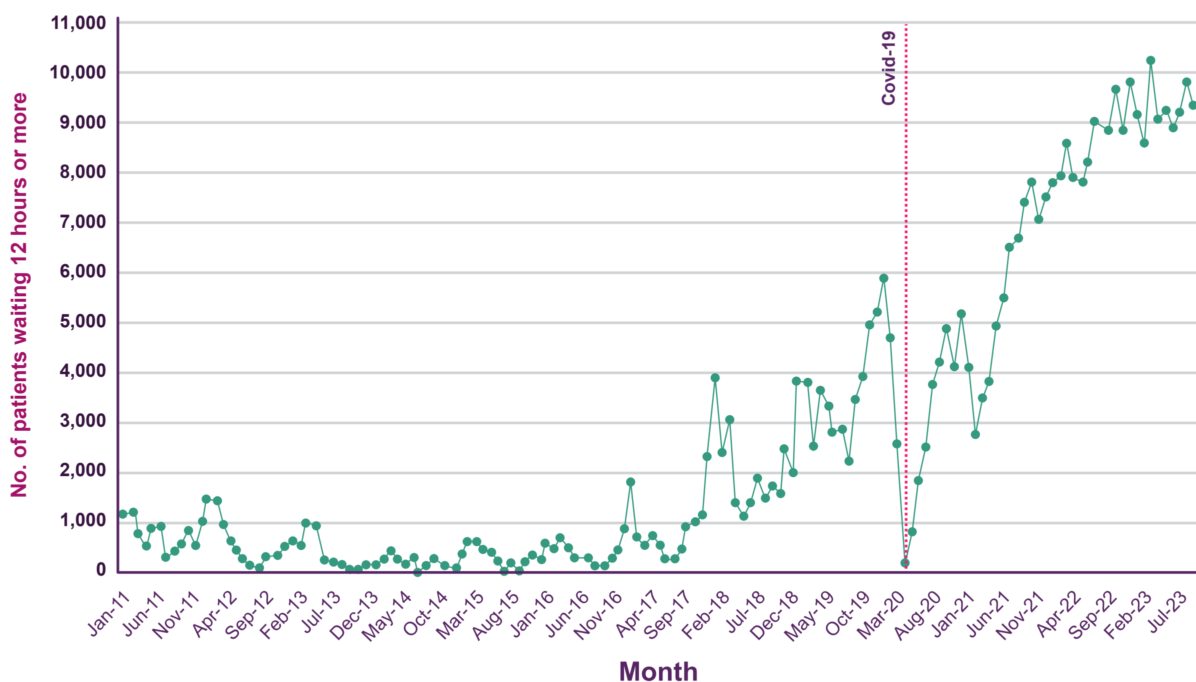
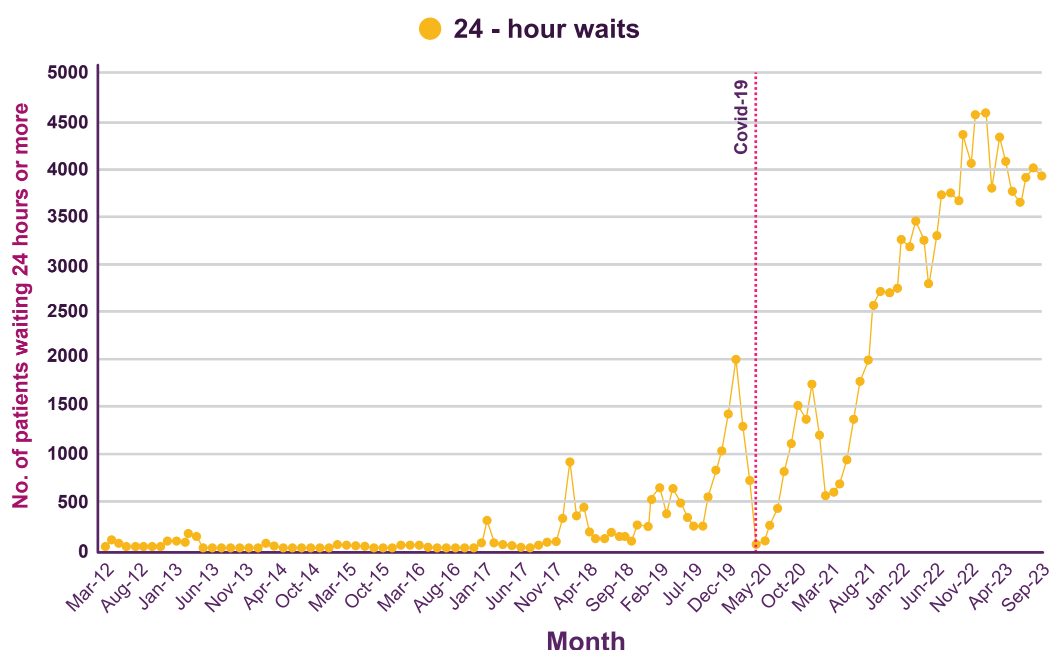
Background

Across the UK, Emergency Department (ED) performance is measured using patient waiting time metrics and EDs in Northern Ireland consistently performs worse than England, Scotland, and Wales. Over the last eight years, four- and 12- hour performance has fallen dramatically despite attendance figures staying relatively consistent. For every month since August 2021, more than half of patients who attended Emergency Departments waited four-hours or longer to be seen. The number of patients seen within four-hours dropped below 40% for the first time ever in December 2023. October to December 2023 was the worst quarter on record for four-hour performances and the second worst for 12-hour performance. A wait in an ED for 12 hours should never occur, let alone a 24-hour wait. There were 43,288 24-hour or more waits in 2022. In September 2016 only 7 people waited for 24 hours or longer; compare this to September 2023 when the number was 3927.

Summer months are usually associated with improved performance in EDs but winter pressures are now the norm all year round. Quarter 2 2023 (July to September) performance was worse than any Quarter 1 (October to December) and Quarter 4 (January to March) between 2011-2021. The two figures below highlight the rate at which long waits have increased in recent years.



Source: Dept of Health NI



Source: Dept of Health NI

Long waits and overcrowding in EDs are strongly associated with an increased risk of adverse events, errors, complaints, and litigation.[1] An Emergency Medicine Journal study found a mortality rate of 1 in 72 for every wait longer than 8-hours.[2] Using this calculation for more than >12 hour waits in Northern Ireland in 2022, we see that 1,434 people may have died because of waits in excess of 12 hours. This report looks to identify and explore some of the operational pressures which compromise the safety of EDs and leads to such poor performance.

Between November 2023 and January 2024, we carried out a 79 question Census of 10 type-1 EDs and two type-2 EDs in Northern Ireland, to better understand staffing numbers and the true extent of the workforce pressures present in EDs. In doing so, we can be far more certain of what is required to ensure a robust, well-resourced, and happy workforce. As a specialty, the Emergency Medicine workforce suffers from a high level of burnout and stress. This results in high attrition rates and more and more staff choosing to work less than full time. It is a vicious cycle, as performance worsens, more staff leave, further increasing the pressure on remaining staff. Our Recruit, Retain, Recover report sets out in more detail some of the pressures faced by ED staff.[3] What the census makes clear is that EDs in Northern Ireland are understaffed and trainee numbers need to increase going forward to make sure that there is no longer a shortfall in consultants.

[1]https://rcem.ac.uk/wp-content/uploads/2021/11/RCEM_Why_Emergency_Department_Crowding_Matters.pdf.
[2]https://emj.bmj.com/content/emermed/early/2022/01/03/emermed-2021-211572.full.pdf.
[3]https://rcem.ac.uk/wp-content/uploads/2021/10/Retain_Recruit_Recover.pdf.

Methodology

The census was created using SurveyMonkey and consisted of 79 questions. In October 2023, a PDF version of the census with all 79 questions was then sent out to all ED Clinical Leads/Directors ahead of the census going live. This was to ensure that respondents had acquired and collated the necessary information and data to complete the census and to encourage accurate answers rather than estimations.

Respondents were asked to complete the survey as per their departments staffing position in late 2023. After two weeks another email was sent out to the leads with a hyperlink to the live census. We received responses from all 10 type-1 EDs and two type-2 EDs. There were 10 entries total. One entry contains three departments, one type-1 and two type-2 EDs. We included this as a single entry because of consultants working across these departments and a single clinical director leading them. Departments are not named specifically in this report.

Consultant Workforce

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There are a total of **126 CCT/CESR consultants** working in EDs across Northern Ireland. 16 are Paediatric Subspecialty CCT holders. Entries ranged from having one consultant to 24 CCT/CESR consultants, with the average being 13. A total of 20 consultants worked in other departments.

Whole Time Equivalent

The above headcount does not properly reflect the size of the workforce. Many consultants opt to work less than full time (LTFT), and some work more than the standard job plan. Some EM consultants have reduced their service provision into their ED to provide cover to other services such as the NI Helicopter Emergency Medical Service (HEMS). In general, job plans consist of 11 programmed activities (PAs) per week, with each PA equating to four hours of work.[4]

A proportion of PAs are dedicated to direct clinical care (DCC) which refers to “work directly relating to the prevention, diagnosis or treatment of illness”.[5] This is primarily undertaken when a consultant is working on the hospital floor or on call. Following guidelines set out by the BMA, a whole-time equivalent (WTE) consultant delivers around 7.5 DCCs per week which is equal to 30 hours of work.

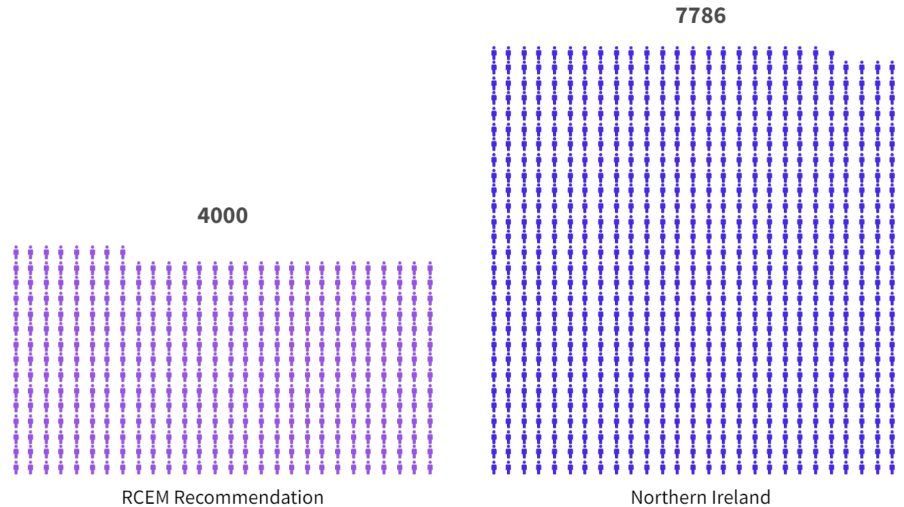
To calculate the number of WTE Emergency Medicine consultants working in Northern Ireland, we asked the Clinical Leads/Directors the total number of DCCs delivered by Emergency Medicine consultants in their department per week, which came to 732 sessions across Northern Ireland. Dividing this figure by 7.5 (the sessions delivered by a WTE consultant in Northern Ireland) comes to **97.5 WTE EM consultants.**

Consultant to Attendance Ratio

RCEM recommends that EDs should have one WTE consultant for every 4000 attendances. **The average number of consultants for Northern Ireland is nearly half the RCEM recommended level, with one consultant for every 7786 attendances**. There was significant variation across Northern Ireland, with the max being one for every 4701 and the minimum one for every 14806 attendances. **Three of the 10 entries reported a ratio of more than 1:10,000**.

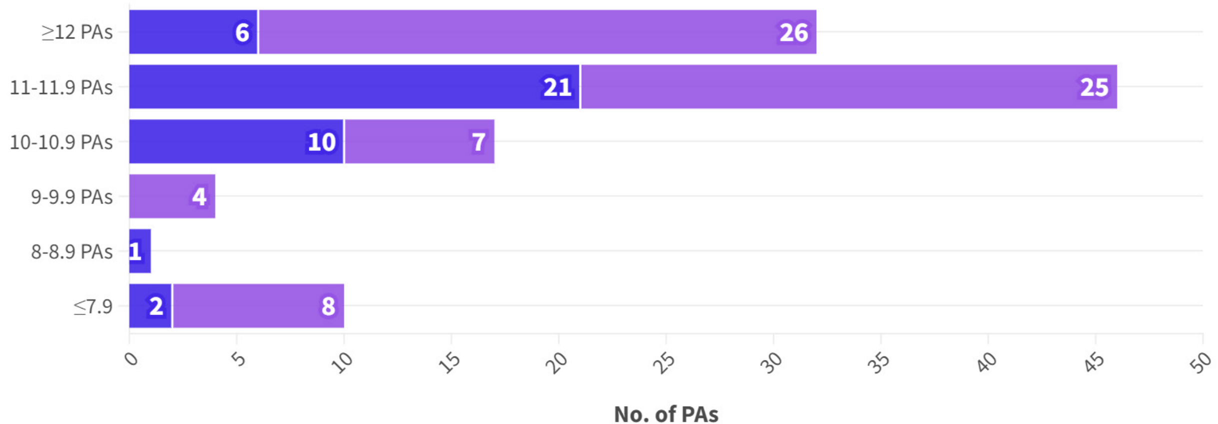
[4] Consultants working after 7pm will have a PA Entitlement of 3 hours and in some cases location negotiation will apply higher rates to antisocial shifts. This affects the calculation but is too complex to apply here. This means that the WTE calculation is an overestimation and the reality will likely be lower.

[5] https://www.bma.org.uk/media/1269/bma-emergency-medicine-consultants-model-job-plan.pdf.



Gender

Of the 126 consultants in Northern Ireland, 84 are male and 42 are female. This is a significant disparity and represents the imbalance present in leadership roles within Emergency Medicine in Northern Ireland with **only 33% of consultants identifying as female**. The two groups which constitutes 11 and more Programmed Activities (PAs) have the most responsibility and is also only 35% female.



Age

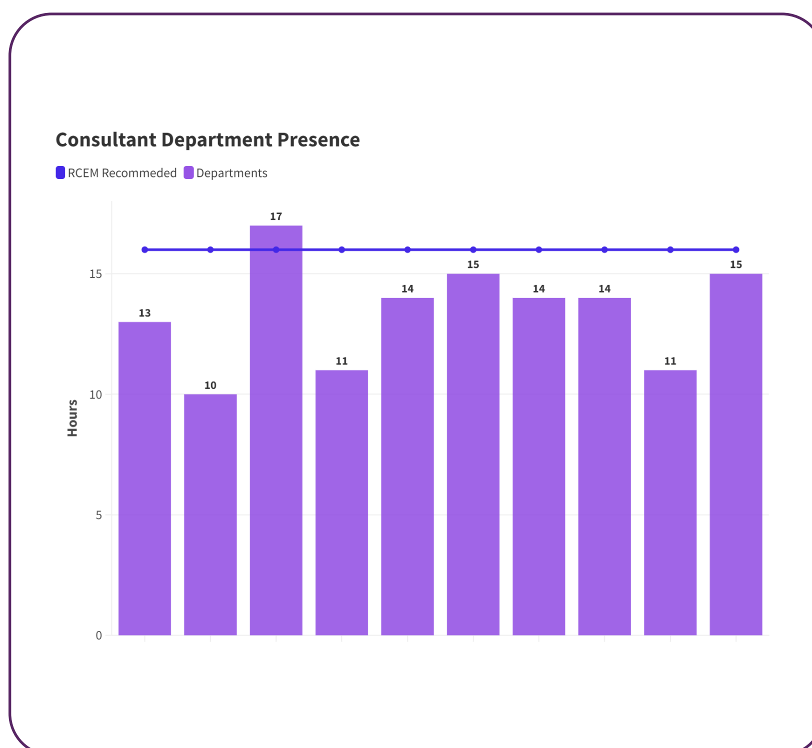
95% of consultants are between the age of 30 and 54. Only 5% of consultants are over 55 and none are over 65. It is common for consultants to reduce hours and working pattern after age 55. The vast majority (63%) were between 35 and 44.

Table 1. Consultant Age Distribution

Age	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
Percentage	2%	38%	25%	13%	17%	3%	2%	0%	0%

Departmental Presence

We asked departments to provide the average hours per day that a consultant is present in the department.



The minimum weekday consultant presence that an entry reported was 10 hours. In contrast, the maximum presence was 17 hours. On the weekend, the maximum consultant presence reported was 15 hours and the minimum was 3.

As pressures mount, the demand placed on the EDs, the complexity of case mix and the challenges that accompany crowding, all mandate the presence of an SDM. Best practice recommended by RCEM suggests that there should be Emergency Medicine consultant presence for at least 16 hours a day (08:00–00:00) in all medium and large systems.[6] The table below shows that departments in Northern Ireland cannot meet this expectation. Indeed, only one department was able to meet the guidance.

Table 2. Average Consultant Presence in Major Departments

	Average	Standard Deviation
Weekday (hours)	13.4	2.2
Weekend (hours	7.9	2.1

[6]https://www.rcem.ac.uk/docs/Workforce/RCEM_Consultant_Workforce_Document_(revised_Feb_2019).pdf.

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Presence on the shop floor

We asked departments about their consultant shop floor presence throughout the day on both weekdays and weekends.

Consultant presence was most concentrated between 08:00 – 16:00 on weekdays. Between 16:00-midnight on weekends, there was only two departments with consultant presence. No departments reported consultant presence on the shop floor between 00:00-08:00.

Table 3. Number of Consultants Present on the Shop Floor on Weekdays and Weekends

	Monday – Friday			Saturday – Sunday		
	8:00 – 16:00	16:00 – 00:00	00:00 – 8:00	8:00 – 16:00	16:00 – 00:00	00:00 – 8:00
Total	27	17	0	12	3	0
Average	2.7	1.7	0	1.1	0.3	0

SAS Doctor Workforce

There are 69 Emergency Medicine Specialist, Associate Specialist, and Specialty (SAS) doctors in Northern Ireland.

SAS doctors are permanent trust appointed employees to individual departments. SAS doctors are not part of the EM training programme. However, they may progress to consultant if wishing to undertake CESR. A SAS grade doctor is frequently an experienced clinician in EM, with many holding the role of a SDM in their department. The specialist role was created to reflect and recognise SAS doctors who have extensive experience and high-level competencies in their specialty.

Using the WTE DCC calculation, we find that there are 66.5 WTE SAS Doctors. One SAS doctor for every 13,922 attendances.

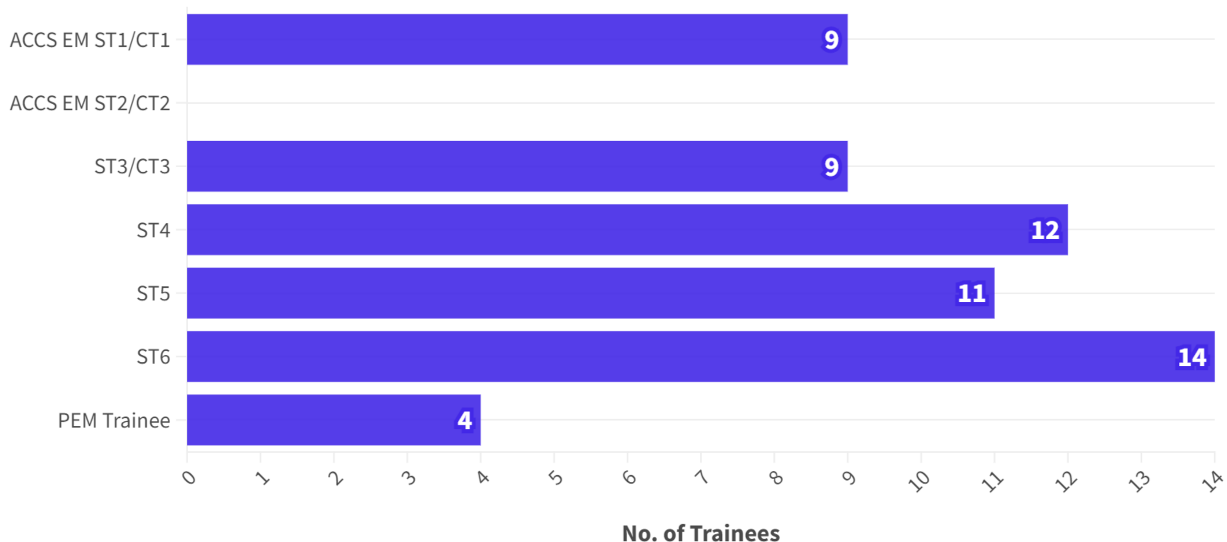
The lowest SAS doctor weekday presence was zero in two departments and 26 was the most. Only one of those departments with zero SAS doctors had a planned expansion (12).

EM specialists in training

The census showed that there were 55 trainees working in the ED on the ST1-ST6 trainee programme, which is the most common route taken to become an Emergency Medicine consultant. Most trainees were at ST6 (14). ST1 and ST2 numbers are under reported in the census. This is because ST1 trainees spend 6 months working within the acute medicine specialty and ST2s spend the year in Anaesthetics and Intensive Care Medicine. These specialties were not surveyed in the census.

Not all the current ST1-ST6 medical trainees will stay on to become consultants, some will drop out. Indeed, it is becoming increasingly common for trainees to opt for LTFT training for reasons such as improving work life balance, maintaining career sustainability and for raising families. Some trainees will elect to undertake additional subspecialist training in areas such as PEM and intensive care prolonging their time in the training programme.

The graph below provides an estimation that within the next year there will be in the region of 10-14 EM specialists trained in NI exiting the programme as consultants. The following year we estimate another 10 specialists will exit the programme.



There were 16 non-medical trainees. The greatest number of non-medical trainees were ANPs (9). There were zero PA trainees.

Non-Emergency Medicine trainees

At the time of responding, there were 64 non-Emergency Medicine trainees working in EDs across Northern Ireland.

At any one point in time, there are doctors in training from other specialties such as general practice working in the ED gaining competencies and experience to take back into their own chosen specialty. There are also doctors part of the foundation programme who rotate through EM. All foundation doctors that come to EM in NI do so in their second year after qualification from medical school. These doctors contribute to the workforce as detailed below. Whilst these figures change frequently, the significance of this number is that these doctors need consultant supervision both from a clinical and training perspective.

Table 4. Number of Non-EM Trainees Working in EDs in Northern Ireland

FY1	0
FY2	34
CT/ST1	29
CT/ST2	0
CT/ST3	0
>ST3	1

Advanced Care Practitioner and Physician Associates

ACPs and PAs have become a valuable addition to the ED workforce within the last few years. Many ACPs were nursing or allied health professionals who have worked within EM for years and have an extensive depth of experience within the specialty. They assess, diagnose and treat patients under the supervision of the senior doctors within the ED.

There are 19 total ACP clinicians and 3 PA clinicians in departments. Two departments report zero ACP clinicians. Alongside this there are 16 ACP trainees and 0 PA Trainees.

Emergency nurse practioners

ENPs are trained nurses providing expertise in the management of minor injuries working under the governance umbrella of the EM consultant. They provide a service in assessing, diagnosing and managing injuries such as fractures and wounds.

There are 58 ENP clinicians. And alongside this, 3 ENP trainees.

GP with Extended Role

Some qualified GPs elect to extend their role into other areas of interest within the healthcare system. There are GPs with Extended Roles (GPwER) who work sessions in EDs.

There were 6 GP CCT Holders across Northern Ireland. Only two departments shared these, with 3 each. The rest of the entries reported no GP CCT holders.

Some departments have reported that they have lost their GPwER colleagues from their workforce and have not been able to replace them despite funding. This is because with the pressures in primary care, some GPs have stepped away from their extended role to offer more support to their practices.

Workforce Gaps

At the time data was collected in November 2023 there were 6 funded but unfilled WTE Emergency Medicine consultant posts in Northern Ireland. One post was due to Maternity Leave and the other five were part of departmental expansion. As of February 2024, five of these posts have been advertised and consultants appointed (although not all have yet taken up post). The remaining post is currently going through the recruitment process.

There are 47 funded but unfilled WTE SAS posts across the EDs. Not all these posts represent rota gaps across the departments. Some will be part of expansion plans to boost the SAS doctor tier in some departments. A problem faced by most departments that career locum working is still seen as more attractive for remuneration and work life balance than entering into a permanent SAS job.

Planned retirement

At the time of undertaking the census there were 16 EM consultants planning to retire by 2030 amongst the EM consultant workforce.

Additionally, 6 SAS doctors are expecting to retire by 2030.

As this number is an impression from those Clinical Leads/Directors who completed the Census for each department, the number by 2030 will likely be higher.

Table 5. Departments answers to whether they had agreed guidance for a change in on call or working pattern as a consultant approaches retirement.

Answer	Departments
Yes	3
No	5
Other	4

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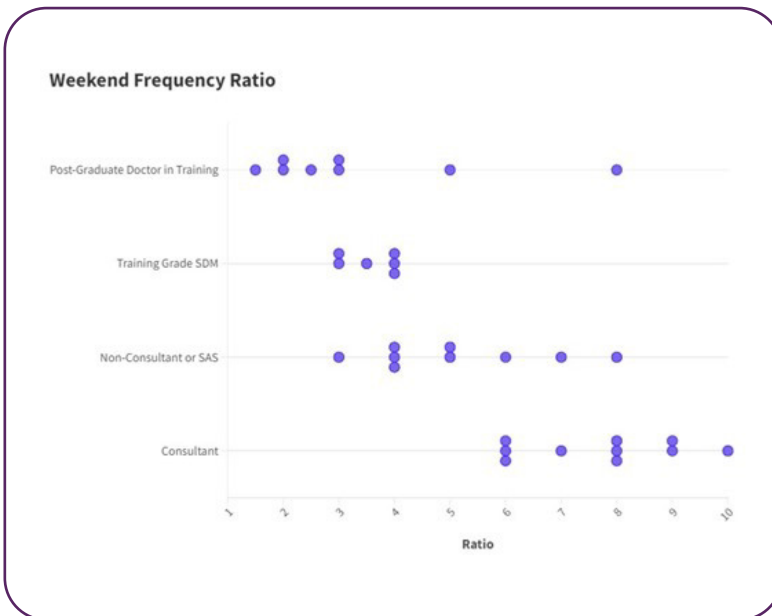
Rotas

Weekend Frequency



The frequency that staff work on weekends varies greatly between staff groups. Emergency Medicine consultants work an average weekend frequency of one in every 7.4 weekends, ranging from the least frequent, one in every 10 weekends in one department, to the most frequent, one in every 6 in three departments.

All other staff groups work weekends more frequently: Non-Consultant or SAS senior decision makers work an average of one in every 5.1 weekends. Training Grade Senior Decision Makers work one in every 3.6 weekends. And finally, EM Doctors in Training work one in every 3.4 weekends.

On Call Frequency

The average on-call frequency from all respondents from Emergency Medicine consultants in Northern Ireland was one in every 9 days. There is a significant variation in this with frequencies ranging from just over once every four days (1:4) to once every 18 days (1:18).

Night Shifts

There is no nightshift working for Consultants, Associate Specialists, and SAS doctors in Northern Ireland.

EM HST are expected to cover an average of 48-night shifts per year and Post Graduate Doctors in Training are expected to cover an average of 56-night shifts per year.

Consultant remuneration for night shifts

There is no offer to consultants of premium PA rates to cover nightshifts at EDs in Northern Ireland.

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Rota Gaps

The total number of rota gaps among all staff groups was 90 across Northern Ireland. There was only 1 consultant rota gap. This does not mean that there are enough consultants but rather that there are not enough available posts. As we see from earlier analysis, consultant numbers are down comparative to attendances. Indeed, later we analyse department's ideal staffing and all fall far short of the required number of consultants.

Table 6. Number of Rota Gaps

Consultants	1
SAS / SDM	46
Training	43

46 of the rota gaps were SAS / Senior Decision Makers and 43 were post graduate doctors in training. The largest for the former was two departments that reported 12 gaps. The largest for the latter was 10.

When asked why there were rota gaps, key themes were a lack of suitable applicants to permanent roles and that choosing to be a career locum remains a popular way of working for doctors.

Rota gap cover

We asked departments how frequently rota gaps were covered in the last year for Consultants, SAS doctors and Doctors in Training. 60% of entries said they cover unfilled Doctors in Training shifts every day. 40% said the same about SAS. And 40% said they are forced cover consultant shifts several times a week.

We also asked for frequency of weekend and overnight rota gaps. These were less prolific, with 30% everyday for SAS and Doctors in Training. And 50% never for Consultants.

We also asked departments whether there have been variation of rota gaps in the last year. 40% said there were more gaps. 40% said about the same. And 20% said fewer gaps.

Locums

There were zero-night shifts covered by consultants as locums. There is a headcount of 115 non-consultant locums currently in post in Northern Ireland and a WTE of 98.

There is a heavy reliance on locums to cover rota gaps.

Table 7. Type of Locum Covering Gaps in Senior Decision Maker and Middle Grade Overnight and Weekend Rotas

Type of Locum	Number of departments
Internal Locum	6
External Locum	7
Consultant Locum	5

We then asked departments which type of locums were being used to cover gaps in Senior Decision Maker and Middle Grade overnight and weekend rotas. Two departments did not record using locums to cover gaps, the rest used at least one type of locum. Four entries used all three types of locum to cover gaps.

Workforce Planning

Planned expansion

We asked departments to provide any agreed planned expansion of consultant and SAS doctor numbers for the next two years.

Over the next two years, all departments reported that there is a planned expansion of 13 additional Emergency Medicine consultants and 27 additional SAS doctors.

Ideal staffing

Looking further to the future, we asked departments to detail how many more of each staff group they would need to safely staff their departments. RCEM suggests that medium sized EDs require 18-25 WTE consultants and a minimum of 30 WTE SDMs. Large EDs require 25-36 WTE consultants and a minimum of 42 SDMs.[7] The table below shows the current figure for each staffing group and the ideal number based on their responses.

Table 8. Ideal staffing in EDs

Staff Group	Current	Ideal
Consultant	126	200
Higher Specialist Trainee/SAS Senior Decision Maker	163	209
Post-Graduate Doctor in Training	55	131
ACP/ANP/PA	77	130
ENP	58	103
Total	**479**	**773**

The total number of consultants that departments would like to see by 2027 was 200, an increase of 74 (59%) compared to the current consultant headcount of 126. To reach this goal, there will need to be at least 16 EM Trainee places per year sustained until 2030.

Departments also reported huge gaps in trainees. The Census shows that they need 77 more Post-Graduate Doctors in Training to get to ideal levels – a 138% increase and more than double the current number.

Across all departments, the total number of ACP, ANP, and PA staff needed to achieve desired staffing levels by 2027 was 53 (69%). The increase required for ENP staff was 45 (78%).

[7]https://rcem.ac.uk/wp-content/uploads/2021/11/RCEM_Consultant_Workforce_Document_Feb_2019.pdf.

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Additional consultant training numbers required

As reported above, there are 16 consultants planning to retire by 2027, alongside a planned expansion of 13 consultants. Taking this into account, there would need to be an additional 77 consultants at the same WTE rate to bring staffing to ideal levels across Northern Ireland.

If this is then compared to the maximum number of 55 trainees expected to gain their CCT and be eligible to take up a consultant role, it becomes apparent that the input of trainees is not enough.

As previously stated, RCEM recommends that safe recruitment of Emergency Medicine consultants should be based on one WTE consultant for every 4000 annual ED attendances. While each department will vary in terms of staff group and skill mix, this standard should be followed to ensure that, at the very least, there are sufficient senior decision makers to ensure patient safety and minimise risk.

By following this standard and assuming attendance will continue rising slowly at the current rate to reach 800,000 by 2030, Northern Ireland will need at least 200 Emergency Medicine consultants to safely staff EDs in the next six years.

Therefore, to achieve safe staffing by RCEM standards (and considering planned retirement, the current 12 trainee places funded by NIMDTA and trusts, and already planned expansion) there would need to be an increase of six EM training places, maintained for the next six years to bring the total number of trainee places to 18 per year.

This would produce an extra 108 consultants by 2030. Considering unaccounted retirement plans, attrition, and LTFT contracts, this would be enough to fill current gaps.

Recommendations

1. Plan for and fund EM consultant recruitment by an additional 108 by 2030.
2. Centrally fund all current 12 NIMDTA appointed trainees per year plus an additional six for a minimum of six years (18 per year).
3. Incentivise doctors to enter substantive employment as SAS doctors rather than career locum working.
4. Invest in postgraduate doctors training places, will improve ED service provision, make less locum dependent and produce additional trained doctors (like GPs) who will contribute to the HSC workforce.
5. Continue the development of the ACP, PA and ENP workforce.
6. An extensive recruitment and retention campaign to attract doctors to train, work and stay in Northern Ireland.

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