Acute medical care in England

Findings from a survey of smaller acute hospitals



Background and methods



- The Nuffield Trust conducted a survey to determine the current state of acute medical care in smaller hospitals in **England** as part of a larger NIHR-funded project exploring models of medical generalism in smaller hospitals.
- Using a semi-structured interview schedule, we interviewed medical directors and/or lead clinicians for acute/emergency medical care between August 2016 and February 2017.
- We used the definition used by <u>Monitor</u> for smaller hospitals: that is, trusts with an annual turnover of less than 300 million.
- The survey covered 48 trusts (accounting for 70% of smaller NHS acute trusts) across 50 hospital sites: two trusts ran two acute hospitals.
- The interviews with acute trusts were recorded and transcribed. The responses were then codified and entered into SurveyMonkey to support a structured analysis.

How this report is structured



- The first section draws on our survey data to explore the **staffing of acute medical services** in smaller hospitals. It shows the huge challenges faced by smaller acute trusts in England, particularly in maintaining sufficient numbers of medical staff, and the stark variation that exists across medical specialties.
- For the skill-mix element of the staffing analysis, we also draw upon NHS Digital data to analyse skill mix across all 68 smaller acute hospital trusts in England. Where data sources draw upon this data it is clearly marked.
- The second section explores the **configuration of acute medical services** in smaller hospitals. This uses the survey data to illustrate the increasingly fragmented and complex nature of acute medical services, and the huge variation that exists across small acute trusts.

Staffing in acute medical care

Staffing: key messages



- Medical staffing is one of the greatest challenges faced by smaller hospitals in sustaining acute medical services.
- The **junior medical staffing problems are severe**, described to us as a "nightmare". Across sites, there is nearly three-fold variation in the number of junior medical staff per consultant.
- Nearly all hospitals surveyed were dependent on locum staff to support senior medical rotas. In acute medicine, some sites are totally reliant on locum acute physicians, and others have no vacant acute physician posts.
- Hospitals are trying a wide range of strategies to address these problems including redesigning job roles; changing skill mix; offering recruitment incentives including 'golden handshakes'; international recruitment.
- There are stark variations in the number of medical staff, and non-medical staff in advanced roles, working within each of the medical specialties. For example, the number of respiratory physicians varies from 1 to 16 and the number of people in elderly care medicine from 0 to 14. This variation is not fully explained by the size of hospital, the volume or case mix of patients.
- While the majority of patients in these smaller hospitals are old with multiple comorbidities, **most trusts have a comparatively low number of medical 'generalists'**, including general medicine, acute physicians and geriatricians. Only five hospitals have more than 60% 'generalist' doctors, using our classification.
- There is no correlation between the medical case mix and the percentage of generalist staff (skill mix).

Major shortages of consultant medical staff



- Most hospitals are dependent on locum staff to support senior medical rotas.
- Two sites were entirely reliant on locum staff to fill acute physician posts. In seven sites half or more staff were locums.
- 40% of sites have at least three A&E consultant posts filled by locums.
- Proportional dependence on locum staff seems to be greatest in the smallest hospitals.
- Dependence on locum staff is not only costly; it makes it difficult to drive forward service improvements.
- A recent survey by the Royal College of Physicians (2018) found that 45% of advertised consultant posts went unfilled due to a lack of suitable applicants.

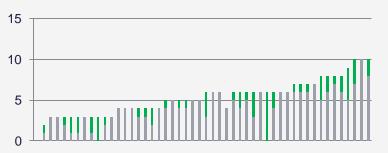
"There are challenges with using so many locums because you run into challenges with consistency and leadership, particularly when you're wanting to embed improvements, it becomes quite a challenge if the majority of your consultant staff are transient."

Divisional Director Medicine, Site 40

Number of ED consultant posts (filled and locum) by hospital site



Number of acute physicians (filled and locum) by site

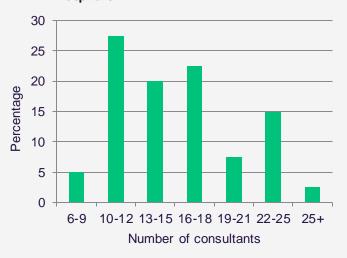


Increasing difficulty with medical on-call cover



- Consultant cover for acute medical services is provided by a rota of oncall consultants from the medical specialties. But the number of consultants supporting the medical on-call rota varies significantly.
- On-call cover includes specialists from respiratory medicine (90%), geriatric medicine (84%), endocrinology and diabetes (86%) and acute medicine (65%).
- A number of specialties have started to withdraw from the on-call rota.
 These include gastroenterology, which was **not** contributing in 35% of surveyed sites, cardiology in 60%, rheumatology in 67%, and stroke in 83%.
- Some sites have insisted that their specialists do take part in the medical on-call rota.

Number of consultants contributing to the medical 'take' out of hours, across hospitals



"Cardiology do a separate on-call and are not involved at all... Stroke dropped off about four or five years ago. Gastroenterology now do a separate GI on-call and they're looking to drop off... How many can drop off?"

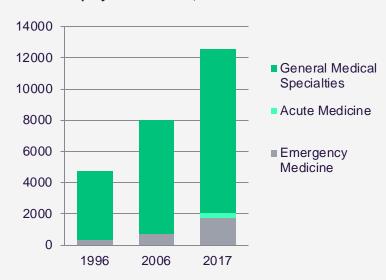
Clinical Director, Urgent Care, Site 33

Increasing pressures on a reducing pool of staff



- Acute medical physicians make up 3% of the total general medical workforce.
- Specialists' progressive withdrawal from the acute medical 'take' leaves acute physicians and a reducing pool of other medical staff to manage the acute medical workload, while it grows in complexity and size.
- Sites described a "cycle of doom" in which the progressive withdrawal from the on-call rota made participation increasingly hard, increasing the incentive to leave the rota.
- Many places we surveyed had very few acute physicians in post (5 or less).

Number of general medical consultants employed in the NHS, 1996-2017



Source: NHS Digital – HCHS workforce statistics; HCHS medical consultants by specialty group (September 1996, 2006, 2017)

Hospitals struggling to provide junior doctor cover, with increasing use of non-medical staff



- According to the survey, 90% of sites had problems with junior medical staffing in the emergency department.
- 80% of sites were having difficulty with their junior doctor cover for the medical on-call rota. Middle grade and sickness cover were highlighted as particular problems.
- 60% were using locums to help cover vacant junior doctor posts and 36% were using trust doctors or clinical fellows, often recruited from overseas.
- 42% of trusts were using advanced nurse practitioners (ANPs).

"It's a nightmare. There's been an imbalance of junior doctors from teaching hospitals and district general hospitals for a long time". Divisional Director, Medicine, Site 40

"There are three or four gaps in the middle grade rota; we have had nights where there is no middle grade in the hospital." Clinical Director, Acute Medicine, Site 36

Trust solutions to their staffing challenges



- Individualised job plans. Offering combination roles that span specialties or hospital sites when recruiting to
 vacant posts. For junior doctors, offering posts with a variety of experience in different departments with CPD
 support.
- International recruitment. India was frequently mentioned as a potential source of medical staff (though visa constraints are inhibiting this approach).
- 'Longer term' locum staff. For example, contracting for regular PAs from consultants working in neighbouring trusts or internal locums.
- A 'shadow' rota of clinical fellows for locum cover to avoid spend on agency staff.
- **Nurse rotations** across the hospital, including difficult-to-recruit wards and the emergency department.
- Changes of nursing skill mix, for example, more band 6 and band 4 nurses to cover shortages at band 5 level.
- 'Golden handshakes', particularly for junior doctors. However, some trusts have suffered from their neighbours
 doing this and argued for an approach where they worked with neighbouring trusts to align staff pay and agency
 rates.
- Growing the number of advanced practice non-medical staff including advanced clinical practitioners and physician's associates.
- Maximise the contribution of the support workforce through apprenticeships and establish development pathways for bands 1-4.

Staffing and skill-mix analysis



- Using data from NHS Digital we undertook a detailed skill mix analysis of all 68 'smaller' trusts in England.
- This gave us further insight into the variation in current staffing and the balance between different levels and types of staff.
- We looked at the balance between staff with more **general medical skills** potentially better able to cope with multiple medical conditions and those who were aligned to a **specific disease area**.
- We acknowledge that specialty labels will not necessarily align accurately with job content but, with professional group and grade, do give a broad indication of primary staff roles.

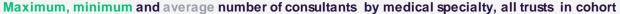
Staffing and skill-mix analysis: methods

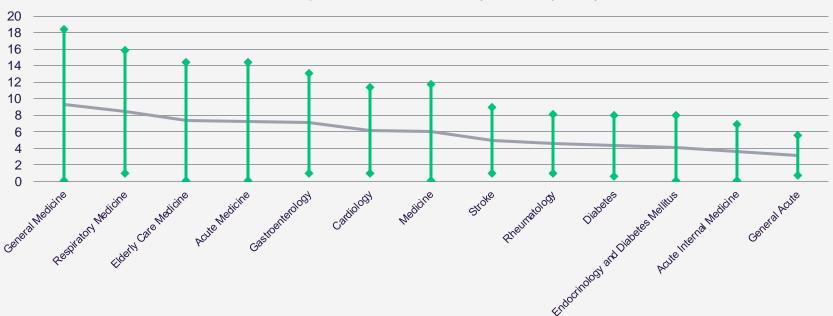
- Data was from the electronic staff record made available by NHS Digital, dated October 2017.
- All 68 trusts classified as 'smaller' (that is, with a turnover of less than £300m) were included in the analysis. This is a larger sample size than the subset of 48 trusts that we surveyed.
- We focused on the medical specialties that are likely to contribute to medical take (excluding A&E).
- We divided specialties between specialist and generalist as follows:

Туре	Specialty
Generalist	Acute Internal Medicine, Acute Medicine, General Acute, General Medicine, Elderly Care Medicine, Medicine
Specialist	Cardiology, Diabetes, Endocrinology, Gastroenterology, Respiratory Medicine, Rheumatology, Stroke
Medical roles	Consultant, Specialty Registrar, Trust Grade Doctor - Career Grade level, Trust Grade Doctor - Foundation Level, Trust Grade Doctor - Specialty Registrar, Foundation Year 2, Foundation Year 1
Non-medical roles	Advanced Practitioner, Emergency Care Practitioner, Nurse Consultant, Paramedic Specialist Practitioner, Physician Associate, Physiotherapist Specialist Practitioner, Specialist Nurse Practitioner, Specialist Practitioner

The number of consultants in each medical specialty varies significantly







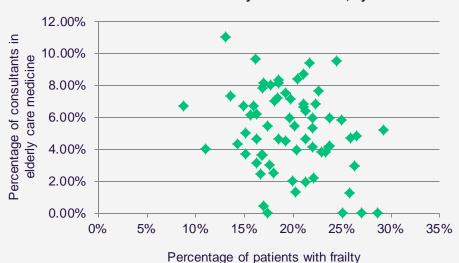
In geriatrics, the workforce does not match the workload



- The number of geriatricians per trust varies from 1 to 14.
- There is no correlation between the percentage of patients with frailty in a trust and the percentage of geriatricians (see figure).
- Given the case mix of patients, the comparatively low numbers of geriatricians is worrying.

"We're funded for four and there's four in there. And it is wholly inadequate. ... If you gave me another twenty, I could probably find work for all of them. We're not really outward facing.... I'm trying to recruit two extra geriatricians and I want them working across both in and out of hospital." Medical Director, Site 6

Percentage of patients with frailty versus percentage of consultants in elderly care medicine, by trust

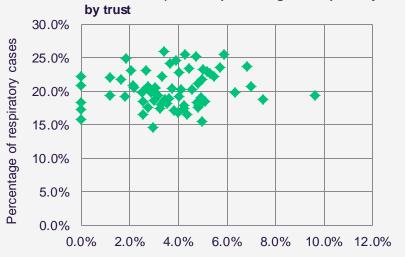


Source: Nuffield Trust analysis of NHS Digital data

There is poor alignment between workforce and workload in other specialties



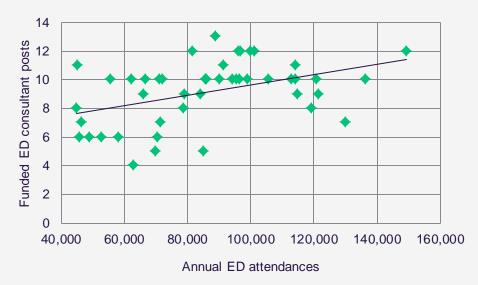
Percentage of respiratory consultants (across total medical staff) versus percentage of respiratory cases, by trust



Percentage of respiratory consultants

Source: Nuffield Trust analysis of NHS Digital data and Nuffield Trust survey results

Number of annual ED attendances versus number of funded ED consultant posts, by trust

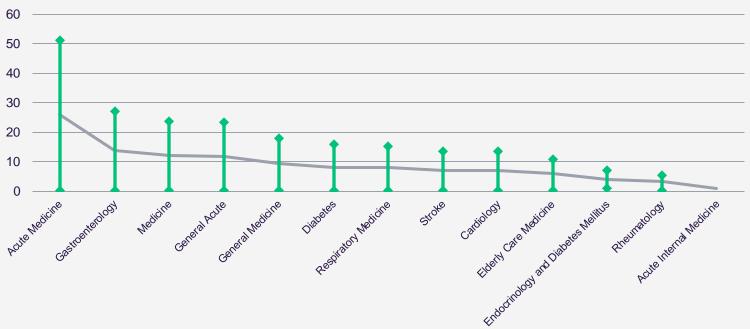


Source: Nuffield Trust analysis of NHS Digital data and Nuffield Trust survey results

There is also huge variation in the number of advanced non-medical roles

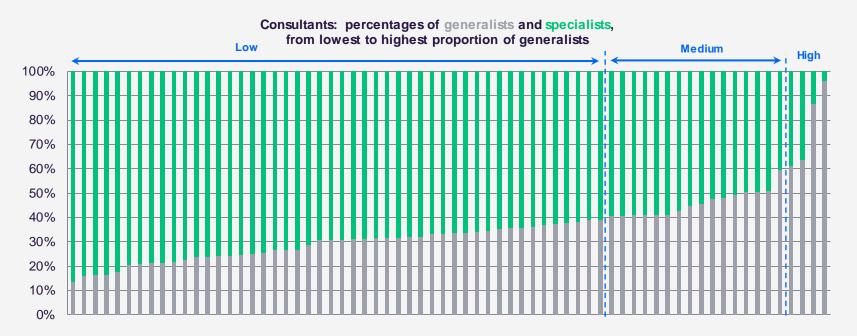












Service configuration for acute medical care

Acute medical services: key messages



- There was striking variation between organisations, with no two hospitals operating the same system.
- Pathways of care were frequently structured as sets of siloes, rather than a smooth stream. Moves between
 different components of the system resulted in complete discontinuities, with medical work frequently being
 repeated each time the patient moved location. It is not uncommon for patients to be passed between different
 medical teams four or five times during a single hospital stay.
- The majority of acute medical patients spend all or the first few days of their hospital admission in an acute medical assessment unit (AMU). But in a number of sites the model of medical cover being used on AMUs is creating problems for maintaining continuity of care.
- There is a **growing emphasis on ambulatory emergency care**. However, the level of staffing and support varies significantly between sites.
- The degree of involvement by specialists in early patient assessment and management varies considerably. **Specialist input is mainly 'reactive'**, responding to requests for a clinical review. There is little specialist input to ambulatory care.
- The current **model of service**, including the configuration of beds, **does not match patient need**.
- Trusts are aware of these issues and are continually experimenting with new approaches and ways of working in an attempt to address them. Some are short term fixes, others are more medium and long term solutions. But no trust felt that they had the 'ideal' model of care or anything very close to it.

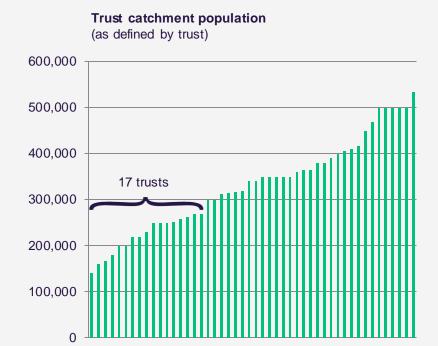
Hospital size and location



The average acute hospital in England serves a population of 300,000, compared to an average of 54,000 for a 'general hospital' in the European Union (World Health Organization, 2011).

For the 48 trusts we surveyed:

- Catchment populations varied from 140,000 to just over 500,000 (see figure).
- Only 17 of the surveyed trusts had catchments of less than 300,000.
- The average distance between neighbouring acute hospital sites was only 17 miles. Only four hospitals were more than 30 miles from their next nearest emergency department.
- The majority of hospitals were in urban settings or well populated rural areas.



Source: Trust websites

Population needs

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- The acute medical caseload is dominated by older people, many with multiple conditions.
- Over 40% of the acute medical workload is accounted for by just 10 diagnostic categories.
- This figure maps out early analysis of what an average hospital might have in its acute medical beds.

"90% of our take is elderly patients coming in with multiple comorbidities." Consultant Physician, Site 12

"Most of the people that are admitted in our hospital are over 65. And we have very, very few in medicine that are admitted under that age" Chief Operating Officer, Site 19

Average bed use on any one day in a single acute trust

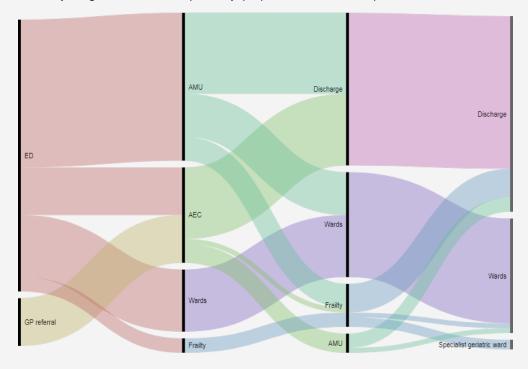


Complex pathways

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- Patients are following increasingly complex and fragmented pathways, involving multiple transfers of care responsibility between professionals (see figure).
- There are many permutations of pathways within and across sites – depending on time of day and local practice.
- For example, some sites allow direct referrals to their frailty units either from the ED or from GPs, while others do not.

Pathways of care on one site for acute medical patients: Sankey diagram: breadth of pathway proportional to flow of patients



Management of acute medical patients in the ED



- For many sites, the ED is no longer the primary place for the active assessment and management of the acutely unwell medical patient. Instead, the patients are rapidly moved from the ED to another place for processing, such as the AMU or ambulatory care.
- 92% of acute medical patients requiring admission are referred from ED to the on-call medical service, with little triage being made directly to specialty services.
- Immediate triage is undertaken for stroke and acute myocardial infarction (AMI). 98% of sites had fast-track pathways for stroke and 100% had them for AMI.

How acute medical patients are managed in the ED

Answer choices	Responses
A: Managed by the ED staff within the ED	16% (8)
B: Managed in conjunction with medical staff (specialty or on-call team) in the ED	20% (10)
C: Referred to the medical team and managed outside of the ED (e.g. in AMU or specialty wards)	16% (8)
A + B	12% (6)
A + C	12% (6)
B+C	14% (7)
A + B + C	10% (5)

"We've also been trialling an alternative model whereby our acute physicians are also working in ED, so they'll take direct admissions from a medical perspective and pull them across to ambulatory emergency care or the acute assessment unit." Divisional Director Medicine, Site 40

Variation in support for the ED



- Most EDs have dedicated support from:
 - Physiotherapy (86%)
 - Occupational therapy (82%)
 - Social worker(s) (44%)
 - Dedicated team to support admission avoidance or early discharge (44%)
- Only 14% had dedicated support from a frailty service including frailty nurses and geriatricians (despite some finding this very helpful).
- Only 22% of sites had dedicated mental health liaison support.

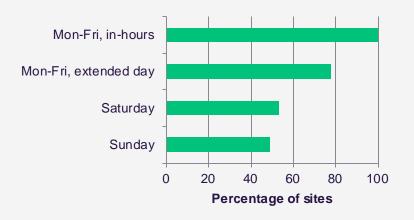
"We historically had what we called the 'God Phone', which was the geriatrician of the day, which was proving really successful, so we've tried to augment that with a multidisciplinary frailty team who work directly behind the ED team but try and pull out patients that are older, frailer..." Chief Operating Officer, Site 20

Variation in the way ambulatory emergency care operates



- 47 of the 48 trusts surveyed had an ambulatory emergency care (AEC) unit.
- Between 10% and 20% of patients referred for medical assessment receive care through AEC
- Most trusts use AEC to undertake a primary assessment of the patients, but some also use it for elective-type care, such as offering follow-up 'hot clinics' or day-case procedures.
- Some sites felt that as a matter of principle the emergency and elective pathways should be kept separate. One site was planning to separate out all elective procedures from ambulatory emergency care to a 'programmed investigations unit'.
- Only half the sites offered services at weekends.

Hours ambulatory emergency care unit is open



Ambulatory emergency care: leadership and support



- Acute physicians provided clinical leadership for 75% of the AEC units.
- In other sites clinical leadership was provided by the ED, or very occasionally by specialty physicians.
- The majority of AEC units have some consultant input, but clinical cover varies from cases with a consultant plus a middle-grade practitioner plus an advanced nurse practitioner (ANP), to an ANP only. Some units use GPs. In some cases clinical cover is provided solely by junior doctors.

"If we move to a model [with] all these calls and there is discussion between GPs and the admitting team then probably a lot of admissions can be reduced. ...[In a model] where there are no boundaries or roles and we have easy access to GPs to discuss things and they have easy access with us, and ambulatory emergency care can make a lot of difference in acute setups nowadays, it can deliver a lot." Acute physician, Site 13

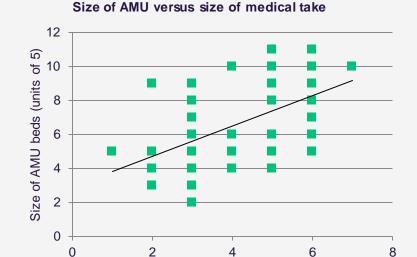
Variation in form and function of acute medical units



- The acute medical unit (AMU) is 'a dedicated facility within a
 hospital that acts as the focus for acute medical care for
 patients that have presented as medical emergencies to
 hospitals or who have developed an acute medical illness
 while in hospital'.
- All sites had an acute medical unit/medical assessment unit or its equivalent. The maximum length of stay on the unit varied from 8 hours (1 site) to 72+ hours (50% of sites).
- Seven sites said that the length of stay could be considerably more than 72 hours:

"We want it to be 72 hours but in reality it is 4 to 5 days".

- AMUs varied significantly in size:
 - 10% had fewer than 20 beds
 - 52% had between 20 and 40 beds
 - 38% had more than 40 beds.



While there is a rough correlation between the size of the AMU and the size of the medical take, there is also considerable variation (see figure).

Average size of medical take - (units of 10)

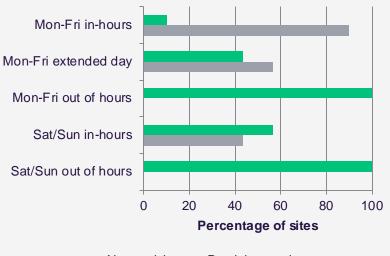
Variation in medical cover for the acute medical unit over the week



The number of acute physicians on the AMU during the day varied from 1 to 4. The tendency is for acute physicians to cover the AMU Monday to Friday within working hours.

"We've also put on additional acute physician rounds at weekends and I would say that's probably again in response to the acuity and the sickness of some of the patients we're now seeing." Director of Operations, Site 24

When do acute physicians provide primary cover for the AMU?



■ No provision ■ Provision made

Varied roles for specialists on the acute medical unit



- We observed three different approaches to the engagement of the specialty teams on the AMU:
 - 1. The 'closed model' with all patients under the acute medical team with invited specialist review.
 - 2. The 'open model' where specialist and acute teams manage patients triaged to their teams.
 - 3. The 'partial model' where the acute medical team has responsibility for the majority of patients with the exception of one or two specialties.
- The specialties frequently identified as providing active input were cardiology, respiratory and frailty. Other specialties were significantly less proactive. In one hospital the gastroenterologists required a formal referral before they would see a patient.
- The seniority of specialty review also varied in some sites this was done by the middle-grade practitioners; in others it was the consultant. Patients might not see the specialty consultant until a day or two after admission.

"What we're working towards is [specialists] inreaching and then owning in the hope that they will pull the patients through more and actually release some of the work from the acute physician so they can work more upstream in the ED. So we are working towards a sort of specialty ownership on AMU." Chief Executive, Site 5

Challenges to continuity of care



- In some sites the current model of medical cover for AMUs provides a significant challenge to continuity of care, with no one feeling responsible for a patient's overall care.
- Some sites have responded to this by taking active steps to support continuity – particularly for short stay patients.

"Somebody that's been there for three days that you've had no involvement with is something that as the physician of the day you probably don't want to get involved in because you've got so many other things to be doing. So there is a concern and a gap around the continuity for those patients" Divisional Director, Site 44

"We introduced a new consultant model a year ago to provide continuity of care for short stay. So if you're admitted and you're a short stay patient you will be under the same doctor. We've brought in a new junior doctor rota to improve continuity of care for junior doctors." Divisional Director, Site 2

Variation in approach to geriatrics services

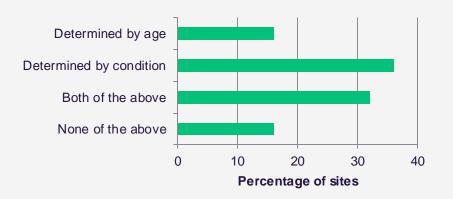


Some sites used clear age thresholds as criteria for referral to a geriatric service. Some used clinical indicators, and some used a mixture of the two.

"It depends upon the geriatrician"

"It's an ongoing debate with the geriatricians about the criteria they use". Associate Medical Director, Site 23

Criteria for referral to a geriatrician



Variation in size and function of frailty units



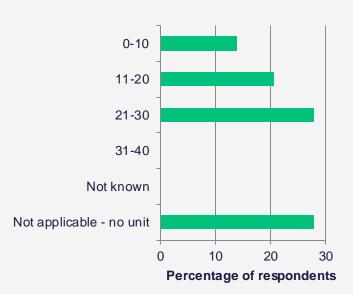
- A frailty unit (or equivalent unit for the assessment of frail older people) is a ward with staff trained in ways to look after patients who are frail. Its focus should be on rapid assessment, treatment and rapid discharge.
- 56% of the sites we surveyed had a dedicated frailty unit (or equivalent). They varied in size, but none were greater than 30 beds (see figure).
- Of those that have a frailty unit, about half are located with the AMU and half with a ward area. One site had recently combined its frailty unit with its AMU.

"We were struggling to staff two units, they're generally doing the same thing and cohabiting similar medical staff, so we combined the units." General Manager Medicine, Site 1

- Patients are generally referred from the ED or the AMU. GPs were able to refer directly in about third of sites surveyed. Two sites allowed direct referral from the ambulance service.
- Some sites were shifting towards understanding frailty as an outreach service, rather than a defined ward space.

"So, actually, therefore, you shouldn't have a limit on the number of frailty beds you've got: you should simply have as many frailty beds as you need...." Clinical Director, Site 33

Number of beds in frailty units in surveyed sites



Ward configuration



- In the majority of hospitals each of the core medical specialties has a ward (see figure).
- Workload was dominated by the problems of old age and a significant proportion of respiratory problems.

"So you would argue that every single ward in this trust is a geriatric ward: geriatric with specialism." Chief Operating Officer, Site 19

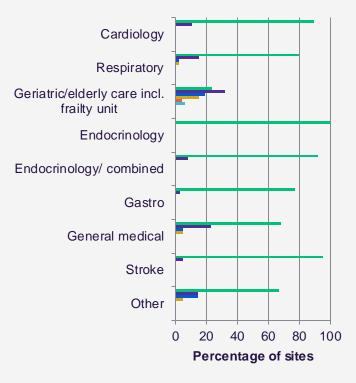
• 36% of sites said that bed pressures meant that patients had to go to 'any available bed'.

"You begin to see why we have problems! ... We've got some specialist ward areas that may or may not have specialty patients and gen med patients on them. We do have a gen med ward that's called something else but, essentially, delivers the general medical service."

Medical Director, Site 6

 One trust described moving from an age-based to a needs-based service (based on analysis of activity), expanding some services such as respiratory and reducing others. They believe this will help specialist services take responsibility for their patients earlier, as they will be 'right sized' for them.

Number of wards for each specialist area



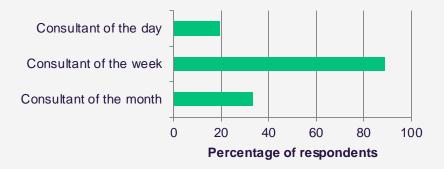
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Variation in approach to consultant cover for wards, with some sites trying to improve

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- In the majority of cases patients are managed by the medical team responsible for their ward.
- Only 12% of sites had specialists managing patients irrespective of their location.
- Consultant cover was delivered across wards in varying ways (see figure).
- The degree to which patients had a consultant who retained overall responsibility for their care also varied across specialties. There was rarely a model that was consistently applied across a hospital.
- A few sites were trying to improve ward cover provided by consultants including increasing cover at weekends and more systematic reviews of patients.

Which models of consultant cover are used by specialties in the hospital?



"If you're in a gastro ward, you'll be looked after by a gastro consultant: you may have a respiratory problem but you'll be looked after by a gastro consultant. If you then move wards and end up on a cardiology ward, you'll then be looked after by a cardiologist. So we've got care, at the moment that is based on location of patient as opposed to patient need."

Acute medical services are systems in flux



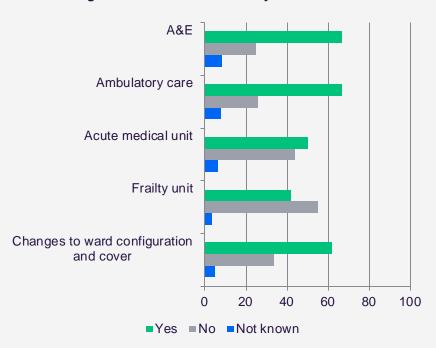
Every site bar two had made changes to at least one aspect of acute medical services in the last year (see figure).

"They're continuously designing and redesigning" Clinical Director, Site 35

There was also an expectation of significant further change:

- Over half of sites were anticipating changes to their ED.
- Just over a third of sites anticipated changes to their ambulatory emergency care service – predominantly expansion of the service.
- Nearly 40% of sites were anticipating changes to their AMU.
- Around a fifth of sites were planning change to their ward configuration.
- Just under a third of sites were planning an expansion of their frailty service.
- Lastly, sites described a number of changes to staffing, including expansion of the numbers of non-medical staff and increased consultant cover to the wards, 7 days a week.

Changes to service model in last year



Trusts' longer-term solutions and strategies for addressing the challenges they face



- Undertaking an analysis of patient case mix with a view to optimising ward configuration and moving to a staffing model (medical and non-medical) that is better aligned with patient need.
- Creating an **acute hub for assessment** of acute medical patients that co-locates the ED with the AMU and the AEC unit, with medical and other **clinical staff working flexibly** across the hub.
- Streamlining acute medical patient pathways: avoiding multiple handoffs between teams, for example by adopting a 'single clerking' model.
- Redesigning medical cover arrangements to support greater continuity of care. For ward cover this includes approaches such as "consultant of the month".
- Extending access to support for patients with frailty through **development of a frailty outreach service** in a model akin to that used for critical care outreach.
- Moving from a reactive to a proactive model for specialist engagement in the management of acute
 medical patients and closer collaboration between acute physicians and medical specialists, particularly on
 the AMU. Facilitating this through the use of advanced nurse practitioners and clinical nurse specialists.

Reflections: I



- In most hospitals, much of the **early pathway** for the management of acute medical patients is **driven by time**. This includes ED, ambulatory emergency care and acute assessment.
- Pathways of care driven by time, fragmentation of services and the models of medical cover at senior and junior level result in multiple patient clerking and provide a significant challenge to continuity of care. As a result, no one physician may feel that they carry overall responsibility for the care of a patient.
- The early part of the acute medical pathway is predominantly led by medical generalists, notably the emergency and acute physicians.
- The degree of involvement by specialists in early patient assessment and management varies considerably across sites and specialties. Specialist input is mainly 'reactive', responding to requests for a clinical review.

Reflections: II



- There is a worrying **mismatch between patient needs and the service model**, with care frequently based on location rather than patient need, particularly on downstream wards. This problem can be exacerbated by bed pressures, but also by not 'resizing' the wards to match a hospital's case mix.
- There are marked differences in the model of care in and out of hours. There is less consultant presence at night and weekends, but also less support for ambulatory assessment as well as other forms of specialist support such as mental health, therapies and frailty.
- Trusts are aware of these issues and are continually experimenting with new approaches and ways of working in an attempt to address them. Some are short-term fixes; others are more medium and long-term solutions.
- None of the trusts had formally evaluated any of these approaches so they were unable to provide evidence of their impact, particularly for the medium and longer term solutions. However, there was some anecdotal evidence of benefits to new approaches.

Appendix and references

References and definitions



Royal College of Physicians (2018) Focus on physicians: 2017–18 census (UK consultants and higher specialty trainees) Available at: https://www.rcplondon.ac.uk/projects/outputs/focus-physicians-2017-18-census-uk-consultants-and-higher-specialty-trainees (accessed 1.8.18)

Emergency department (ED), also known as an accident & emergency department (A&E), emergency room (ER), emergency ward (EW) or casualty department, is a medical treatment facility specializing in emergency medicine, the acute care of patients who present without prior appointment; either by their own means or by that of an ambulance.

Acute medicine is the area of <u>internal medicine</u> concerned with the immediate and early specialist management of adult patients with a wide range of medical conditions who present in hospital as <u>emergencies</u>.

Acute medical unit (AMU) is 'a dedicated facility within a hospital that acts as the focus for acute medical care for patients that have presented as medical emergencies to hospitals or who have developed an acute medical illness while in hospital'.

Ambulatory emergency care (AEC) is a service that provides same day emergency care to patients in hospital. Patients are assessed, diagnosed, treated and are able to go home the same day, without being admitted overnight.

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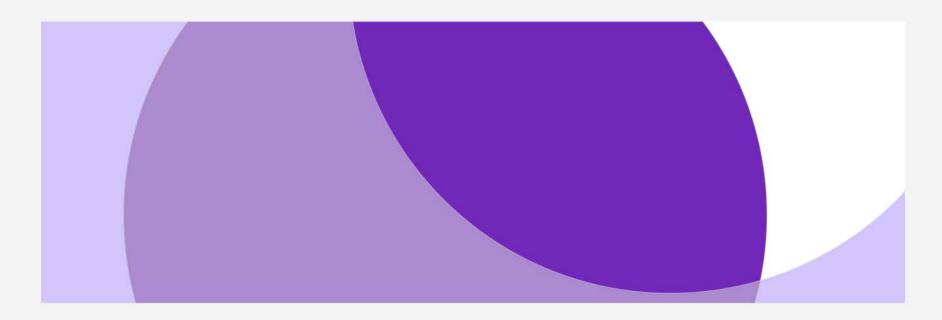
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