Supplementary Material 6: Case study profiles

1. Hospital Site A

Key features of this site

- In October 2016, the trust, together with the local GP alliance and some community care providers, won the tender to provide community care in the local area.
- Social workers support ED and ACU, which also have a reactive service provided by physiotherapists and occupational therapists (OT). However, services require more input from these disciplines at the weekends.
- Although there is good engagement and relationships with social care partners, there are still long waits due to limited infrastructure in social care and to a lack of robust 'discharge to assess' arrangements at the hospital.

Trust overview

Catchment population	• 300,000
Hospital size (number of beds)	• 540
Income (at time of visit)	• £204.3 million and a deficit of £10.7 million.
Demography	• Some localities covered by the trust have a high incidence of lung cancer and stroke, and above average alcohol-related emergency admissions. • There is a growing cohort of patients with co-morbidities and complex needs, and most patients currently presenting to ED are frail elderly.
Case mix	• 50.3% consultants in general specialties
Local geography	• The hospital is located outside a small rural town in North West England. The local population is set to see a significant increase, with

	plans to develop the local town area and with a number of housing developments planned in the near future.
Services	• 3 sites including an intermediate care centre • Key services: emergency department; urgent care centre; ambulatory care unit; acute medical unit; general medicine (care of the elderly) • Main hospital site has 26 wards, critical care, maternity, paediatric and neonatal wards • The trust is integrated into a local health partnership providing services across parts of the county
Nearest A&E	• There is no tertiary care centre in the county and the nearest A&E is approximately 17 miles away.
STP	• In the October 2016, a Sustainability and Development Plan (STP suggested a "remapping" of the trust's emergency and elective care, in order to create "clinically and financially sustainable services". There are plans underway for the development of Accountable Care Organisations (ACOs) across the local patch as part of the STP, which is likely to receive additional funding. This is creating conflicts with local CCGs and two CCGs would potentially be separated in the process. • There is some anxiety locally around what will happen to acute and emergency services, and the local network relationships already established.
A&E	• 78,991 attendances (2015/16) • Average of 180 presentations/day (min 130–300) • 8.6 FTE posts – 5.6 filled • Includes a Clinical Decision Unit (CDU) – a separate 8-bedded area within A&E where patients can be admitted if they need ongoing treatment or investigations before discharge or sometimes admission to the hospital wards.

ACU	• Implemented since 2016 • Led by acute physicians • 8am–10pm Monday to Friday • Approximately 15 patients per day (10 from GP, 5 from ED) – about 10% of medical take from A&E goes through to ACU
AMU	• Closed AMU – some in reach from gastroenterology and cardiology • Medical take: 45 • 32 beds • Led by acute physicians • 5.8 posts funded and 3.8 filled • During the day, covered by acute physicians. Out of hours, one consultant covers the take from the general medical rota (contributed from most specialties except cardiology and gastroenterology) • LOS determined by patient need and nursing staff/physician consensus (about 2 days but with long tail for occasional patients) • Split between 'seeing and assessing' (where maximum stay is up to 24 hours) and 'general medical' (where maximum stay should be 72 hours)
Downstream wards	• 1 AMU, 1 short stay ward, 2 general medical wards, 1 respiratory, 1 care of the elderly, 1 care of the elderly run rehab, 1 gastro, 1 stroke. • Total number of beds in specialty based wards: 270

Workforce

High-level figures (FTE, January 2017)

Number of doctors (all HCHS doctors, non-locum)	304
Qualified nursing, midwifery and health visitors staff	1,021

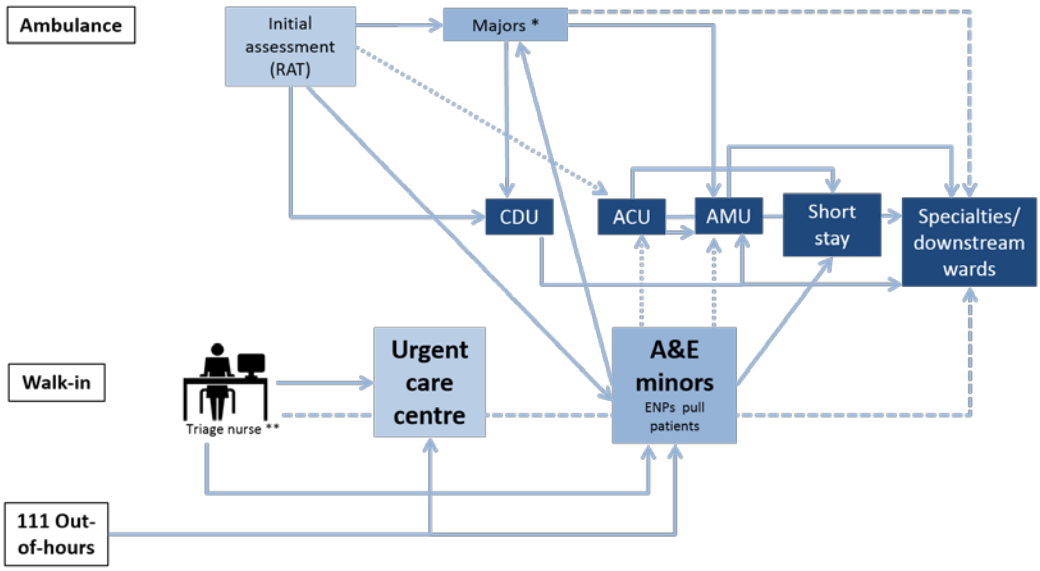
Source: NHS Digital, NHS Workforce Statistics – January 2017 (Provisional statistics)

Selected workforce figures

Selected specialties	Consultants (total FTE)
Acute internal medicine	6.2
Cardiology	6.1
Emergency medicine	6.6
Endocrinology and diabetes	1
Gastroenterology	5
General (internal) medicine	-
Geriatric medicine	5
Neurology	-
Respiratory medicine	2
Rheumatology	-
Grand total	31.9

Source: Telephone survey and case study interviews. Trust asked to clarify – some information not provided.

Patient pathways



* For specialty patients, specialists generally come down and see patients in ED. Assessment units would normally pull patients, but they generally have no bed capacity

** Challenges OOH and weekends: only 1 triage nurse to process every patient walking in to A&E – subject to surges in incoming patients

Cardiology only

Patients are 'pushed' and 'pulled' between these services

Emergency department overview

Rapid Assessment & Treatment (RAT)

3 cubicles at front door led by ED consultants (but struggling to staff this 24 hours due to consultant numbers)

Majors

10 cubicles (1 Paeds, 2 infection)

Minors

- 3 large cubicles
- Cluster bay
- Eye room
- Consulting room

CDU

- 8 beds (split male/female)
- No set criteria for which patients come here
- Gatekeepers are senior consultants
- Always a nurse present, registrars overnight
- Physio and OT work here 9.00-16.00 weekdays

Urgent care centre

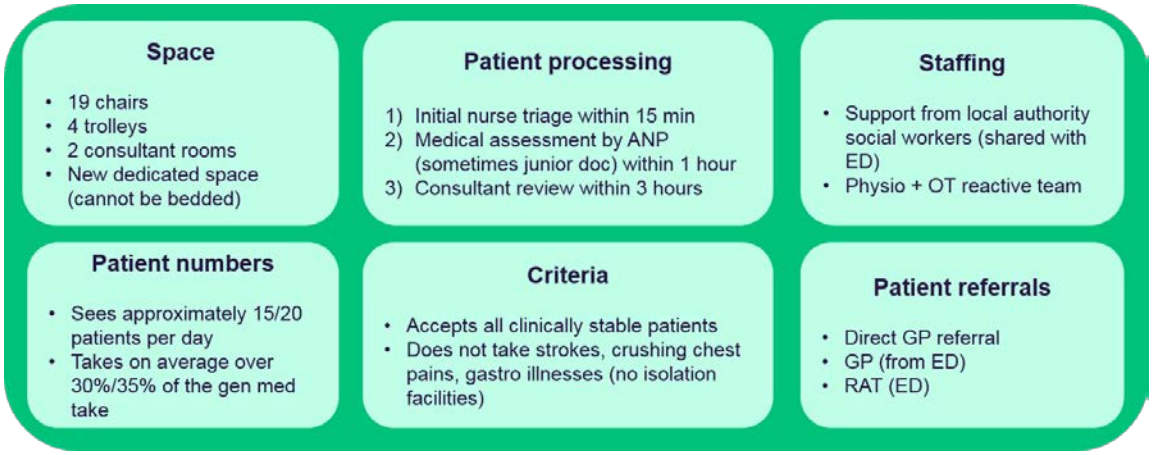
- Previously run by Shropdoc now run by the Trust
- Primary care service open 8.00-6.30pm
- 1 GP + 6 nurses present 8.00-6.30pm
- OOH service after 6.30pm (appointment from 7.30pm)
- Includes ambulatory care stream to see medical GP admissions (five pathways e.g. renal colic)

Resus

- 5 spaces
- Slightly far from main hub of activity in A&E and majors
- Not used as overspill

Mental health rooms

Ambulatory care (AEC) overview



2. Hospital Site B

Key features of this site

- Quality improvement and innovation feature prominently in the culture of the hospital. This is evidenced by the degree of investment in novel ways to improve the infrastructures and building functionality, and by the establishment of innovative strategic partnerships between the trust and commercial organisations. Quality improvement is ‘second nature’ to most staff members, who are driving change and are given control over the implementation of service improvement projects.
- The hospital’s front door runs what can be described as a ‘hyper-streaming’ model, where there is a high number of channels through which patients can go when they come into hospital. The current complex configuration of the hospital’s front door is the result of iterative add-ons in response to local needs and national directives. The hospital has ongoing plans for its future acute and emergency services.
- The hospital is strongly investing in admission avoidance, speeding up discharge and providing alternatives to managing and supporting complex patients out of hospital. The hospital is pioneering a programme focused on better integration across primary care, hospital care and community services.
- One of the biggest challenges for the hospital in the future will be to recruit the appropriate number of consultants to fill current gaps and deliver a succession plan for retiring consultants, while ensuring appropriate consultant cover for the general medical on-call rota.
- The hospital is moving to a model where admission is the ‘last resort’, rather than the default option. It has put in place admission avoidance and assessment systems to better identify patients presenting to hospital who do not need to be admitted. The hospital is now streaming ambulatory patients through an additional assessment area and the new ambulatory care unit (ACU) in the ED, and the frailty unit.
- The limitations with floor space have meant that the hospital’s current front door model has been “bolted together”, rather than being driven by a clear vision. However, there are plans to expand the emergency footprint by moving the day theatre unit to a different location. There is also a plan to amalgamate a separate walk-in centre, currently run by a trust-owned subsidiary with the front door.

- The hospital is involved in a 100-day project driven by NHS England looking at a referral and follow-up model for patients in primary and secondary care.

Trust overview

Catchment population	• 185,000
Hospital size (number of beds)	• 345 beds
Income (at time of visit)	• £126.2 million (2015/16) – deficit £10.6 million
Demography	• There is a local projected increase of 30% in the number of people aged over 65 until 2021. In the primary district served by the hospital there is a higher proportion of residents aged over 65 (21.6%) than in the rest of England (16.3%). There is also a growing cohort of patients with co-morbidities and complex needs, and most patients presenting to ED and being admitted are frail elderly. • While there are many areas of affluence within the county, there are also pockets of deprivation with higher levels of unemployment, lower educational attainment and poorer health and wellbeing.
Case mix	• 24.2% general (as per research analysis)
Local geography	• The site is located in the centre of a small rural town in South West England.
Services	• 1 hospital site • Key services: ED; primary urgent care centre; ambulatory care unit; AMU; elderly care

STP	• The hospital hosts an integrated primary and acute care systems (PACS) vanguard in partnership with a GP federation, the local CCG and the local council. The programme serves a population of 200,000 and is jointly managed by health and social care staff. The main aim is to prevent avoidable hospital admissions and to provide support to managing care out of hospital. • In the October 2016, a Sustainability and Development Plan (STP), 'addressing clinically and financially unsustainable acute care service provision' was a key priority. The plan involves: reducing spending on acute hospital-based care, while investing in primary and community services; reconfiguring/consolidating vulnerable services and shifting services to out-of-hospital settings; and developing ambulatory models of planned and emergency care. • A new front door model at each acute trust within the STP footprint was to be agreed by January 2017 and operational by March 2017.
A&E	• 46,542 (2015/16) • Average of 150 presentations a day (range: 140–169) • 6 cubicles in major • Strategic leadership by clinical director (paediatrician), but on ED, ED physicians • Consultant cover in ED: 08.00–22.00 (then on call) • 7.6 funded, 6.6 filled • Does not have a CDU • Includes an additional assessment area (AAA) which acts as 'inpatient holding area' while tests are carried out (formerly the clinical decisions unit)

AEC	• Dedicated space led by acute physician team and nurse consultant lead • Operates Mon–Fri 10–8, weekends and bank holidays 10–6 weekends. Due to extend to 10pm seven days a week • Average 170 new patients with average 320 appointments per month – average 10 patients per day • 15–20 GP referrals a day (and 10–15% of ED presentations) • Staffed primarily by nurse practitioners who see and assess patients; if needed, medical input is available from the ED consultant of the day, the acute physician and the acute surgeon
AMU	• Known as emergency admissions unit (EAU) • Closed AMU • Acute medical team has clinical responsibility for all patients, inviting specialist opinion where necessary • Four dedicated acute physician consultants cover – nearly all consultants that make up general rota are general with a special interest • Medical take: 30 • 24 beds • When flow, approximately 90% of patients admitted go to AMU • LOS 1.4 days (when no bed capacity problems throughout hospital) • Acute physician consultant present 8–8 Monday–Thursday and 8–5 on Friday. 12-hour cover Saturday and Sunday from on-call physician, who is generalist with special interest. Overnight, no consultant present but cover from on-call consultant. • Support from OT and physio, who attend daily MDT. Social service input for patients medically fit for discharge.

Downstream wards	• Respiratory and endocrinology, gastroenterology, cardiology, high dependency unit, coronary care unit and care of elderly, medically fit for discharge, surgery, orthopaedics, intensive care, frail older persons' assessment service, emergency admissions unit. • Frailty unit (no short stay unit), general medical ward, care of the elderly ward, specialist ward • Open wards • Specialist wards only • Total number of beds in specialty-based wards: 146

Workforce

High-level figures (FTE, January 2017)

Number of doctors (all HCHS doctors, non-locum)	239
Qualified nursing, midwifery and health visitors staff	509

Source: NHS Digital

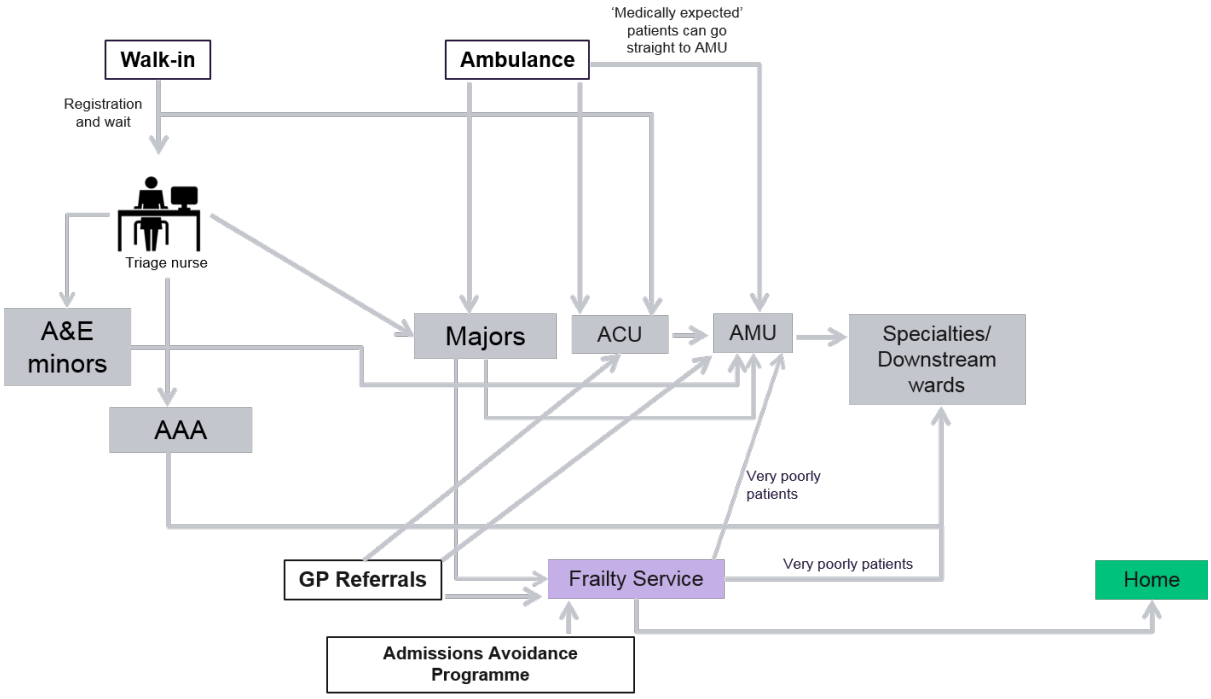
Selected workforce figures

Selected specialties	Consultants (total FTE)
Acute internal medicine	4
Cardiology	3
Emergency medicine	6.6
Endocrinology and diabetes	2
Gastroenterology	4
General (internal) medicine	-

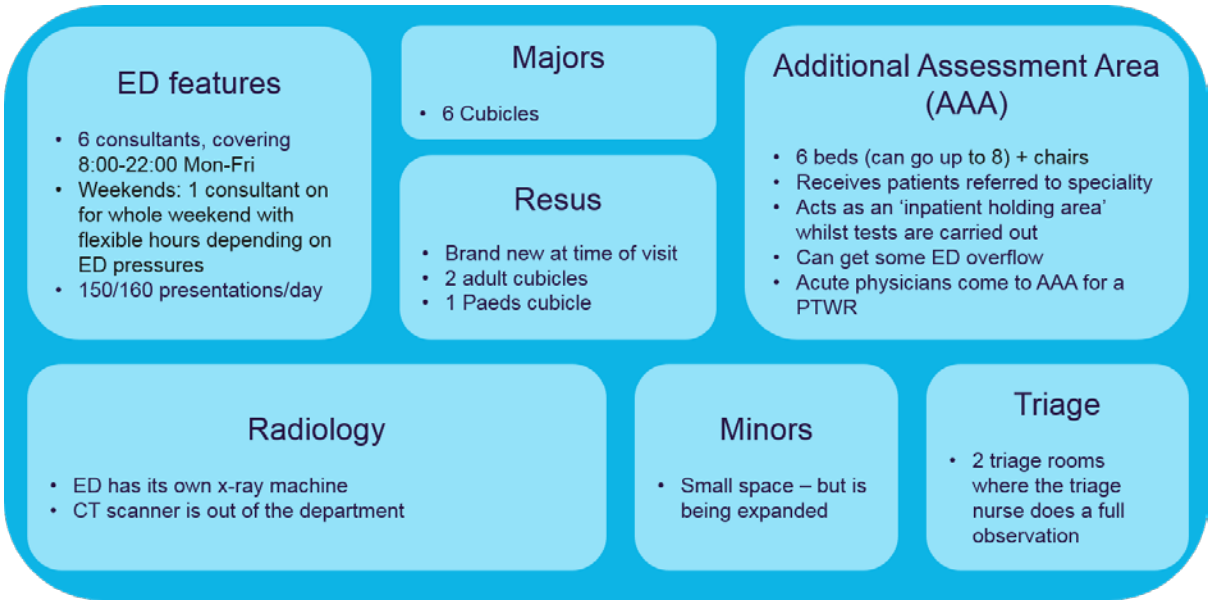
Geriatric medicine	3
Neurology	-
Respiratory medicine	2
Rheumatology	-
Grand total	24.6

Source: Telephone survey and case study interviews: trust asked to clarify – some information not provided.

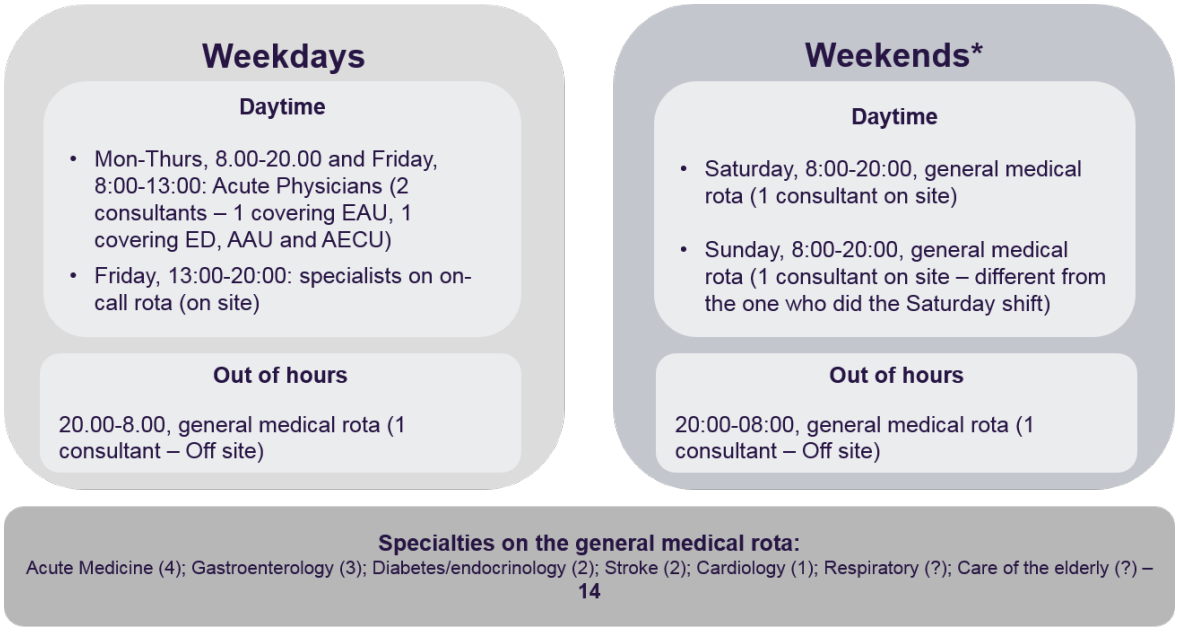
Patient pathways



Emergency department overview

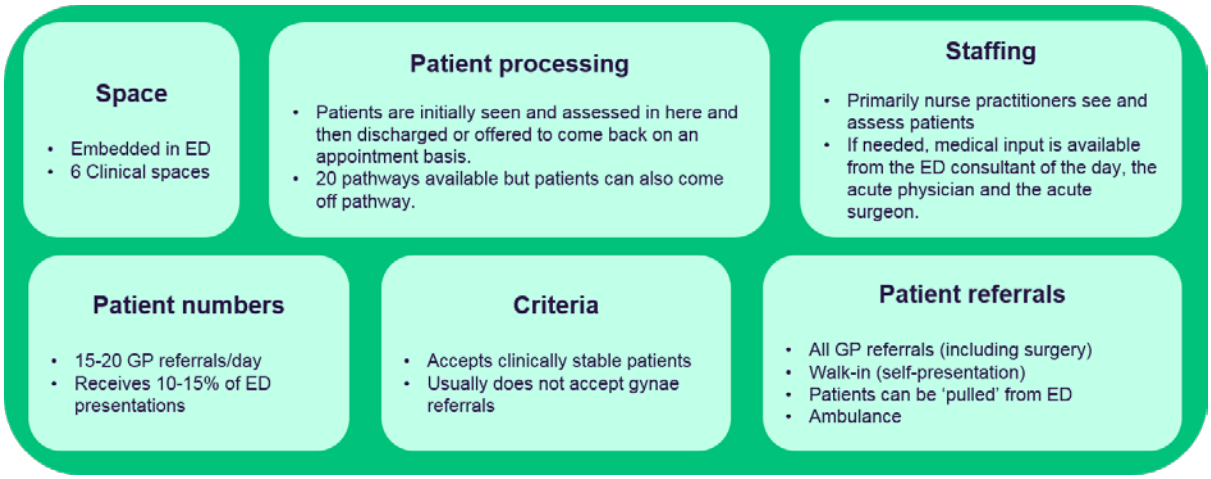


Acute medical cover overview

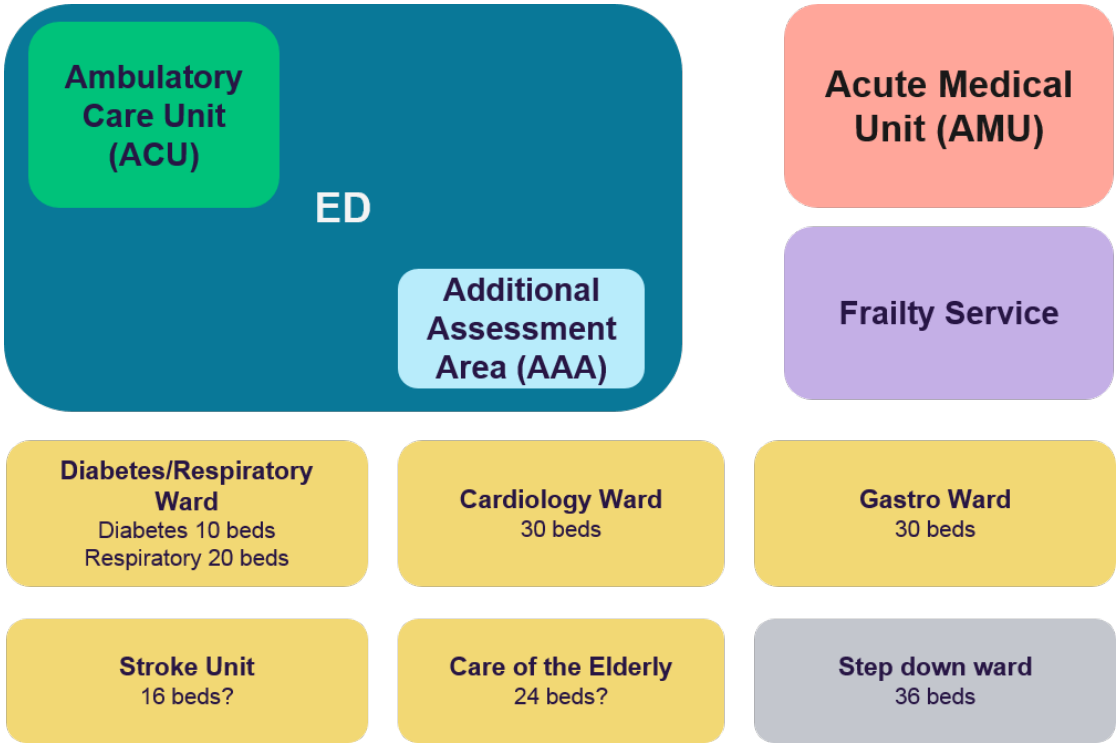


* Weekend cover includes a post-take ward round and a ward round in the High Dependency Unit.

Ambulatory care (AEC) overview



Ward configuration



3. Hospital Site C

Key features of this site

- Workforce recruitment is the organisation's main challenge. The hospital has no substantive consultant acute physicians and the AMU is reliant on sessional commitments, which has important implications for financial sustainability, capacity for service change, and training and supervision of junior doctors. Similarly, the current shortage of geriatricians prevents the hospital from developing a dedicated frailty service.
- Ongoing gaps in junior doctor training and supervision led the General Medical Council (GMC) to put the hospital in 'special measures' in 2015. However, the hospital has since deployed new recruitment strategies to ensure there is a sufficient number of consultants to provide an appropriate level of clinical and educational support.
- The hospital has reorganised its clinical governance structure and established clinical business units with greater decision-making autonomy. This has allowed for the development of strong leadership in the ED and the AMU, and for the nursing workforce to thrive. There was a significant investment in creating new roles and flexible job plans, as well as in developing staff. These strategies have already had an impact on nursing recruitment and retention.
- Having the ED and the AMU under the same clinical business unit has facilitated patient transfer across both services. The hospital has also created new ED-based roles designed to help improve flow, such as 'controller' A&E consultants and Band 3 nurse coordinators, who progress pending tasks so that patients can be nimbly transferred.

Trust overview

Catchment population	• 313,000
Hospital size (number of beds)	• 590 beds
Income (at time of visit)	• £219 million (2015/16) – deficit £15 million

Demography	• The hospital's patient population consists of a mix of older patients coming from nursing homes in the hospital's catchment area, and younger families, who have contributed to a sharp increase in paediatric presentations at the hospital. • The hospital's location is geographically convenient for the population, which has an influence on the number of ED attendances.
Case mix	• 13.6% in general specialties
Local geography	• The hospital is located in a large town in North West England.
Services	• Two major hospital sites, one where the majority of emergency care and complex surgical care is based, and the other dedicated to routine surgery. Orthopaedic surgery at a third location. • Key services: ED; primary urgent care centre; ambulatory care unit; AMU; elderly care.
A&E	• 119,163 attendances (2015/16) • Average of 200–230 presentations/day • Led by consultant emergency physicians reporting to clinical director of urgent and emergency care • 8 posts funded, 7 currently filled • Consultant cover in ED: generally Mon–Sun, 8am–11pm • Includes a clinical decision unit (CDU)
AEC	• Operating hours: Monday–Sunday, 10:00–22:00 • Led by emergency physicians • Sees 30–35 patients per day (all must go through ED first then triaged through to AEC)

AMU	• No substantive acute physicians – 6 posts funded but none filled substantively, all filled by locums • Medical take: 60 (range 45–75) • 29 beds (can expand to 39 in escalation in trolleyed areas) • Maximum length of stay aim: 48 hours • Support from OT, physio and social work, and a rapid response team
Downstream wards	• One gastro (21 beds), AMU, short stay (28 beds), coronary care (eight beds), respiratory (32 beds), cardiology (24 beds), older person's assessment unit (34 beds), sub-acute ward (34 beds), acute geriatric neuro rehab ward (34 beds), dementia ward (21 beds), two more acute geriatric wards including stroke unit (each with 24 beds) and sub-acute ward with 12 beds

Workforce

High-level figures (FTE, January 2017)

Number of doctors (all HCHS doctors, non-locum)	376
Qualified nursing, midwifery and health visitors staff	913

Source: NHS Digital

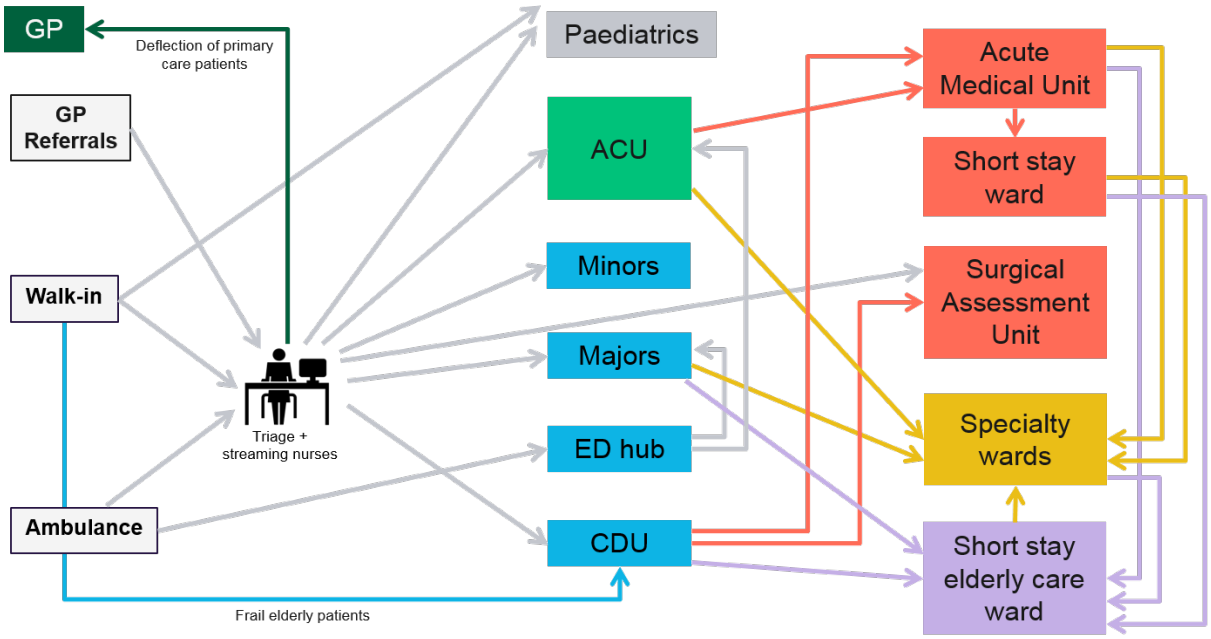
Selected workforce figures

Selected specialties	Consultants (total FTE)
Acute internal medicine	1
Cardiology	6
Emergency medicine	8
Endocrinology and diabetes	4

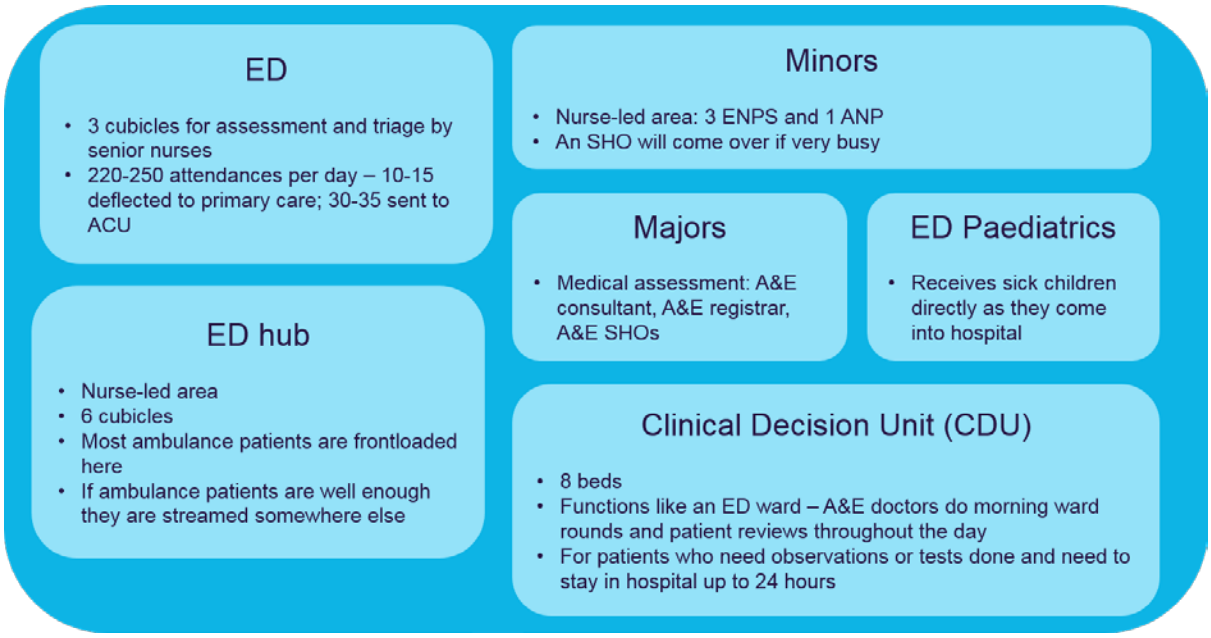
Gastroenterology	4
General (internal) medicine	1
Geriatric medicine	3.6
Neurology	-
Respiratory medicine	2
Rheumatology	1.8
Grand total	31.4

***Source**: NHS Digital (figures from Oct 2016) and interview transcript. Trust asked to clarify – some information not provided.*

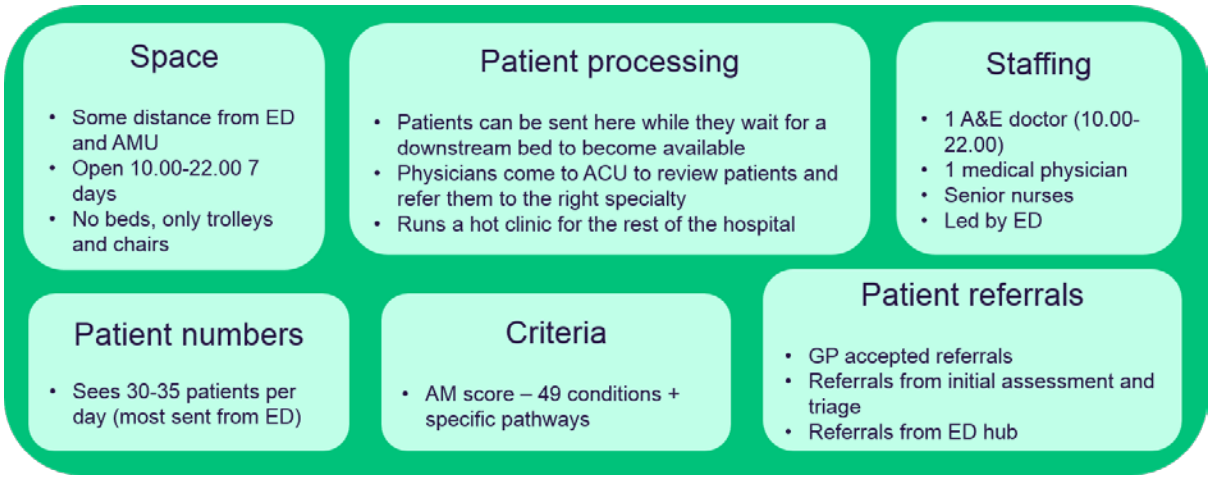
Patient pathways



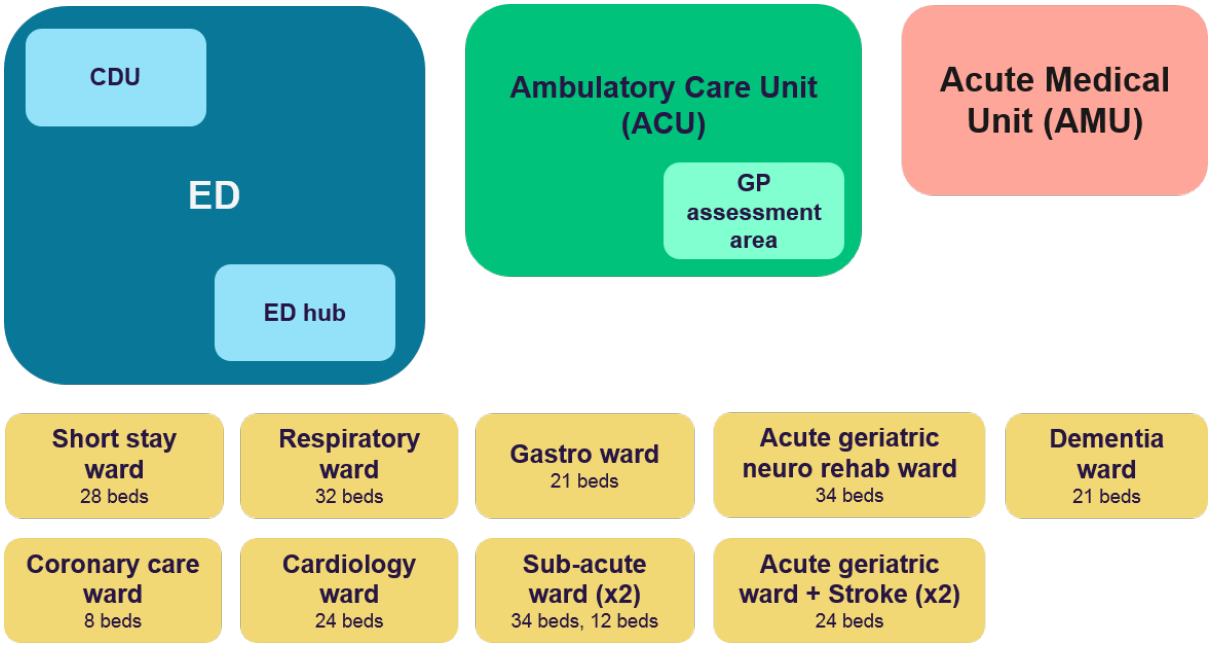
Emergency department overview



Ambulatory care (AEC) overview



Ward configuration



4. Hospital Site D

Key features of this site

- The hospital has a unique patient case mix, with a predominantly young and ethnically diverse population presenting with complex conditions, as well as problematic patient groups.
- The hospital's medical model is unusual in that it does not have any acute physicians managing the acute take. The medical rota is covered by specialists, who also see themselves as medical generalists.
- The hospital has undertaken long-standing work to integrate aspects of care and this is evident in the strong relationship between the hospital and local GPs.
- Integration is also facilitated by the established integrated independence team (IIT), which works across ED, ambulatory care, the wards and the community. The IIT provides continuity for patients in hospital and post-discharge, while removing almost all social admissions from the medical take.
- Unlike most hospitals in this study, the organisation does not seem to have major medical or nursing workforce gaps at any level.
- The hospital is bordered by two large trusts, so it has invested in fostering 'localism' as an essential and distinguishing part of the organisational culture.

Trust overview

Catchment population	• 263,000
Hospital size (number of beds)	• 500 beds
Income (at time of visit)	• £284.4 million (2015/16)

Demography	• The borough has a mix of highly deprived areas and wealthier patches. • The local population is very distinctive in that it is very ethnically diverse. There are minority communities that provide strong family networks for patients in the area. • The older complex population does not represent the majority of the hospital's caseload. It sees more complex patients at a younger age (~34 years old) than other similar-sized hospitals. There is also a high prevalence of sickle cell disease. • There are local challenges around difficult patient groups (e.g. drug users, alcoholics). The hospital has challenges with abusive behaviour of some patients.
Case mix	• 46.70% general (as per research analysis)
Local geography	• The hospital is located in a high-density urban area.
Services	• One hospital site • Key services: ED; primary urgent care centre; ambulatory care unit; AMU; elderly care; IIT. • 11 wards, a nine-bed intensive care unit and maternity, paediatric and neonatal wards. • The trust is integrated in the local health and social care economy, providing both acute and community services (staff working at 75 different out-of-hospital sites).
STP	• The hospital is heavily embedded in the local area and has strong relationships across its geography. It liaises with one CCG and one local authority. Local GPs are very involved and engaged in keeping patients out of hospital. • The hospital believes that its high performance will prevent any merger or service downgrade from taking place as a result of the local STP.

A&E	• 121,345 attendances (2015/16) • Average of 333 presentations/day (min 290–max 400) • No major trauma provision. Some occasional trauma patients from shooting and stabbings. • 9 FTE consultants delivering ED rota (12–13 bodies) • Consultant cover in ED: Monday to Friday, 8.00–22.00; weekends, one consultant covering nine hours + senior registrars (level of staffing adjusts to predicted degree of busyness) • Includes a clinical decision unit (CDU) – a separate eight-bedded area within A&E where patients can be admitted if they need ongoing treatment or investigations before discharge, or sometimes admission to the hospital wards.
AEC	• Brand new service at the time of the visit to the hospital • Operating hours: Monday–Friday, 9.00–17.00/18.00. Weekends, 10.00–16.00 • Number of patients referred from ED: 2–3/day • AEC will be staffed by two ED consultants and two medical consultants • Explicit purpose is admission avoidance
AMU	• Partial AMU • Specialist dominant AMU – no substantive acute physicians • Medical take: 25–35 • 35 beds • Maximum length of stay: 48 hours • Nurses have a broad range of skills
Downstream wards	• Open wards • Specialist wards only • Total number of beds in specialty based wards: 180

Workforce

High-level figures (FTE, October 2016)

Number of doctors (all HCHS doctors, non-locum)	476
Qualified nursing, midwifery and health visitors staff	1,173

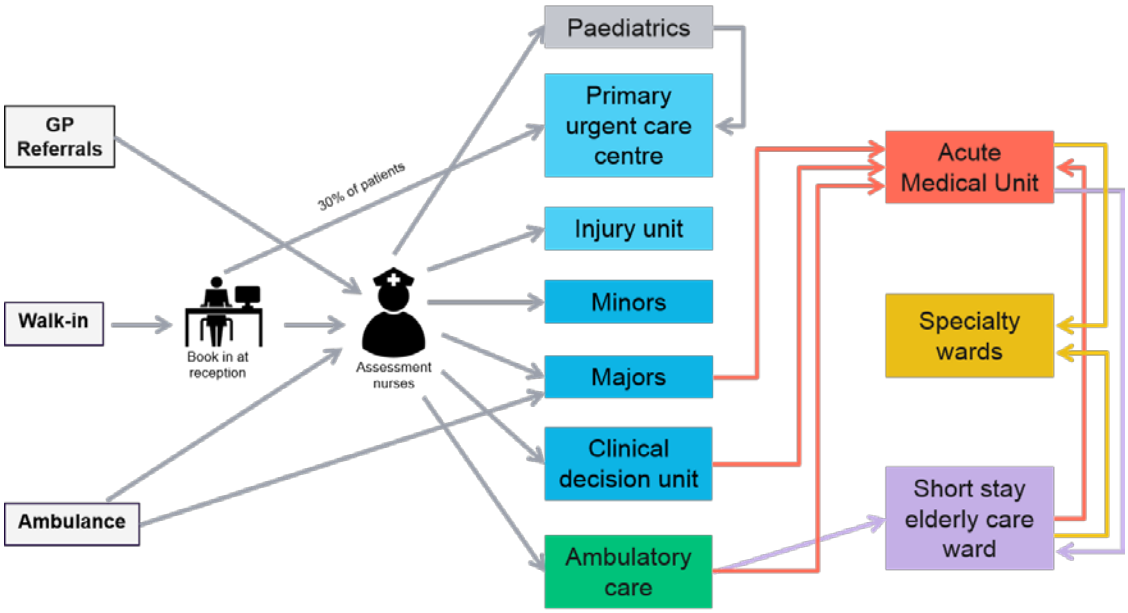
Source: NHS Digital

Selected workforce figures

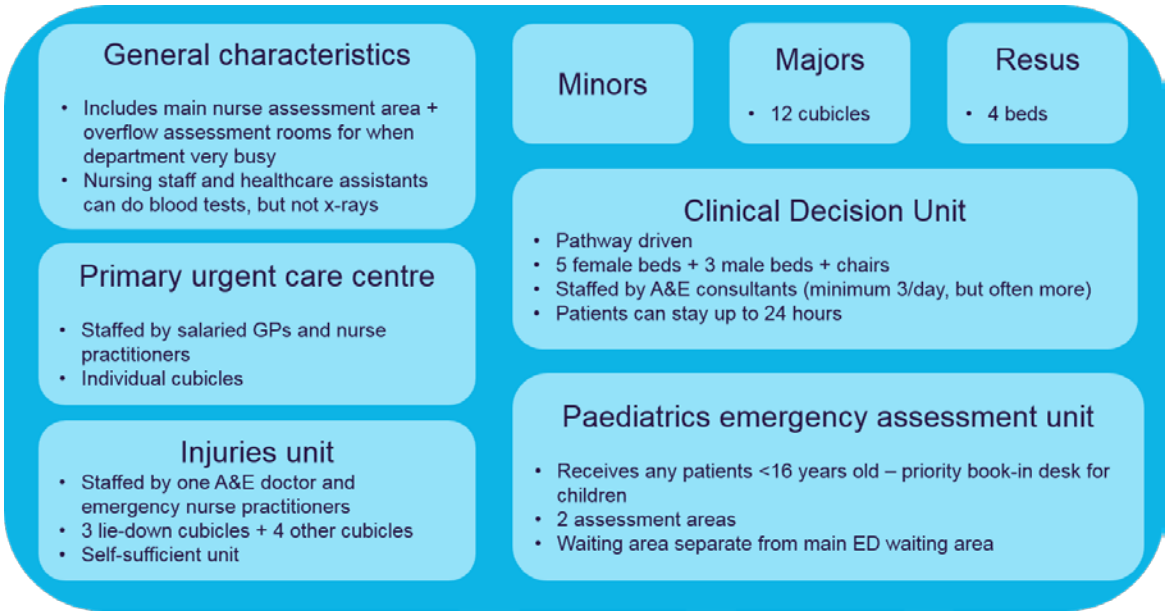
Selected specialties	Consultants (total FTE)	Consultant figures from interview (posts filled)
Acute internal medicine	N/A	1 acute physician (but employed in AEC)
Cardiology	2.8	3.5
Emergency medicine	8.5	8.6
Endocrinology and diabetes	3	N/A
Gastroenterology	7	7
General (internal) medicine	N/A	N/A
Geriatric medicine	2	5
Neurology	2.6	N/A
Respiratory medicine	4.6	5 (bodies)
Rheumatology	2.9	N/A
Grand total	33.4	N/A

Source: NHS Digital (figures from Oct 2016) and interview transcript

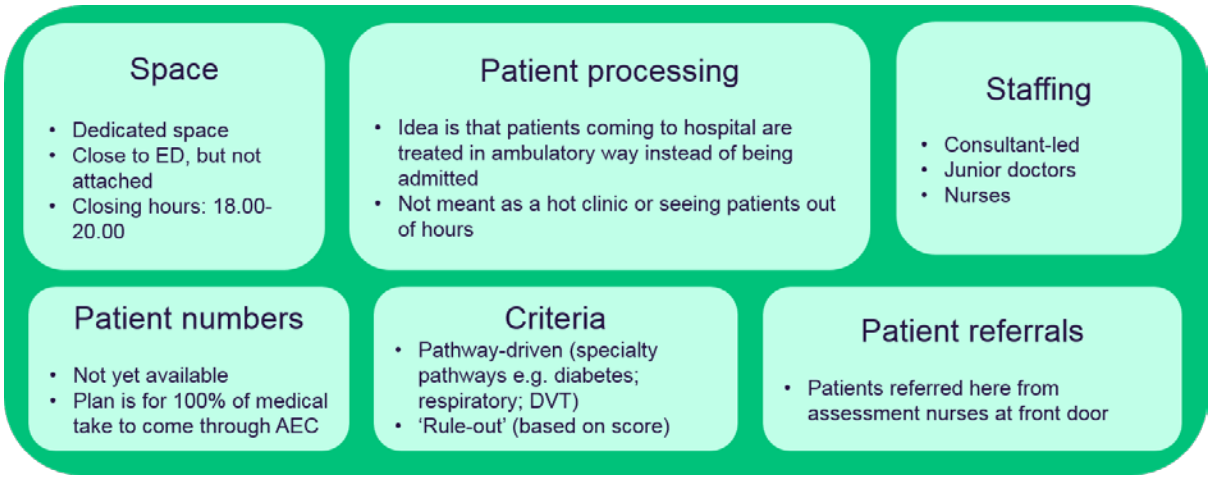
Patient pathways



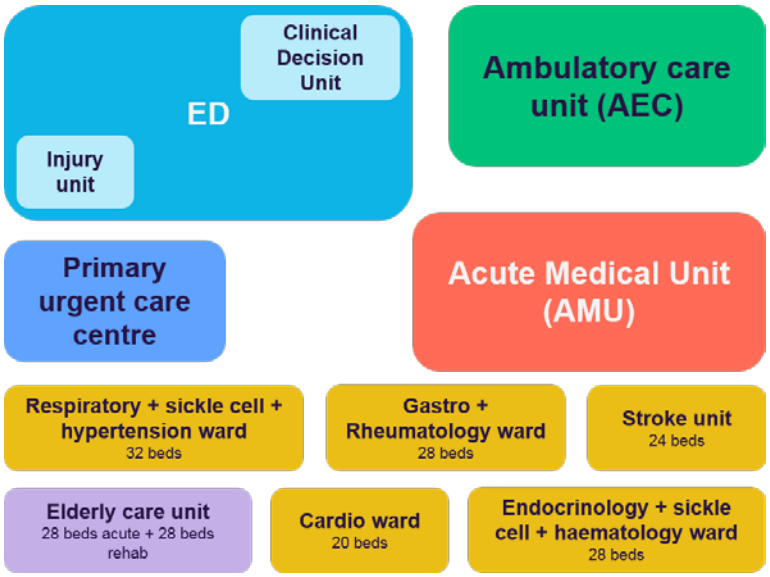
Emergency department overview



Ambulatory care (AEC) overview



Ward configuration



5. Hospital Site E

Key features of this site

- The trust recently merged with a neighbouring trust, expanding its catchment area. There is uncertainty about the impact this will have on services in the region, particularly with regard to reconfiguration of acute and emergency services.
- The organisation has difficulty in establishing high income generating services, not least because of its proximity to important medical centres. However, this had led to management considering how to expand generalist type of services.
- The local context is very complex, with six local CCGs commissioning services from the hospital.
- The AMU is a relatively recent purpose-built unit adjacent to ED, which incorporates a frailty service.
- AEC is a relatively new space too, and it has a highly sophisticated model predominantly delivered by nursing staff with extended skills.
- Substantial levels of managerial dysfunction were consistently reported by staff, with evidence of departmental siloes, especially at senior management level.

Trust overview

Catchment population	• 700,000
Hospital size (number of beds)	• 635 beds (on this site, not trust-wide)
Income (at time of visit)	• £261.3 million (2015/16)

Demography	• After the merger with a neighbouring trust in April 2017 the trust's catchment area has considerably expanded. • The area covered is demographically diverse with a relatively young and more deprived population in some places, and a much older population with lower levels of deprivation in others.
Case mix	• 46.70% general (as per research analysis)
Local geography	• The trust serves the needs of a growing population. • There are an estimated 30 care homes in the region. • The hospital liaises with 5–6 local CCGs, which increases complexity around service configuration and hospital discharge planning. Issues include disagreements over the funding of certain services at the hospital. • One of the issues for the hospital is the gap in funding for social care locally, although there are also issues around the bureaucracy created by CCGs (e.g. frequent data requests that take up a lot of staff time). • The hospital has the two-fold setback of being geographically close to a major tertiary site, and difficulty in retaining or establishing any high income generating services.
Services	• The hospital site is a purpose-built PFI hospital. It opened in 2010. • Key services: ED; ambulatory care unit; cardiology (no PCI); stroke services (thrombolysis 24/7).
Nearest A&E	• The nearest ED is 27 miles away, followed by 31 miles and 45 miles.

STP	• The trust merged with a neighbouring trust, with the aim of strengthening the clinical and financial sustainability of the three hospitals and retaining services that were previously deemed fragile. • The STP determined that it is in the best interest of the local population to maintain the current levels of provision: a specialist emergency centre at the second hospital site and an emergency department at this site. The other hospital site will retain its A&E department and continue to manage the current caseload of minor injury and major medical cases, with a physician-led service. • The STP aims to improve community-based urgent care and emergency services to prevent hospital admissions. Plans include: working with ambulance teams to allocate patients to out-of-hospital care options; and implementing an expanded 'integrated urgent care service (IUC) with clinical hub'. • There are plans to develop three rural urgent primary care hubs which will focus on integrating local primary, minor injury and community services. In the future this will include point of care testing and consultant support, via telemedicine links. • There are also issues with the level of cost savings required by the STP, which staff regard as unrealistic.
A&E	• 99,821 A&E attendances (2015/16) – growing at faster rate than average • 36,167 emergency admissions (2015/16) • Average of 280 presentations/day (min 230–max 330) • About 100 ambulance arrivals per day • 120 staff in ED, of which 11.2 are ED consultants • The hospital is a trauma unit (not a major trauma centre)

AEC	• Large dedicated unit that opened three years ago • Geographically distant from ED and AMU • Staffing: one permanent consultant, one registrar, one band 6 shift coordinator, three ANPs (one of whom allocated to triage in ED), eight nurses (bands 5–7) • Operating hours: 08.00–20.00 (Monday to Friday); 08.00–16.00 (weekends) • 60–70 patients a day are seen in AEC, about 29 of whom are planned procedures
AMU	• Closed AMU – patients are solely under the care of the acute physicians. Specialists are available to come to AMU or for telephone advice. • Six acute physicians • It is a recently redesigned space adjacent to ED • It has 49 beds, with four functions: assessment; short stay; awaiting transfer to specialty; and a frail elderly unit • 54 admissions per day (report from 21 June 2017) • Length of stay: 48 hours
Downstream wards	• Partially open wards – patients can be looked after by other consultants who are not allocated to that ward • There are designated general medicine and specialist wards • Total number of beds in specialty and generalist wards: ~280

Workforce

High-level figures (FTE, February 2017)

Number of doctors (all HCHS doctors, non-locum)	452
Qualified nursing, midwifery and health visitors staff	1,184

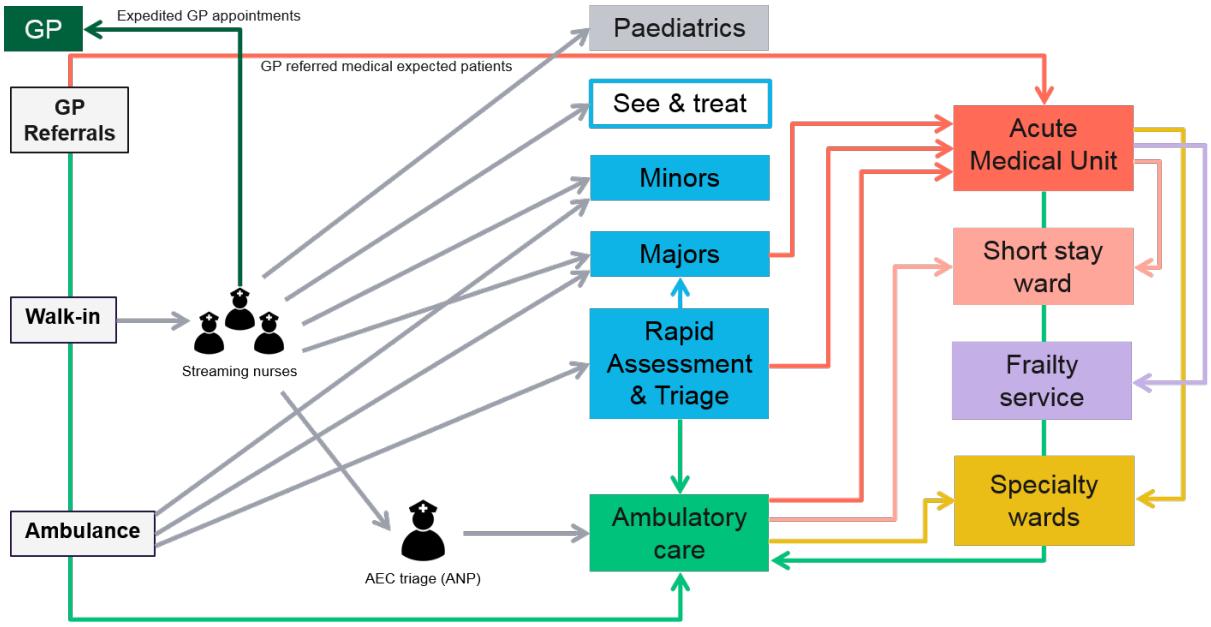
Source: NHS Digital

Selected workforce figures

Selected specialties	Consultants (total FTE)	Consultant figures from visit (posts filled)
Acute internal medicine	-	4
Cardiology	3	N/A
Emergency medicine	11.4	11.2
Endocrinology and diabetes	1.35	N/A
Gastroenterology	2.7	N/A
General (internal) medicine	7.975	N/A
Geriatric medicine	6	6
Neurology	4	N/A
Respiratory medicine	3.1	N/A
Rheumatology	2.9	N/A
Grand total	42.4	N/A

Source: NHS Digital (figures from Feb 2017) and interview transcript

Patient pathways



Emergency department overview

General characteristics

- Large ED
- 'Super-skilled' ED
- 120 staff
- 24-hour x-ray and CT scanner available (but not in main ED space)

Minors

8 cubicles
Predominantly nurse-led

Majors

24 beds

Resus

6 spaces

See and Treat

- Full ENP service (7.00-23.00)
- Triages patients walking in to ED
- Can do observations and order investigations

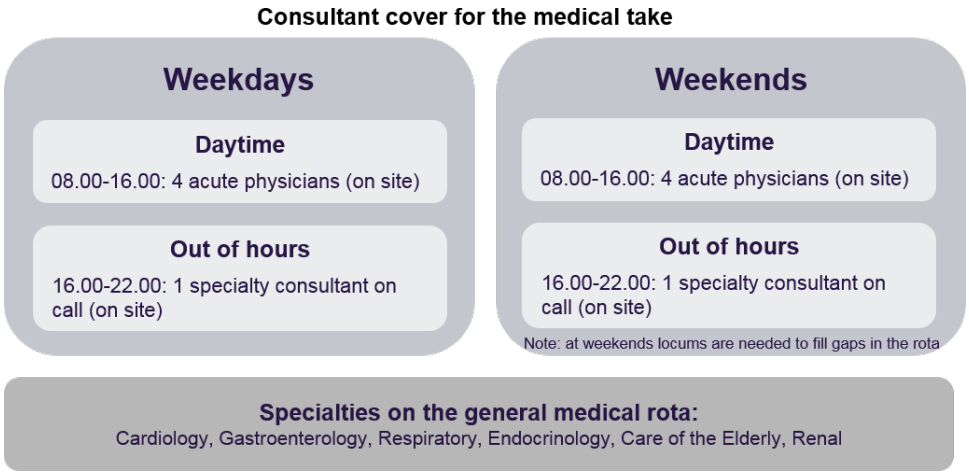
Paediatrics ED

- 6 cubicles

Rapid Assessment and Triage (RAT)

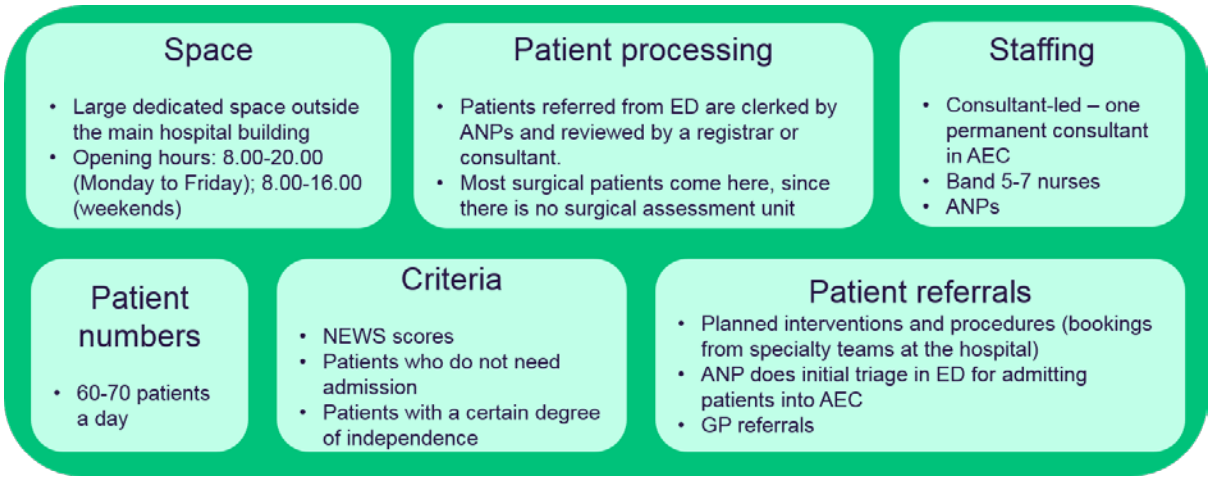
- 4 cubicles
- Where patients arriving by ambulance are assessed
- Consultant-led (1 at a time)

Acute medical cover overview

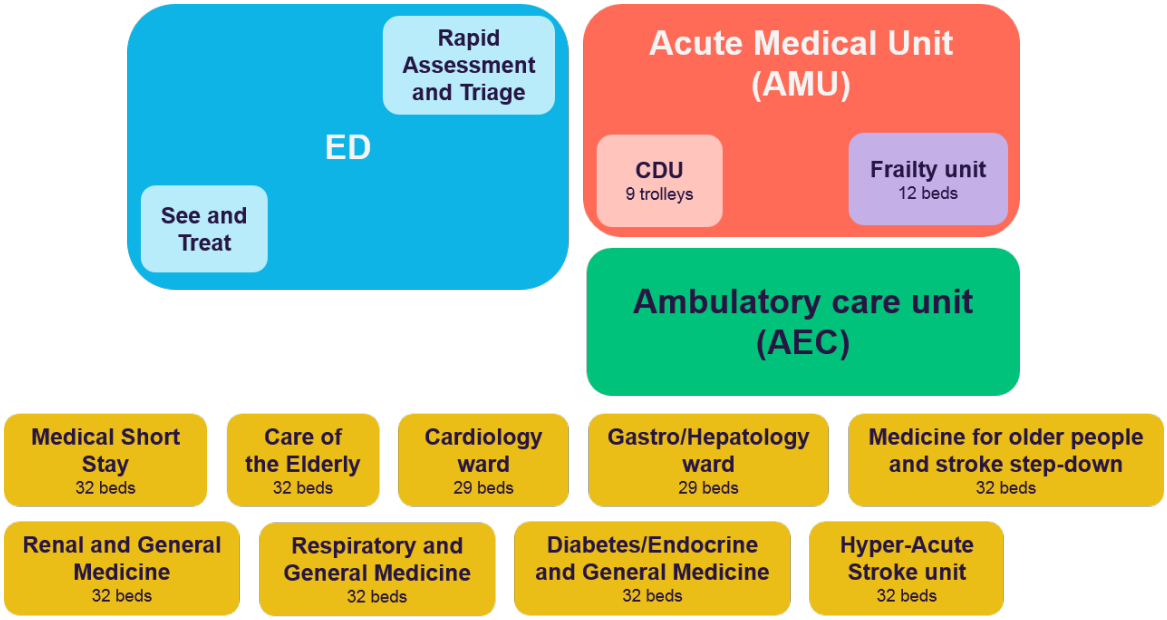


Trust asked to clarify – some information not provided.

Ambulatory care (AEC) overview



Ward configuration



6. Hospital Site F

Key features of this site

- The organisational identity and the hospital's external image are tightly linked to a distinct philosophy. This was heavily promoted around the hospital and was articulated by almost everyone with whom we spoke.
- The hospital has an unusually high proportion of non-elective patients. This has led to substantial investment in acute services while leaving the hospital with a relative paucity of income-generating services.
- The hospital has been operating in an environment of extreme uncertainty about its future, created by the regional Clinical Services Review (CSR) and then the local STP. At the time of the visit, the hospital was still awaiting an imminent announcement about whether most acute services would be transferred to a neighbouring site and the hospital reconfigured as an elective site.
- The hospital's subsequent concern is the impact that local service reconfiguration will have on the organisational culture, which staff feel bound together by.
- The hospital has a novel medical model, where the medical take is split into medicine and elderly care, which makes the acute medical take in AMU easier to manage.
- The hospital has invested heavily over a long period of time in elderly care/frailty services, due to recognition of its unique demographic.
- The hospital has also developed a highly sophisticated nurse-led ambulatory care service aimed at avoiding admissions.

Trust overview

Catchment population	• 500,000 • This figure rises between May and September each year, as the trust is located in a popular holiday destination.
Hospital size (number of beds)	• 638 inpatient beds

Income (at time of visit)	• £226 million (2015/16)
Demography	• The hospital is located in a region with a large and increasing proportion of older patients compared to the UK average, which presents particular challenges for the local health economy. • The hospital appears to be the provider of choice for the elderly population in the local area.
Case mix	• 60.80% general
Local geography	• The hospital is in a coastal location. • The nearest ED is only 10 miles away, but regional transport is surprisingly difficult because of the absence of A roads within the county. • A proposed merger between this trust and a neighbouring foundation trust was blocked in October 2013 by the then Competition Commission.

Services	• Single site trust – an acute general hospital based on the south coast of England. • The trust undertakes a very high proportion of non-elective work. Only 15 acute trusts across the country deliver a higher percentage of non-elective activity. • Key services: urgent and emergency care; medical and older people's care; stroke services; surgery, critical care, maternity and gynaecology care; end-of-life care; outpatient and diagnostic services. • The hospital is the trauma unit and the designated regional cancer centre for the region, providing medical and oncology services for the whole of the county, serving an approximate population of 750,000. • The trust does not provide the usual range of elective services: orthopaedics, urology, ophthalmology and interventional cardiology are largely provided by the neighbouring trust. However, the hospital is a centre of excellence for non-invasive cardiology.
Nearest A&E	• The nearest ED is the 9 miles away and the closest tertiary centre is 35 miles away.

STP	• The local STP published in October 2016 outlined plans to: establish a major emergency hospital in the east of the county to provide more specialist emergency services; establish a major planned care hospital in the east of the county, to provide elective services and a 24/7 urgent care centre; maintain planned and emergency services in the west of the county. • A consultation led by the local CCG on two options for reconfiguring acute care delivery in the area favoured this hospital site to be a major planned hospital with an urgent care centre. • There were ongoing discussions about whether the trust might merge with a neighbouring trust in the short term. This means the trust could potentially lose some of the service it currently provides and no longer be an acute hospital in a few years' time. • The trust has good working relationships with the local CCG and the local authority.
A&E	• 34,858 attendances (2015/16) • 7.5 ED consultants • The hospital is a trauma centre for the region
Medical take	• The medical take is split into the general medical take and the elderly care take. • There are about 14 general physicians who make up the on-call rota for the general medical take. Specialties include cardiology, respiratory medicine, gastroenterology and endocrinology. • There are 12 geriatricians who make up the on-call rota for the elderly care take.

AEC 1	• Dedicated area, nurse-led but supported by the medical teams • Operating hours: 12 hours a day on weekdays (07.30–19.30) and 8 hours at weekends (07.30–15.30) • Purpose was initially conceived around admission avoidance, but has since been expanded • 30–40 patients seen per day (300 patients per week) • The unit is staffed by 19 highly skilled nurses • The services offered include: bone marrow aspirations, cardioversions, endocrine tests, intravenous drug therapies etc.
AEC 2	• This is run within the footprint of the AMU • It has a nurse-led DVT clinic • Same-day review for patients referred in by the GP is performed by acute physician on call • The unit also does some follow-ups for patients directly discharged from the AMU
AMU	• Open AMU – patients are under the care of multiple specialties. • Only acute physicians provide input to the take • 30 beds and 5 trolleys in the ambulatory assessment area • Average length of stay is 72 hours • Average of 30 admissions per day, around 10 of which are referred to AEC
Downstream wards	• Number of beds in specialty-based wards (including stroke): 87 • Number of beds in generalist wards (including elderly medicine):105

Workforce

High-level figures (FTE, October 2016)

Number of doctors (all HCHS doctors, non-locum)	434
Qualified nursing, midwifery and health visitors staff	977

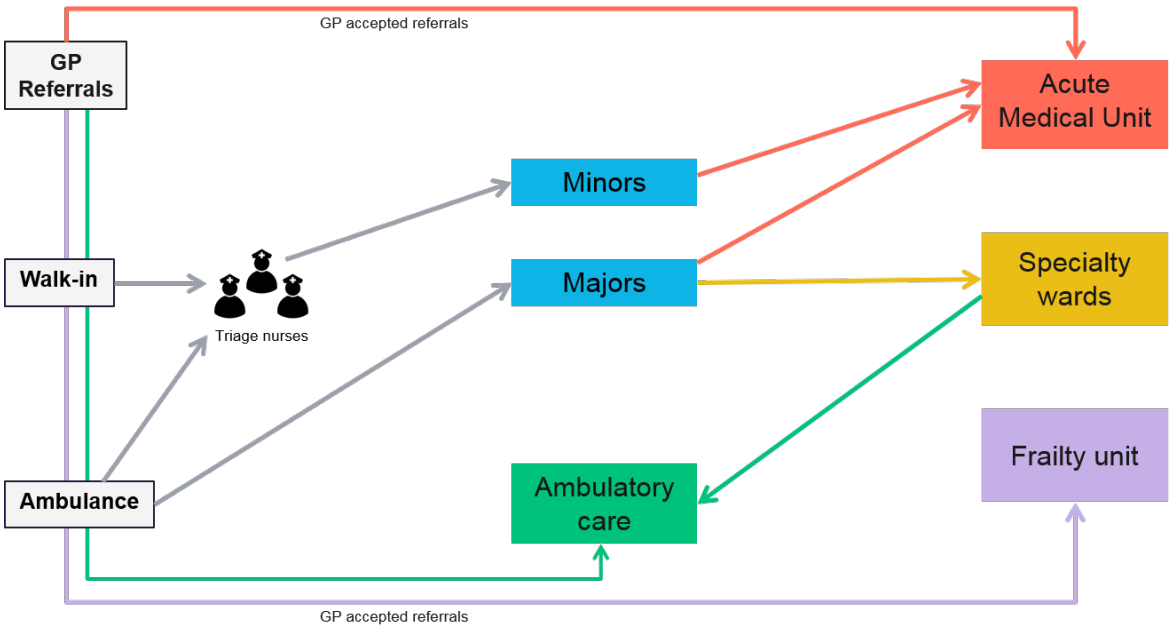
Source: NHS Digital

Selected workforce figures

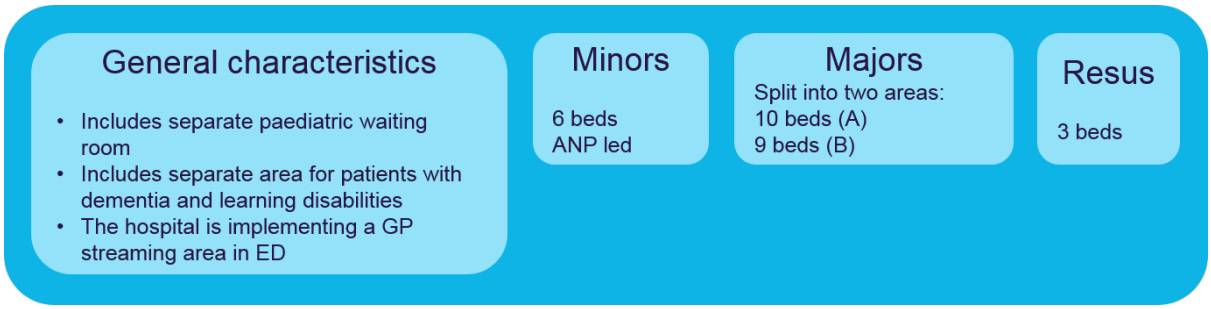
Selected specialties	Consultants (total FTE)	Consultant figures from site visit (posts filled)
Acute internal medicine	4	4
Cardiology	5	5
Emergency medicine	8.3	7.5
Endocrinology and diabetes	2	2.5
Gastroenterology	5.5	N/A
General (internal) medicine	2.8	N/A
Geriatric medicine	11.65	12
Neurology	6	N/A
Respiratory medicine	2	1
Rheumatology	4	N/A
Grand total	51.25	N/A

Source: NHS Digital and interview transcript

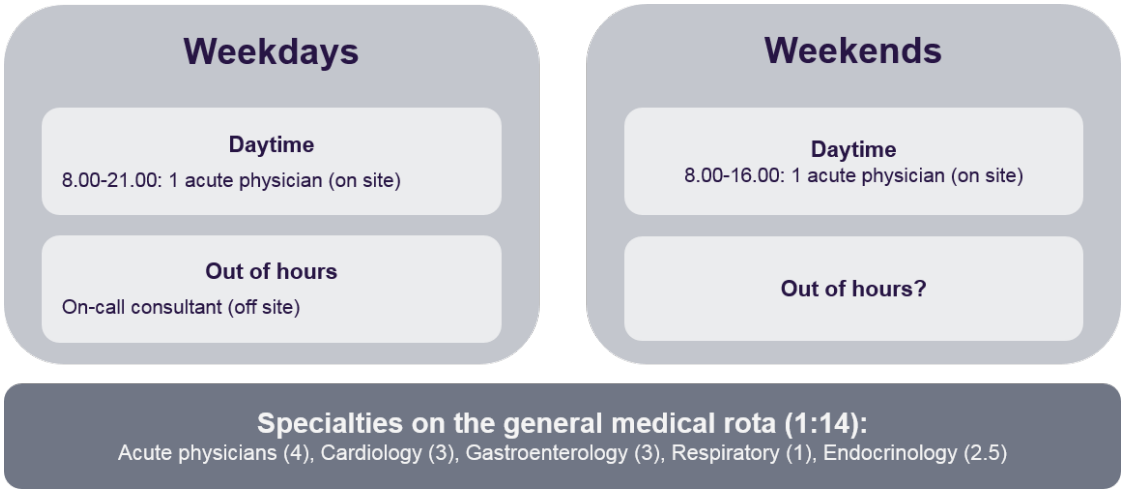
Patient pathways



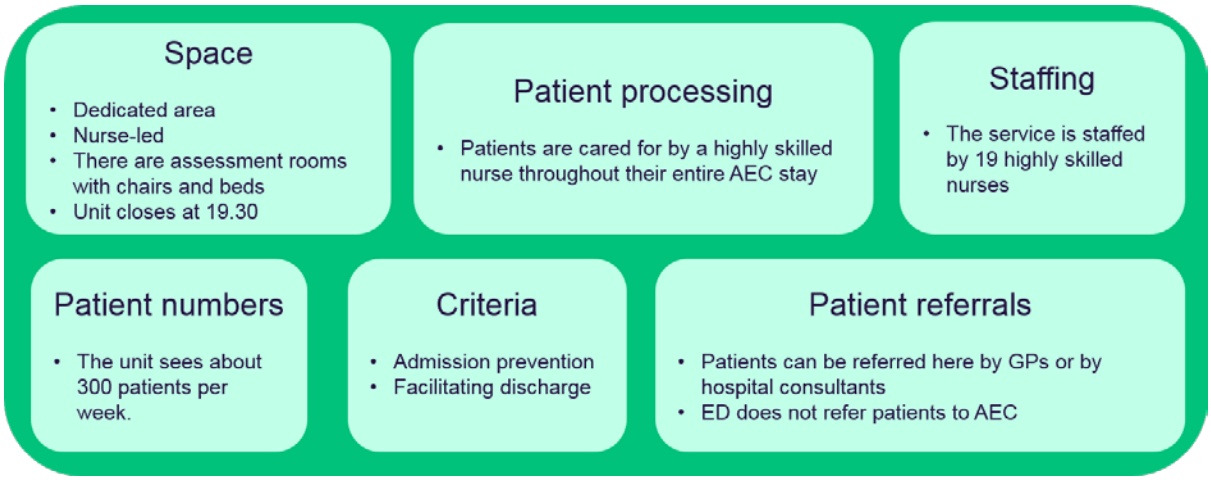
Emergency department overview



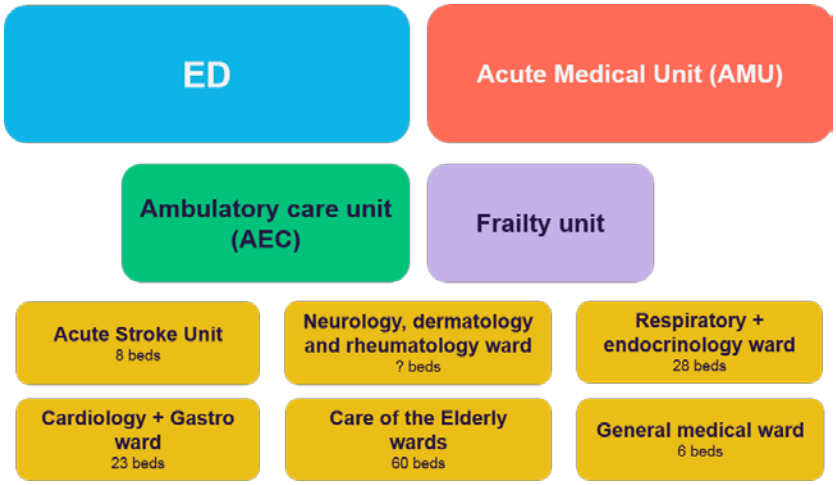
Acute medical cover overview



Ambulatory care (AEC) overview (Unit 1)



Ward configuration



7. Hospital Site G

Key features of this site

- The trust operates in a complex political landscape: not only is it part of two different STP footprints, but it also has strategic relationships forged independently of geography. Additionally, one of its local CCGs is under financial pressure, which results in some strategic paralysis for the trust.
- Although the medical model of care has mostly relied on patient 'push' mechanisms so far, the hospital is now working on systems to actively 'pull' patients instead. Examples include one senior nurse from AEC in-reaching into ED, and plans to deploy acute physicians at the front door.
- Staff recognise that the hospital's current model of medical care needs to change and most people are able to articulate which elements of the system should change. However, a lack of strategic direction from the local CCGs and recruitment challenges/workforce constraints hamper change.
- One of the main concerns for the organisation in the future is the growing patient demand resulting from the population expansion in the area. There are concerns about the pressure this will put on already stretched financial resources and the workforce.

Trust overview

Catchment population	• 350,000
Hospital size (number of beds)	• 478 inpatient beds
Income (at time of visit)	• £224.6 million (2015/16)

Demography	• The trust serves a local population that is both ageing and growing. This is especially true considering a new development currently underway, which is set to deliver up to 15,000 homes and create a 21st century ‘Healthy New Town’. NHS England sees this development as a significant opportunity to improve the health of local people and build a new healthy community that promotes healthy lifestyle choices via the creation of multi-functional green spaces, leisure facilities, healthy eating venues, active transport links, integrated cycle paths, walking routes and access to smart technology. • The new development is likely to bring thousands of people into the hospital’s catchment area, resulting in additional pressures. According to the STP document, this could amount to £28 million healthcare commissioning pressures for the local providers and CCGs.
Case mix	• 60.20% general (as per research analysis)
Local geography	• The hospital is located in South East England has good road and rail links to Central London and the rest of the South East.

Services	• The trust was established in 1993. It runs services at the main acute hospital site – which the team visited – and two other hospital sites that the trust took over in 2013. The trust also runs a 31-bed nurse-led community care unit. • The main acute site opened in September 2000 and the building is run as part of a private finance initiative (PFI). • Core services of main acute site: urgent and emergency care; cardiology; medical and older people's care; stroke services; surgery, trauma and orthopaedics and maternity; day care surgery; outpatient and diagnostic services; children services. • In September 2015, the trust became a vanguard site, in partnership with a large London acute trust. The two trusts have formed a partnership to create a sustainable care system for the region, with greater integration locally with primary, community, social care and mental health partners, and a seamless transition to specialist and tertiary care within the larger trust. The partnership focused on six work streams: three clinical (cardiology, paediatrics and vascular care), and three non-clinical (IT, location and organisational design of the overall model).
Nearest A&E	• The nearest A&E is 15 miles away, followed by 16 miles.

STP	• The trust is part of two different STP footprints. One of the STPs outlined plans to develop multispecialty community providers (MCP) within its footprint and, potentially, a small number of accountable care organisations (ACO) that hold capitated budgets; manage demand for acute services by developing 'Local Care' to enable reductions in acute activity and length of stay, and relieve pressure on the acute bed base (estimated £160 million of net system savings by 2020/21); introduce a county strategy for 'Hospital Care' to provide high-quality specialist services at scale and also consider opportunities to optimise service and estate footprint. • One of the two local CCGs is under pressure financially, which contributes to some paralysis around the strategic direction of the organisation.
A&E	• A&E attendances (2015/16): 99,058 • Emergency admissions (2015/16): 30,035 • 4-hour target (May 2017): 85.3% • Average number of presentations per day: 290 • 7 FTE ED consultants
Medical take	• The medical take is approximately 30–50 patients per day and is run from AMU. • The on-call rota includes gastroenterology, care of the elderly, respiratory, endocrinology and diabetes, and nephrology.
AEC	• Admissions: 20 patients per day (10 of whom are referred from ED) • Hours of opening: 08:00–18:00 (Monday–Friday), 10:00–18:00 (Saturday–Sunday) • Staffing: one consultant (08.00–18.00), two middle-grade doctors (09.00–16.00 and 10.00–18.00), three nurses, one ward administrator, 'Hospital at home' team and one senior nurse in-reaching into ED.

AMU	• Closed AMU: the acute medical team in charge of the AMU has clinical responsibility for all patients in the AMU, inviting specialist opinion where necessary. • Acute physician dominant model: acute physicians provide the majority of care. Specialists contribute to the on-call at weekends and out of hours. • 35 beds • Admissions per day: 30–50 patients • Maximum length of stay in the AMU is (ideally) 48 hours
Downstream wards	• No generalist wards • Two elderly care wards – short stay and long stay • Trust sked to clarify bed numbers – information not provided

Workforce

High-level figures (FTE, October 2017)

Number of doctors (all HCHS doctors, non-locum)	361
Qualified nursing, midwifery and health visitors staff	958

Source: NHS Digital

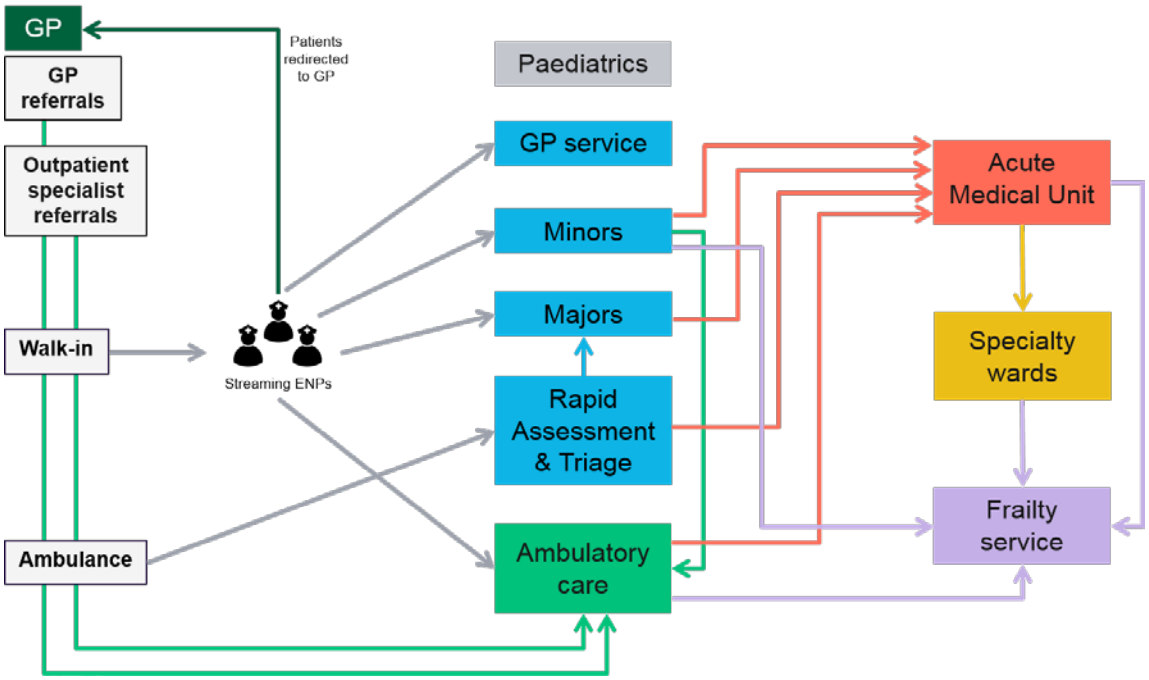
Selected workforce figures

Selected specialties	Consultants (total FTE)	Consultant figures from site visit (posts filled)
Acute internal medicine	N/A	5
Cardiology	5.925	N/A
Emergency medicine	8	7
Endocrinology and diabetes	3	N/A

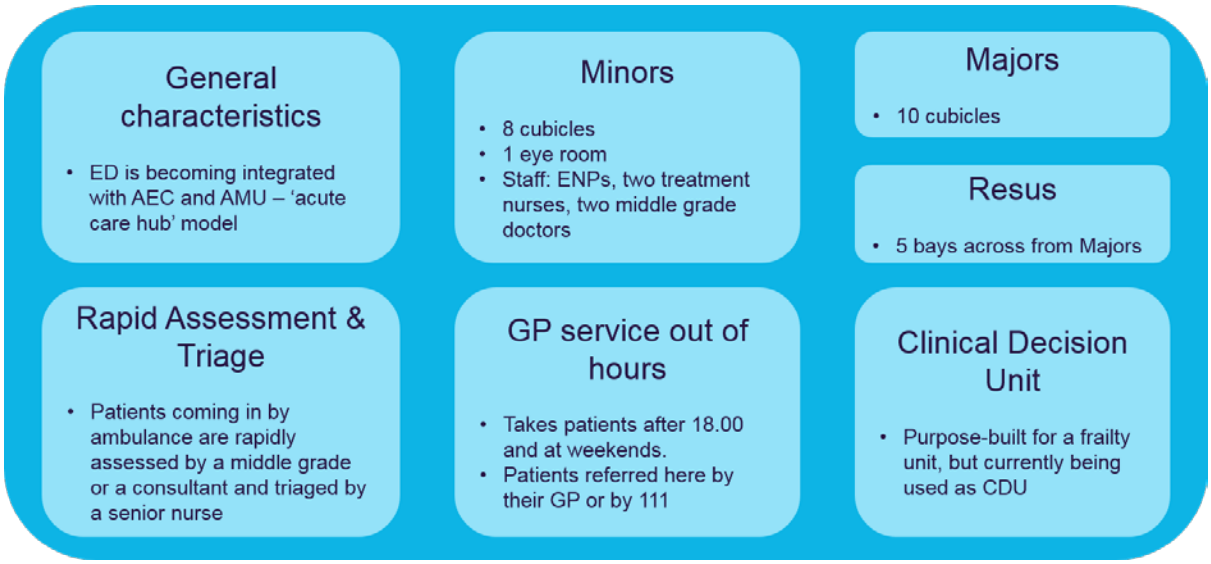
Gastroenterology	5	N/A
General (internal) medicine	6	N/A
Geriatric medicine	8.2	7
Neurology	2.525	N/A
Respiratory medicine	5	N/A
Rheumatology	N/A	N/A
Grand total	43.65	N/A

Source: NHS Digital (figures from February 2017) and interview transcript

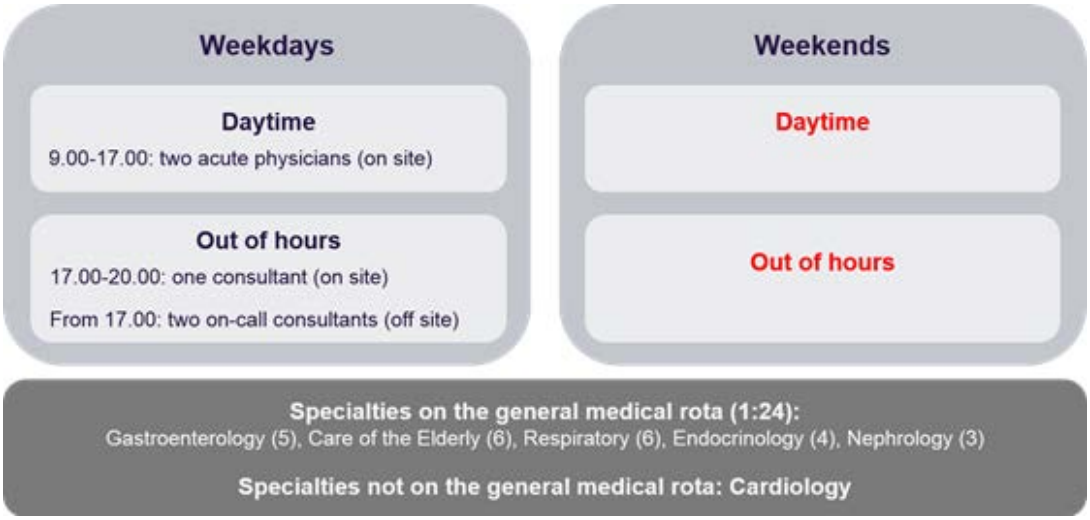
Patient pathways



Emergency department overview

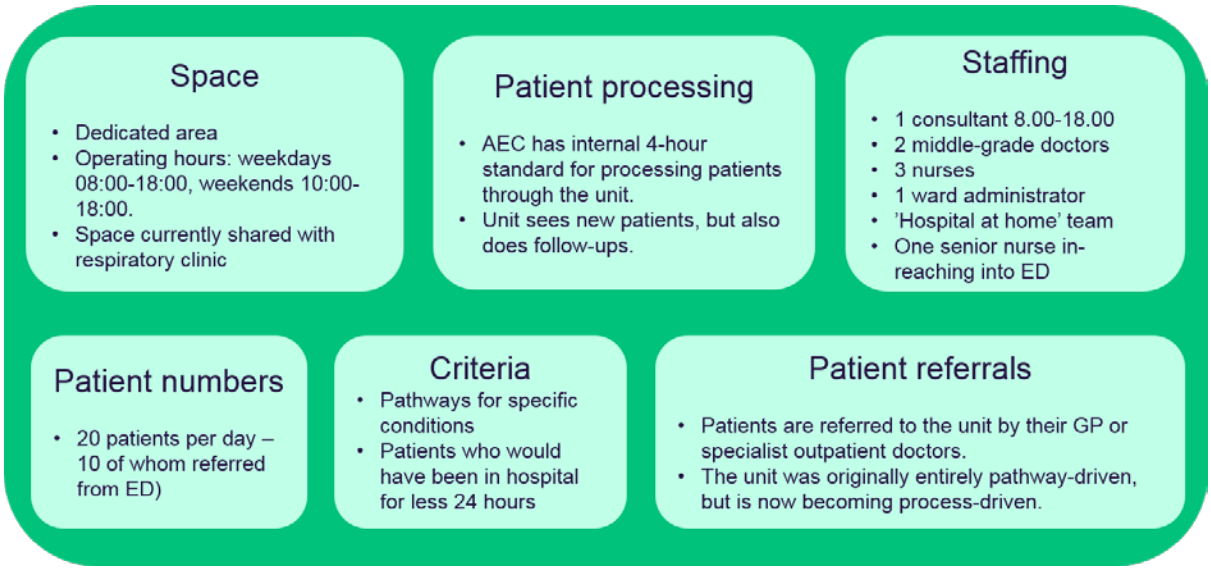


Acute medical cover overview



Trust asked to clarify – some information not provided.

Ambulatory care (AEC) overview



8. Hospital Site H

Key features of this site

- The acute medical model at the trust is an amalgamation of what can be considered a standard acute medical unit and an ambulatory care service. The acute service provision is largely dependent on one acute physician providing the bulk of clinical work.
- Compared to other ambulatory care units, the ambulatory care service at the trust tends to take on a sicker cohort of patients with more complex needs, which would otherwise be handled by ED or by AMU.
- The trust has developed a business plan to grow its patch for non-acute services and for other surgical services.
- The organisation has challenges with gaps in the nursing and junior doctor workforce, but not at middle grade level due to successful recruitment via the Certificate of Eligibility for Specialist Registration (CESR) scheme.
- The local context has seen a substantial change in terms of finance. The trust has always been in surplus, but there has been a sudden shift in the local CCGs' budget. This has led to decommissioning of key services, difficulties in the discharge of patients to community services, and concerns about the sustainability of current service provision.

Trust overview

Catchment population	• 300,000 (for acute services) • 600,000 (for elective orthopaedics and community services)
Hospital size (number of beds)	• 402 inpatient
Income (at time of visit)	• £187.8 million (2015/16)
Demography	• The trust serves a local population that is both ageing and growing, particularly the 70+ age group. This is also due to the fact that the town where the hospital is located is popular with many people choosing to retire here. • The hospital's busiest months are July and August due to tourism. • The local population is relatively wealthy but the extensive catchment area means that the trust also serves less affluent areas in the county.

Case mix	• 60.50% general (as per research analysis)
Local geography	• The hospital is located in a rural area with reasonably good road and rail links to major cities.
Services	• The trust is an integrated organisation providing acute, community and children's healthcare services. It delivers urgent and emergency care services at the main hospital site and minor injury units at two other sites. • The trust was authorised as a foundation trust in January 2005 and it became an integrated provider in April 2011, when it acquired a number of community services from a local primary care trust. • Core services at the main acute site: urgent and emergency care; cardiology; medical and older people's care; stroke services; surgery; trauma and orthopaedics and maternity; outpatient and diagnostic services; children services. • The trust has well-established clinical alliances with two local teaching hospitals and it is also a member of a local association of acute trusts. • Local GP provision was described as excellent with highly proactive GPs. • Local community and mental health services were described as struggling.
Nearest A&E	• The nearest A&E is 16 miles away, run by the teaching hospital.
STP	• In October 2016, the STP outlined six place-based health and wellbeing strategies. • Two of the main aims for the locality include a reduction in A&E attendances by 11% by 2018/19 and a decrease in emergency admissions by 16% by 2020/21. • There are two main CCGs which commission services from the trust. • Compared to previous years of financial stability, the local context has seen a marked deterioration in terms of its financial situation.

A&E	• A&E attendances (2015/16): 48,981 • Emergency admissions (2015/16): 18,105 • 4-hour target (June 2017): 96.4% • Average number of presentations per day: 140 • 6 FTE ED consultants
Medical take	• The medical take is approximately 50 patients per day (range 35–70) and is run from AMU. • The on-call rota includes the following specialties: respiratory, endocrinology and diabetes, and care of the elderly.
AEC	• Sees between 14 and 20 patients per day (mostly GP referrals) • Admissions: 8% of patients seen • Hours of opening: 08:00–18:00 (Monday–Friday) • Staffing: one consultant, one acute medical registrar, a trainee grade, two ACCS (joint appointment with ED), nurses and two ACPs.
AMU	• Open AMU: The vast majority of patients would be under acute medical care but, if there are other patients with specialist needs, they would be admitted under a parent team who would take over their care. Hence specialist and acute teams have clinical responsibility for patients triaged to their teams. • Acute physician dominant model: Acute physicians provide the majority of care. Specialists contribute to the on-call at weekends and out of hours. • 30 beds • Admissions per day: not specified • Maximum length of stay: not specified
Downstream wards	• Wards open • General medical wards only • Number of beds in specialty based wards (total): not specified • Number of beds in ‘generalist’ wards (total): not specified

Workforce

High-level figures (FTE, February 2017)

Number of doctors (all HCHS doctors, non-locum)	306
Qualified nursing, midwifery and health visitors staff	1,161

Source: NHS Digital

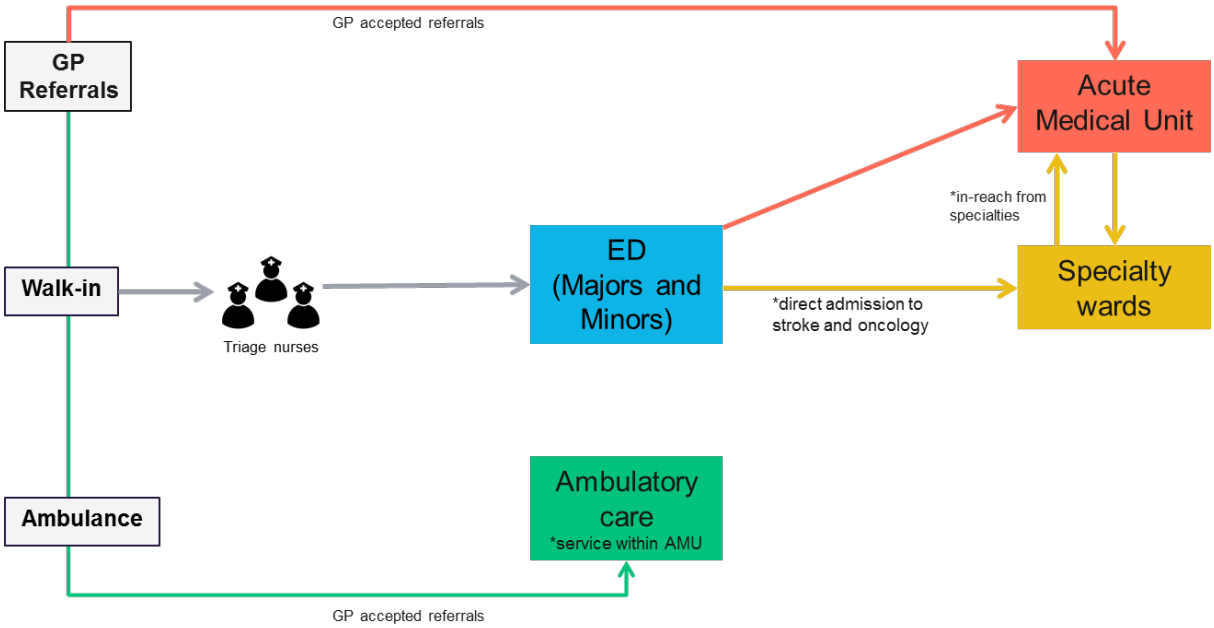
Selected workforce figures

Selected specialties	Consultants (total FTE)	Consultant figures from site visit (posts filled)
Acute internal medicine	N/A	1[1]
Cardiology	5.925	N/A
Emergency medicine	8	6 (FTE)
Endocrinology and diabetes	3	N/A
Gastroenterology	5	N/A
General (internal) medicine	6	N/A
Geriatric medicine	8.2	3 (FTE)
Neurology	2.525	N/A
Respiratory medicine	5	N/A
Rheumatology	N/A	N/A
Grand total	43.65	N/A

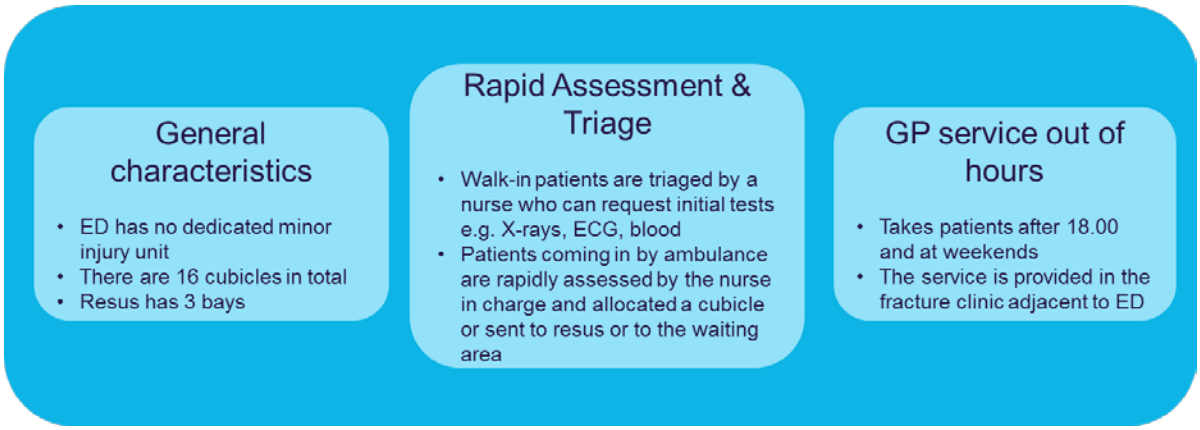
Source: NHS Digital (figures from Feb 2017) and interview transcript

[1] One acute physician assisted by two other consultants providing regular sessional commitment to cover two days a week.

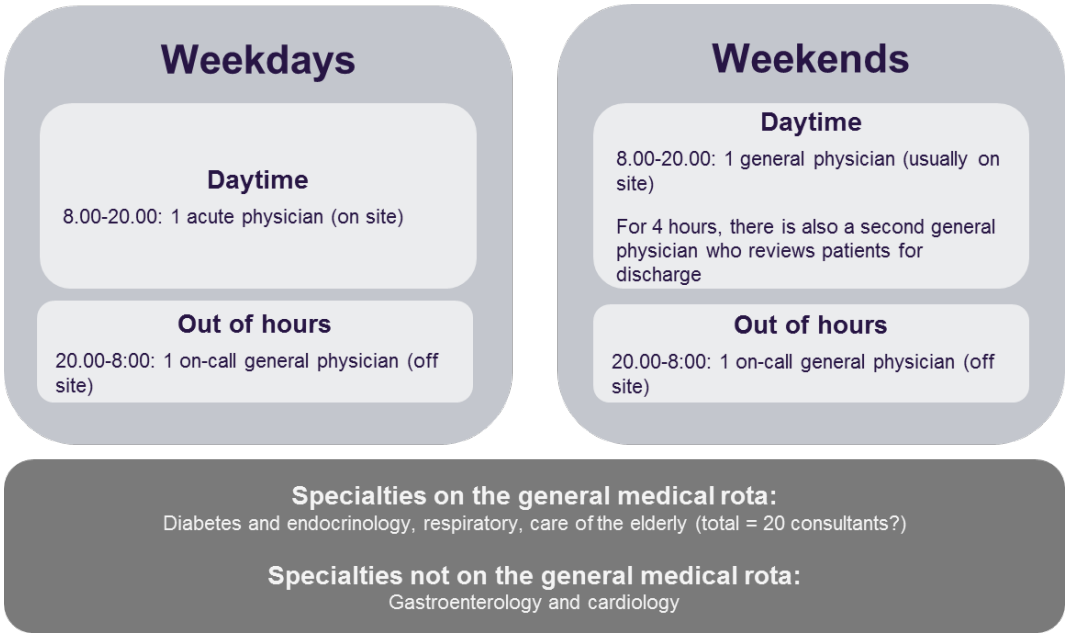
Patient pathways



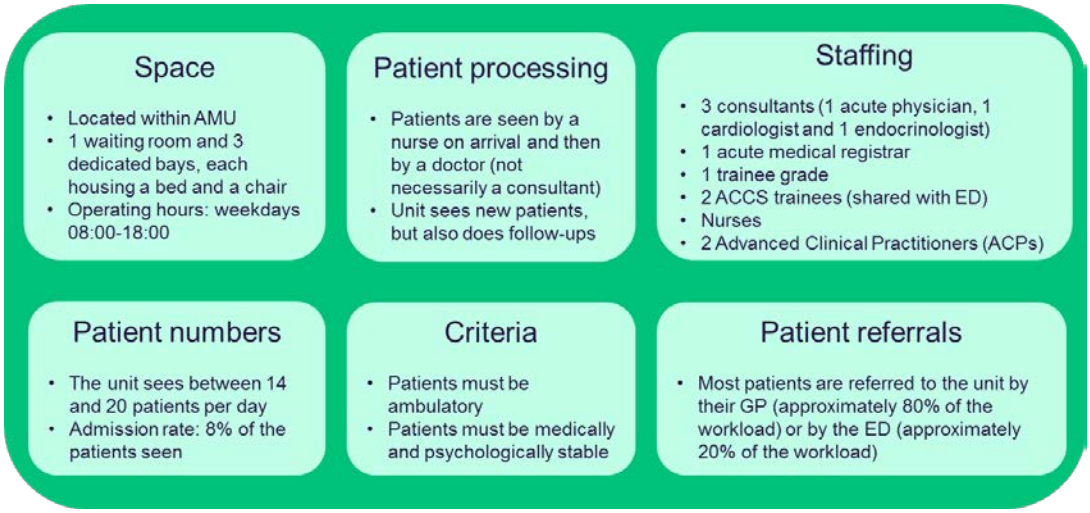
Emergency department overview



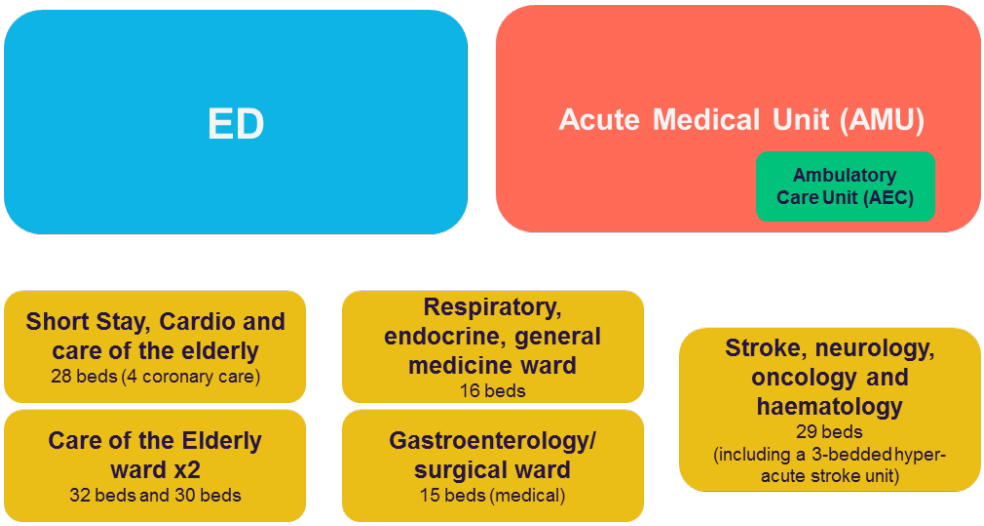
Acute medical cover overview



Ambulatory care (AEC) overview



Ward configuration



9. Hospital Site I

Key features of this site

- The trust has strategically decided to invest a large amount of its capital budget in its front door services. A brand new ED opened in 2014 and a new acute assessment unit (AAU) was set to open in 2018. The AAU will bring together the medical, surgical and orthopaedic take and a GP out-of-hours service.
- The trust is renowned nationally for its work in digital healthcare and it boasts a digital care hub providing telemedicine services to over 300 care homes and prisons nationwide.
- The trust has serious financial challenges linked to its agency and bank spend to cover the gaps in the junior doctor and nursing workforce.
- Though recruitment is a widespread national issue, the organisation particularly struggles with recruitment at registrar level (4 out of 9 gaps in the whole county).

Trust overview

Catchment population	• 220,000
Hospital size (number of beds)	• 358 inpatient beds, including 317 general and acute care, 27 maternity and 14 critical care beds
Income (at time of visit)	• £155 million (2015/16)
Demography	• The trust serves a local population that is both ageing and growing, particularly the 70+ age group. • The extensive catchment area means that the trust serves some affluent areas, as well as some more deprived local authorities.
Case mix	• 60.10% general (as per research analysis)

Local geography	• The hospital is located in a small civil parish in the North of England. • The hospital is geographically very close to large cities. However, the local geography is dominated by rurality, where access and transport links are poor. • The trust primarily serves people from a widespread area covering 700 square miles.
Services	• The trust is an integrated organisation providing acute hospital and community services. • The trust was authorised as a foundation trust in June 2010 and it provides community services across the north of the region from three sites. • The trust is known nationally for its work in digital healthcare, in particular providing 24/7 face-to-face video consultation. It also provides access to immediate clinical opinion and care for terminally ill patients and for over 300 care homes and prisons nationwide. • Core services at the main acute site: urgent and emergency care, cardiology, medical and older people's care, stroke services, surgery, trauma and orthopaedics, maternity, children services and the digital care hub.
Nearest A&E	• 12 miles away.

STP	The district has aligned the local three CCGs under a single accountable officer and chief finance officer, and it has also a nationally recognised digital shared care record across health and social care. • The local STP was due to move to a shadow accountable care system in April 2017 with a 'go live' aim of April 2018. • The trust has a reasonably healthy relationship with its main CCG, but has slightly more complex relationships with the other two CCGs. • Challenges to the local health economy include an estimated funding deficit of approximately £243 million by 2018/2019, based on commissioner and provider cash releasing efficiencies of at least 4% per annum for the next five years and local authority funding reductions in social care.
A&E	• A&E attendances (2015/16): 55,725 • Emergency admissions (2015/16): 21,103 • 4-hour target (June 2017): 92.2% • Average number of presentations per day: 160 • 8 ED consultants
Medical take	• The medical take is approximately 31 patients per day (range 11–55) and is run from the AMU. • The on-call rota includes the following specialties: respiratory, care of the elderly, gastroenterology and endocrinology.
AEC	• Sees between 10 and 12 patients per day • Admissions: 9–10% of patients seen • Hours of opening: operates 9am to 7pm, Monday to Friday and 10am to 6pm, Saturday and Sunday. • Staffing: run on a daily basis by ACPs with input and support by an acute physician

AMU	• Partial model: The acute medical team in charge of the AMU has clinical responsibility for all patients in the AMU, inviting specialist opinion where necessary. There is consistent in-reach from cardiology, less so from other specialties. • Acute physician dominant model: Acute physicians provide the majority of care. Specialists contribute to the on-call at weekends and out of hours. • 44 beds • Admissions per day: 30 • Maximum length of stay: 48 hours
Downstream wards	• Wards: partial (organisation of care on downstream wards) • Mixed wards • Number of beds in specialty based wards (total): not specified • Number of beds in 'generalist' wards (total): not specified

Workforce

High-level figures (FTE, February 2017)

Number of doctors (all HCHS doctors, non-locum)	248
Qualified nursing, midwifery and health visitors staff	655

Source: NHS Digital

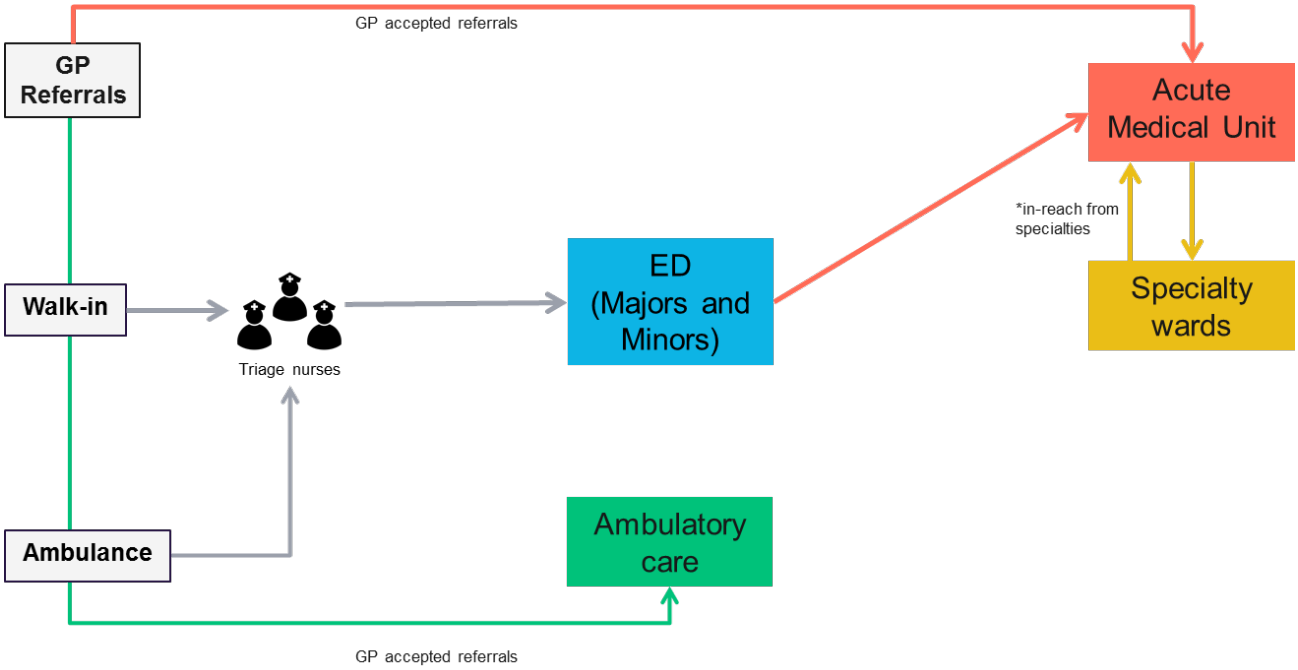
Selected specialty figures

Selected specialties	Consultants (total FTE)	Consultant figures from site visit (posts filled)
Acute internal medicine	N/A	5 (6 FTE)
Cardiology	4.4	N/A

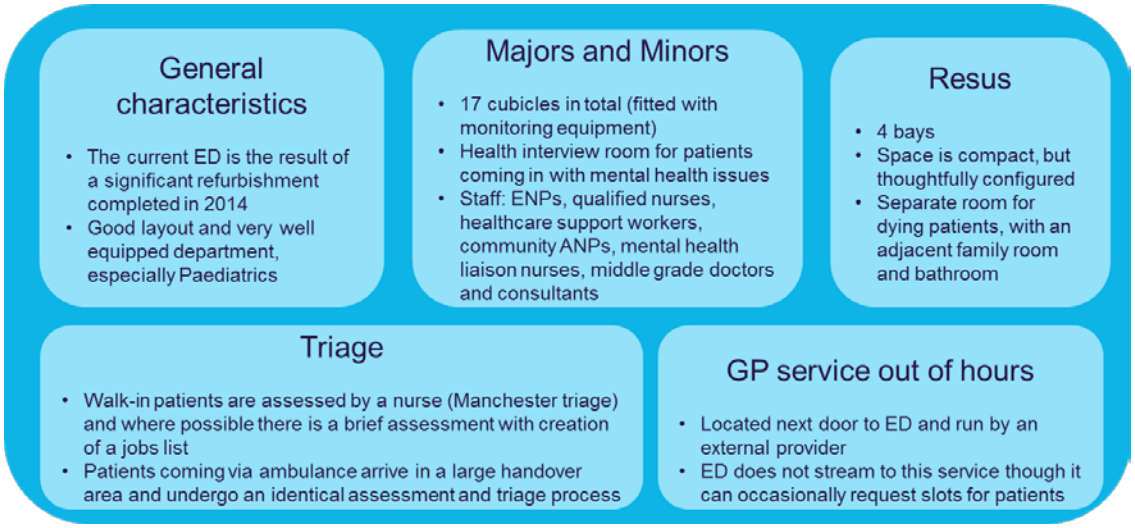
Emergency medicine	7.6	8
Endocrinology and diabetes	3	N/A
Gastroenterology	4	N/A
General (internal) medicine	4	N/A
Geriatric medicine	5.75	5
Neurology	3	N/A
Respiratory medicine	5.725	N/A
Rheumatology	2.5	N/A
Grand total	39.975	N/A

Source: NHS Digital (figures from Feb 2017) and interview transcript

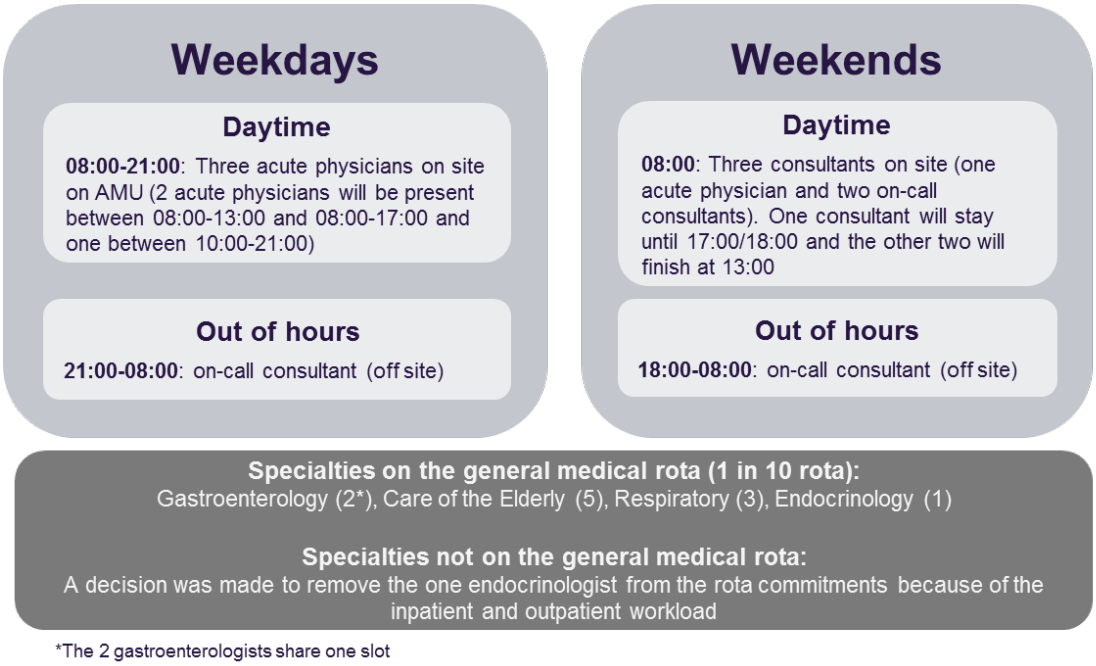
Patient pathways



Emergency department overview

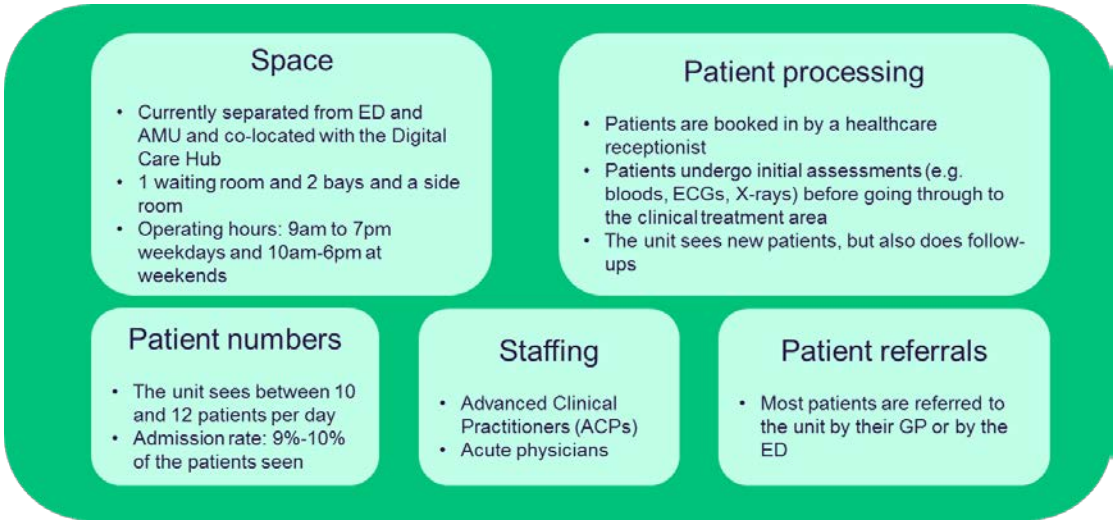


Acute medical cover overview

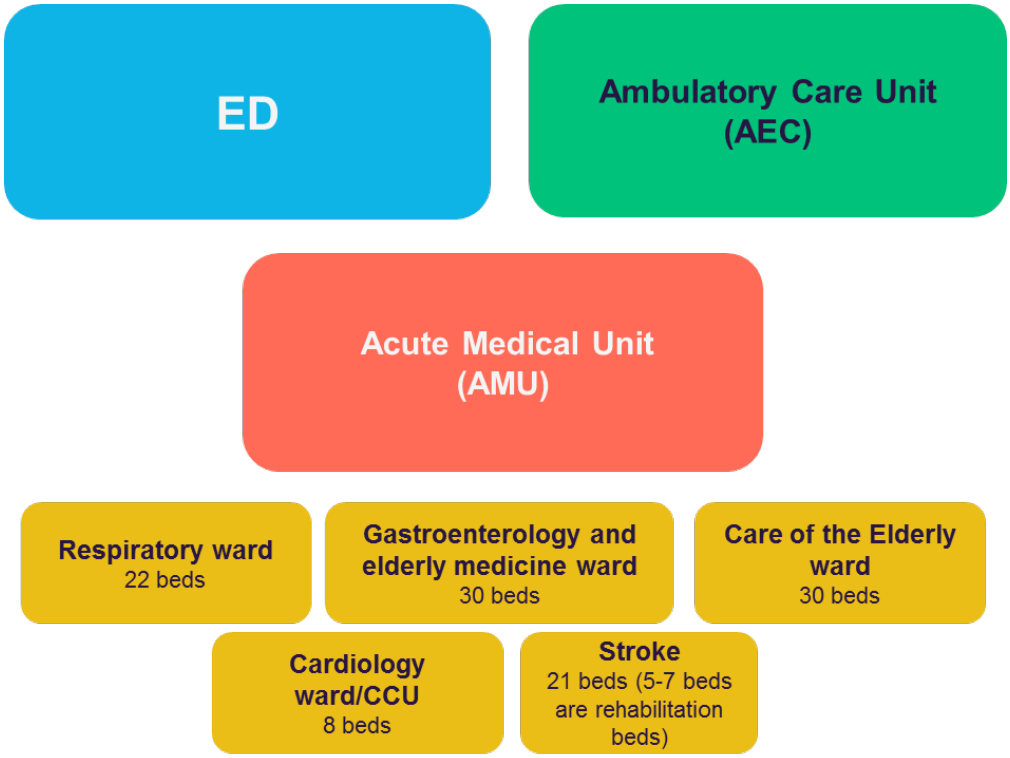


*The 2 gastroenterologists share one slot

Ambulatory care (AEC) overview



Ward configuration


ED
Ambulatory Care Unit (AEC)
Acute Medical Unit (AMU)
Respiratory ward
22 beds
Gastroenterology and elderly medicine ward
30 beds
Care of the Elderly ward
30 beds
Cardiology ward/CCU
8 beds
Stroke
21 beds (5-7 beds are rehabilitation beds)

10. Hospital Site J

Key features of this site

- Integrated care (though only for district nursing and therapies) is the trust's 'niche'.
- The trust has invested in its front door services, particularly with the creation of a large ambulatory care centre. This provides a very wide range of services and it is the default in the hospital for GP calls and ED referrals.
- The specialist consultants have a high degree of buy-in in the ambulatory care model and most specialties in-reach regularly in the unit.
- Compared to other sites, specialists appear to have a positive attitude towards having to look after general medical patients and about taking part in the on-call general medical rota.

Trust overview

Catchment population	• 500,000
Hospital size (number of beds)	• 320 inpatient beds
Income (at time of visit)	• £309.3 million (2016/17) – no longer 'small', based on Monitor's 2012/13 criteria
Demography	• The trust is located in Greater London and delivers services to people living in numerous boroughs. • The population served by the trust is diverse and growing. There is a large sickle cell population, which receives specialist treatment at the hospital. • Deprivation in the area is higher than the national average.
Case mix	• 55.50% general (as per research analysis)
Local geography	• The trust provides acute and community services from over 40 sites. • The main hospital is located in a high-density urban area with good access and transport links.

Services	• The trust was established in April 2011, bringing together community and acute services to form a new integrated care organisation (ICO). • One main hospital site. • Key services: urgent and emergency care, ambulatory care centre, cardiology, medical and older people's care, surgery, trauma and orthopaedics and maternity, children services, nephrology, and integrated community ageing team (ICAT). • The trust has a highly regarded educational role. It teaches undergraduate medical students, nurses and therapists, alongside providing a range of educational packages for postgraduate doctors and other healthcare professionals.
Nearest A&E	• Approximately 2 miles away.
STP	• The trust is part of an STP that comprises five CCGs, three other acute trusts and three single specialist hospitals. • One of the STP's main goals is to provide care closer to home, for example by developing ambulatory care services such as that already in place at the site in question, to reduce avoidable and unplanned admissions to hospital. • The trust works with two CCGs, who commission different services from the hospital. One of the issues is the wealth disparity between the two CCGs and their local populations, leading to differences between the levels of service commissioned by each CCG. This often results in inconsistencies in the ability of catchment population to access services post-discharge.
A&E	• A&E attendances (2015/16): 96,829 • Emergency admissions (2015/16): 16,953 • 4-hour target (July 2017): 92% • Average number of presentations per day: 268 • 6.1 ED consultants[2]

[2] From telephone interview

Medical take	• The medical take is approximately 20–30 patients per day and is run from ED. • The on-call rota includes the following specialties: respiratory, care of the elderly, cardiology, rheumatology and endocrinology.
AEC	• Sees between 8 and 12 patients per day coming from ED • Admissions: AEC sends 2 to 6 patients directly to resus or in general back to ED • Hours of opening: 8am to 8pm, Monday to Friday and 9am to 5pm Saturday and Sunday. • Staffing: nurse-led unit with input and support provided by acute physicians and ED consultants. Most medical specialties in-reach on to the unit.
AMU	• Partial model: The acute medical team in charge of the AMU has clinical responsibility for all patients in the AMU, inviting specialist opinion where necessary. There is consistent in-reach from cardiology, less so from other specialties. • Acute physician dominant model: Acute physicians provide the majority of care. Specialists contribute to the on-call at weekends and out of hours. Acute physicians join the on-call rota at the weekends • 2 AMU wards: 16 and 19 beds (35 beds in total) • Admissions per day: 20–30 • Maximum length of stay: 48–72 hours
Downstream wards	• Wards: closed (organisation of care on downstream wards) • Mixed wards • Number of beds in specialty based wards (total): not specified • Number of beds in ‘generalist’ wards (total): not specified

Workforce

High-level figures (FTE, February 2017)

Number of doctors (all HCHS doctors, non-locum)	435
Qualified nursing, midwifery and health visitors staff	1,114

***Source**: NHS Digital*

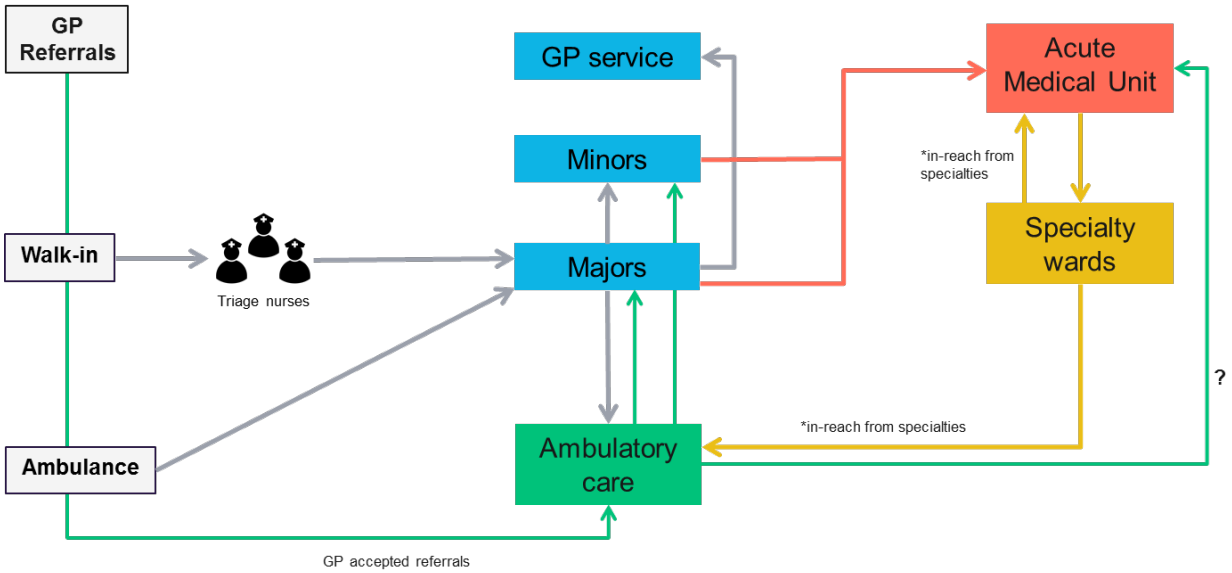
Selected specialty figures

Selected specialties	Consultants (total FTE)	Consultant figures from site visit (posts filled)
Acute internal medicine	N/A	6 (headcount)
Cardiology	3	3 FTE (5 headcount)
Emergency medicine	7.9	6.1
Endocrinology and diabetes	4.5	N/A
Gastroenterology	4.90	N/A
General (internal) medicine	5.2	N/A
Geriatric medicine	6.325	4[3]
Neurology	1.9	N/A
Respiratory medicine	4.7	N/A
Rheumatology	2.40	N/A
Grand total	40.84	N/A

Source: NHS Digital (figures from Feb 2017) and interview transcript

[3] From telephone interview: six geriatricians, but two have joint care of the elderly and acute medicine appointments

Patient pathways



Emergency department overview

Minors

- 9 cubicles
- Mainly staffed and led by ENPs (4)
- 1 or 2 junior doctors also present
- GP with special interest in urgent care joins the ENPs and covers the unit at weekends

Majors and resus

- 15 cubicles in total
- 2 rooms for patients coming in with mental health issues
- Resus has 4 bays

CDU

- Located next to Majors
- Removed some beds to include more chairs
- Flexible admission and discharge criteria

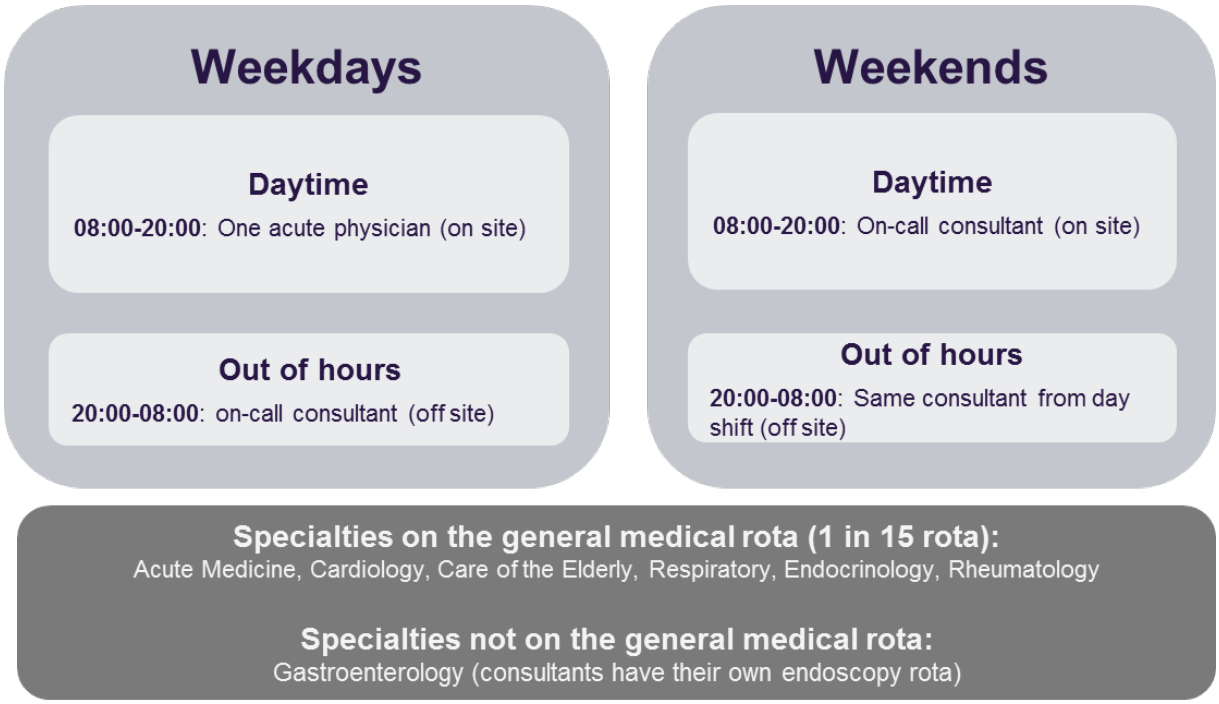
Triage and initial assessment

- Walk-in patients are assessed and triaged (Manchester) by a nurse who will carry out initial observations
- Patients coming via ambulance arrive in Majors and are redirected from here (e.g. to AEC, minors or GP service)

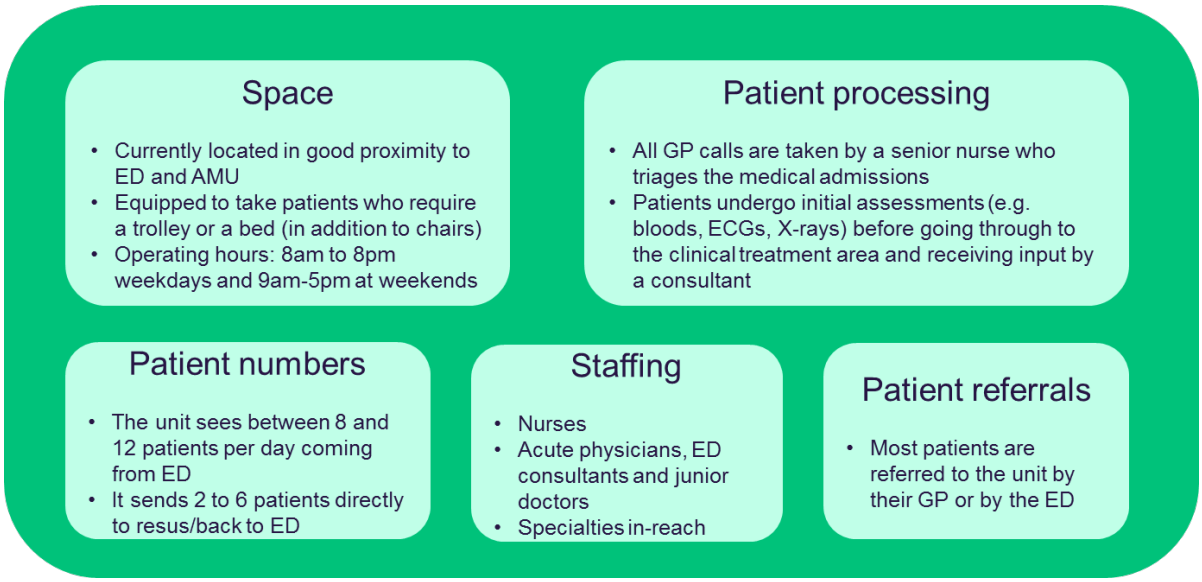
GP service

- Located in the main reception area in ED
- GPs are contracted from a local consortium of practices, mainly on a locum basis
- GP present between 09:00-21:00

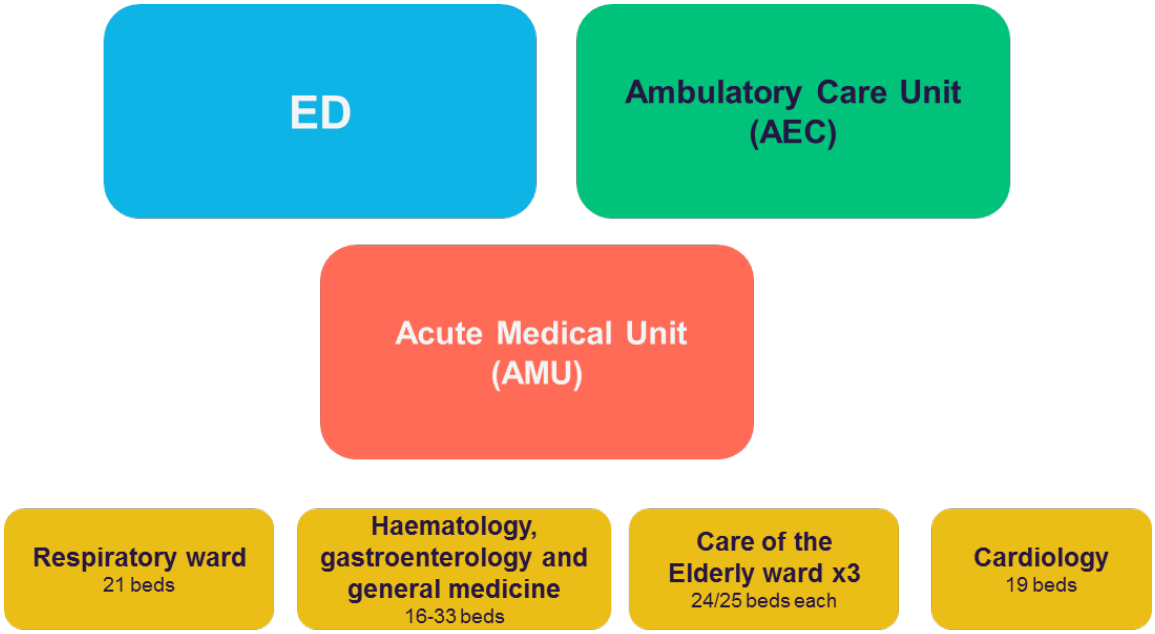
Acute medical cover overview



Ambulatory care (AEC) overview



Ward configuration



11. Hospital Site K

Key features of this site

- The trust was established in April 1998, following a merger. For many years, the hospital was one of the worst performing hospitals in England and has been hampered by historical debt. However, it's now considered to be one of the better performing small hospitals.
- The hospital has enjoyed stable leadership, with the same CEO in post for seven years. Leadership is clinically led and managerially enabled.
- The trust is one of five UK trusts to partner with the Virginia Mason Institute (VMI) to develop their quality improvement strategy.
- There is a highly complex model of care, underpinned by a small number of guiding principles;
    - The 'horrendousness/frequency ratio' – the preference is for low intensity/high frequency input; high intensity is actively managed.
    - Belief in medical generalism – despite having sufficient staff, a specialty-based system is considered as potentially undermining to collegiality.
    - Negotiation – the model is heavily negotiated and flexibility is expected from both staff and management.

Trust overview

Catchment population	• 535,000
Hospital size (number of beds)	• 691 beds
Income (at time of visit)	• £286.3 million (2016/17) – 'small', based on Monitor's 2012/13 criteria

Demography	• The population of the county is projected to increase by 19% over the next 25 years, reaching 1,366,100 by 2037. By 2037, 57% of the population will be of working age, 18% will be under 16 and 25% will be over 65. • The trust serves a population with varied demographics. For example, one area has a high immigrant, working class community, and another is considered to be more affluent.
Case mix	• 57.30% general (as per research analysis)
Local geography	• The trust is located in a suburban area outside Greater London, with good access and transport links. • It provides services to residents across three counties, including three major towns.
Services	• The trust provides acute and complex services at the main site, and also a range of outpatient, diagnostic and less complex planned services elsewhere. • The trust is an associated university hospital. • One main hospital site. • Key services: urgent and emergency care, cardiology (including coronary angioplasty and stenting), medical and older people's care, surgery, trauma and orthopaedics, maternity and children's services. • With regard to cardiology, the trust has strong links with three tertiary hospitals. Cardiothoracic surgeons from these hospitals visit weekly to take part in multidisciplinary meetings with the cardiologists and also undertake clinics for patients being considered for cardiac surgery. • The main hospital is the designated hospital for a major airport and sections of the motorway. It has a trauma unit, which cares for seriously injured patients, in partnership with the major trauma centres at two other hospitals.
Nearest A&E	• Approximately 11 miles away, followed by 14 miles away.

STP	• Historically, the trust has had difficult relationships with the local CCGs. • The local STP is rated as category 4, due to its huge financial deficit. • NHS Improvement has given the trust some funding and the trust is set for a £21 million saving.
A&E	• A&E attendances (2015/16): 91,265 • Emergency admissions (2015/16): 34,323 • 4-hour target (June 2017): 92.8% • Average number of presentations per day: 285 • 10 ED consultants

Medical take	• The medical take is approximately 60–70 patients per day (range 50–84). • The acute medical take is run from the emergency floor, which houses the ED and AMU and operates as a hybrid system. • From Monday to Friday the acute medical take is run by acute physicians from the AMU. Consultant cover is one acute physician from 8am to 2pm, and two acute physicians from 2pm to 7pm. In the afternoon, one consultant will focus on the ED and the other will focus on ambulatory patients. At 5pm, a general internal medicine (GIM) consultant will join the acute medical take and will be available on site until 8pm/9pm, after which time the same GIM consultant will be on-call from home. • At the weekend, the GIM consultants run the acute medical take. On Saturday, two consultants (one GIM and one elderly care) will cover 8am to 2pm, then one of the consultants will return to site from 5pm to 8pm. That same consultant will remain on-call (off-site) overnight. On the Sunday, the consultants switch. The acute physicians from AMU are onsite at the weekend but do not contribute to the acute medical take. • There are two GIM rotas that run in parallel: elderly medicine and general medicine. At times, the rotas are combined and roles are shared. Essentially, the weekend rota is a two in 18 and the weekday rota is one in 18 (because the acute physicians manage the take during the week). • Respiratory, endocrinology, elderly medicine and acute physicians all participate in the GIM/elderly medicine rota. However, rheumatology, gastroenterology and cardiology do not participate in the rotas.

AEC	• At the time of the site visit, the AEC unit was waiting for CCG approval to open and ambulatory patients were being cared for in a designated ambulatory area within the AMU. • When the AEC unit opens it will be open Monday to Friday 8am to 5pm, and it is hoped that the unit will be able to see 24–30 patients per day. • The AEC will be a consultant-led service. • The planned operating model will be to turn patients around within four hours of arrival on the unit. However, it is fully expected that patients could be on the unit for longer if, for example, they require MRI/CT results or they are not able to attend a follow-up clinic.
AMU	• Partial model: The acute medical team in charge of the AMU has clinical responsibility for the majority of the patients in the AMU, inviting specialist opinion where necessary. There is consistent in-reach from cardiology, gastroenterology and elderly medicine. • Admissions per day: 60–70 • Maximum length of stay: max 72 hours • The AMU currently houses the ambulatory care area. This is due to change when the new AEC unit opens. • On weekdays, there are three simultaneous ward rounds conducted by the three AMU consultants. In addition, cardiology, gastroenterology and elderly medicine conduct daily in-reach ward rounds on AMU to see any patients referred. • There are four ward rounds on the AMU at the weekend. Consultants from cardiology, gastroenterology and elderly medicine will see the patients under their care and the AMU consultant on-call will see all other patients on the AMU. This ward round usually runs from 8am to 1pm.

Downstream wards	• Wards: closed (organisation of care on downstream wards) • Mixed wards • Number of beds in specialty based wards (total): not specified • Number of beds in 'generalist' wards (total): not specified • Specialties have 1–5 base wards which also accept general medical patients. • The trust has 12 medical wards, most of which have a specialty focus. • Two care of the elderly wards • Two rehabilitation wards – funded by CCGs and admission dependent on patient postcode

Workforce

High-level figures (FTE, February 2017)

Number of doctors (all HCHS doctors, non-locum)	530
Qualified nursing, midwifery and health visitors staff	1,003

Source: NHS Digital

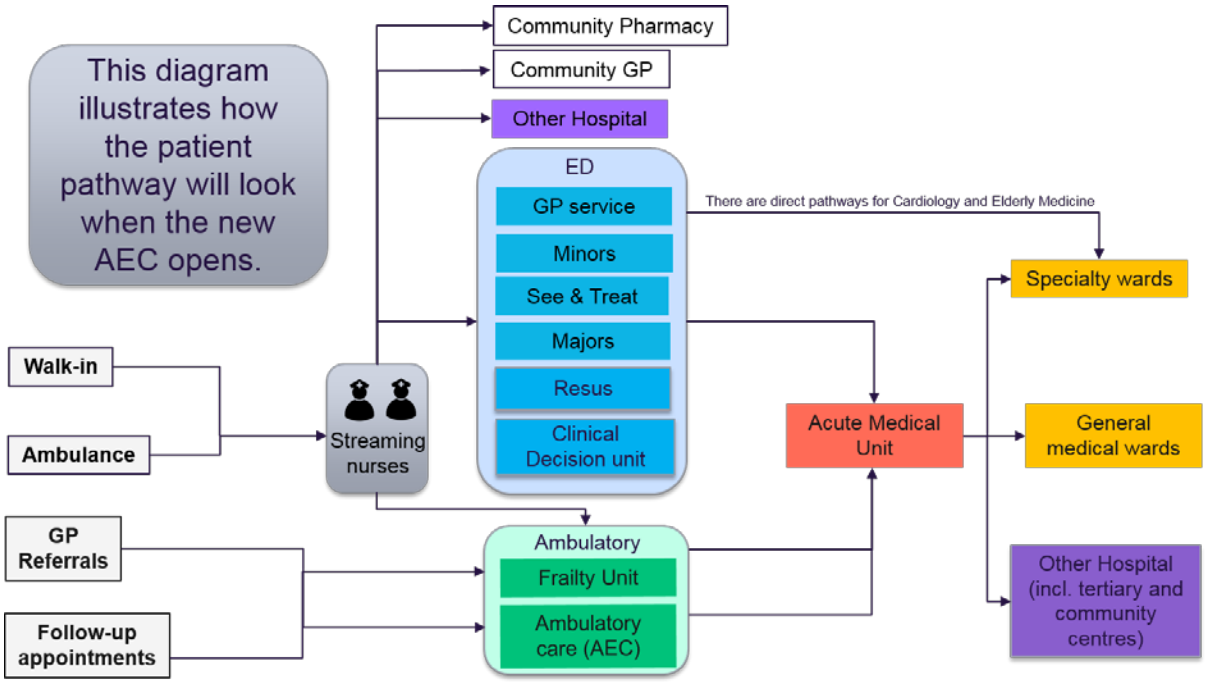
Selected specialty figures

Selected specialties	Consultants (total FTE)	Consultant figures from phone interview (post filled and FTE)
Acute internal nedicine	5.65	Approx. 9*
Cardiology	8	N/A
Emergency medicine	9	10
Endocrinology and diabetes	N/A	N/A
Gastroenterology	6.9	8

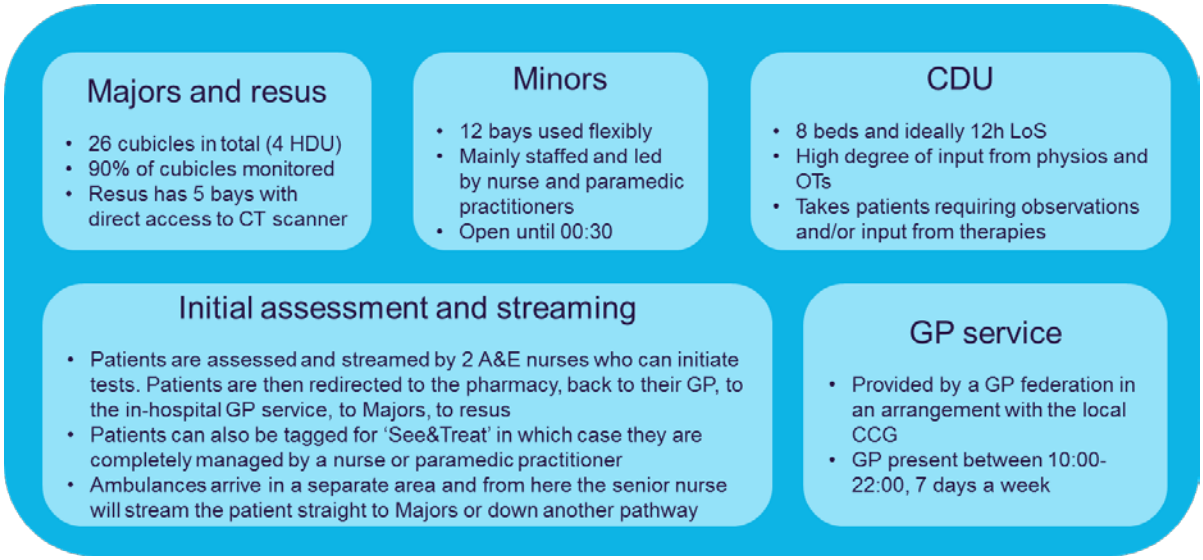
General (internal) medicine	13.3	N/A
Geriatric medicine	9.5	10
Neurology	N/A	N/A
Respiratory medicine	N/A	N/A
Rheumatology	3.8	N/A
Grand total	56.15	N/A

Source: NHS Digital (figures from Feb 2017) and interview transcript

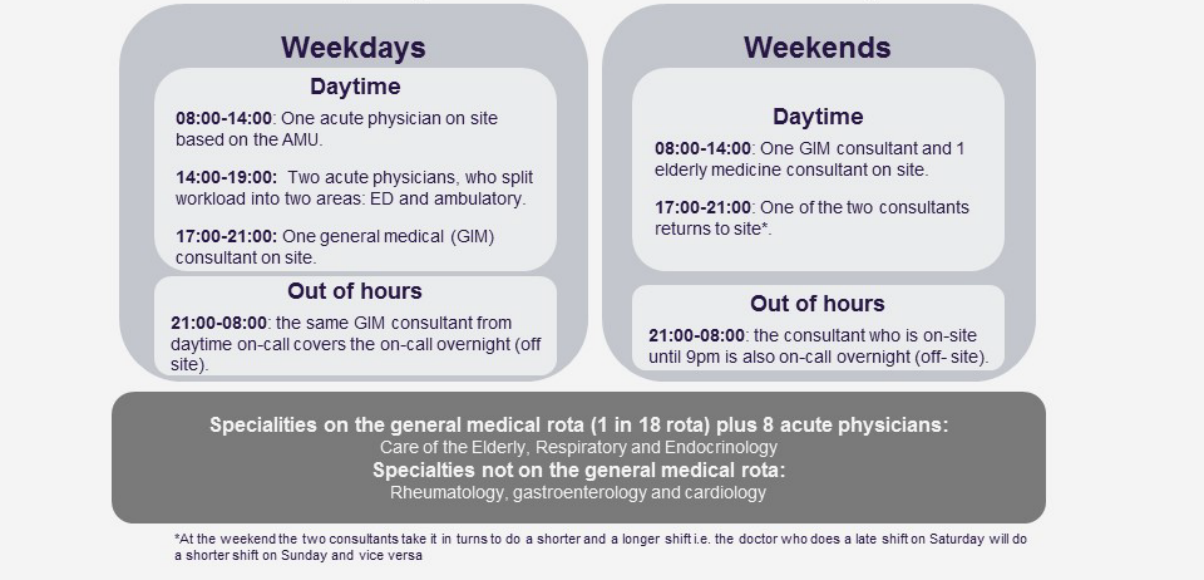
Patient pathways



Emergency department overview



Acute medical cover overview



Ward configuration