ACADEMY OF
MEDICAL ROYAL
COLLEGES

Seven Day Consultant Present Care Implementation Considerations

November 2013

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Seven Day Consultant Present Care – Implementation Considerations

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Foreword.

It is wrong that a patient in hospital can suffer more because their stay includes a weekend and/or a Bank Holiday.

The Academy and its constituent medical Royal Colleges and Faculties have been publicly championing this issue for some time, highlighting the impact on patient safety and seeking ways to improve the quality of patient care and experience. We are pleased to see how this is also now a key issue for the NHS.

Our healthcare system is complex and is under unprecedented financial and resource constraints right across primary, secondary, tertiary and social care. It is also only just over six months into a significant reorganisation and is subject to a number of national wide-reaching inquiries and reviews. This provides significant impetus and indeed opportunity for change, but makes change more challenging.

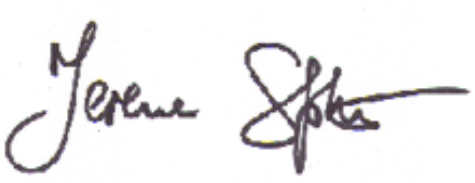
The Academy and its members want to encourage the momentum already developing for systematic seven day service delivery and to support leaders, at all levels in the health service and across all four countries of the UK, in making tangible change. This report is designed to help organisational and clinical leaders with both identifying their starting point on the path to deliver seven day consultant-present care for patients in hospital, and setting out a view of the target destination.

We know that delivering seven day consultant present care has sizeable resource implications in hospital, primary care and community settings. We also recognise that addressing these implications in this financial climate means looking at where resources are currently allocated and most likely re-shaping those resources, both within organisations and across whole health economies. There is no single solution, however, and local circumstances, informed by the content of this report, should be reflected in the designing of required changes. In depth financial modelling will also be

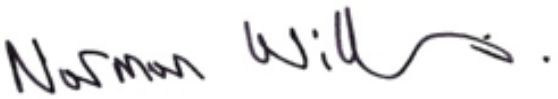
required to determine what can be achieved with what resource. Delivering this sort of change is not easy and requires patients, clinicians, managers and commissioners to work together to improve the quality of care and achieve better value for society.

In developing this report, there has been substantial support and involvement from over fifty specialty organisations as well as patient and lay representatives. This is reflective of the collaborative multi-disciplinary working that is needed to meet the Academy's three standards for consultant present care and put the patient at the centre of what we do and how we think.

We are grateful for the energy and enthusiasm that has already been shown by colleagues in the production of this report and look forward to continuing to work with you in improving the quality of patient care.



Professor Terence Stephenson
Chair, Academy of Medical Royal Colleges



Professor Norman Williams
Chair, Academy Steering Group
President, Royal College of Surgeons of England

Executive Summary.

It is ethically unjustifiable to provide a lower standard of care to patients at weekends than on weekdays. Medical Royal Colleges have signed up to this principle and have worked hard for the past two years to find ways in which seven day consultant-present care can be achieved for the whole of the NHS and across the UK.

The Academy has led the debate on seven day care and has previously published three standards to support parity of care for hospital inpatients across the whole week.[1] This report builds on the earlier work and considers the implications of those three standards by bringing together the UK-wide expertise of the medical Royal Colleges and other specialty organisations. This report, which has involved over fifty specialty organisations, is designed to be a catalyst, providing organisational and clinical leaders with further support in delivering seven day consultant-present care for patients in hospital.

The report demonstrates the importance of a daily consultant-led review and that moving toward having more consultants with the skills to manage patients across different specialty areas ('generalists') will increase the flexibility of the consultant workforce delivering daily reviews at weekends.

Having greater levels of early, weekday engagement and advance discharge planning between patients and their carers, hospital and community-based staff and equipment providers would also help as this would lead to an increase in the ability to make a safe transfer of care from the hospital at the weekend.

The report concludes that to achieve this transformational shift in care is likely to require additional consultant appointments as well as a reorganisation of the existing consultant workforce and increased resourcing for community based services including general practice. It also notes that optimal value from consultant weekend

presence will be achieved if the consultant is leading a multi-disciplinary team of healthcare professionals and the required specialist supporting services are available. Several factors will determine the resources required by Trusts to deliver effective seven day consultant-present care. These include the degree to which seven day working is already provided, the case mix within a Trust and the skill mix of the Trust's current workforce.

Delivering seven day consultant-present care will have a financial impact, and the likely need for service reconfiguration was noted in the Academy's first report in December 2012. However, the scope of this follow-up project was the clinical requirements for implementation of the Academy's three standards, not the economic implications.

Some other key findings are:

- The total amount of consultant time required for inpatient daily reviews at weekends for most specialities will equate to around six hours per day for every 30 inpatients
- The majority of hospital inpatients will benefit from daily consultant review across the whole week, including at weekends, and the review will take less time if a patient is already known to the consultant; rota patterns which optimise continuity of care should be designed to ensure best use of consultant time
- Consultant presence at weekends will enable greater coaching and supervision of doctors in training, and time should be allowed for consultants to deliver training as well as service at weekends. However, this must not discourage the development of decision making skills in junior doctors
- Progression of the patient's care pathway following weekend consultant review in most specialty areas will require timely seven day access to:
    - Investigations, including (but not limited to) laboratory services, radiology, ultrasound and cross sectional imaging
    - Interventions, including (but not limited to) emergency surgery, anaesthesia, interventional radiology and therapeutic upper gastrointestinal endoscopy
    - Support services within hospital, including (but not limited to) physiotherapy, occupational therapy, pharmacy, dietetics, specialist nursing, operating theatres, administrative and clerical support
    - Patient transport and community support services, particularly social care teams, providers of equipment, community nurses and the ability to liaise directly with primary care.

Part One/

Seven Day Consultant Present Care. Implementation Considerations.

01/ Introduction.

1.1. Purpose

This report provides a follow-up to the Academy of Medical Royal College's (the Academy's) report *Seven Day Consultant Present Care*,[2] published in December 2012, which contained three patient-centred standards. The purpose of this follow-up report is to provide a more detailed understanding of the implications of the three standards for each specialty in order to encourage and assist implementation.

1.2 Structure of report

This report is structured in two parts. Part 1 provides the background to development of the report and, under each of the Academy's three standards in turn, summarises the results of the survey undertaken as part of the project and identifies the key messages arising from the survey and Academy-led workshop.

Part 2 of the report contains seven day services commentary provided by professional organisations. This commentary was sought in response to the survey findings and provides detail on a specialty specific basis from the professional organisations relevant to the interventions, investigations and hospital based services seen as of particular priority in supporting effective weekend consultant-led daily reviews and progression of care pathways. The submissions from each of the professional organisations are generally structured to provide information on current levels of weekend provision, the views of the organisation on weekend provision and examples of existing good practice.

1.3 Background

In January 2012 the Academy published a report *The Benefits of Consultant Delivered Care*[3] which identified the following benefits of medical healthcare being delivered by consultant doctors:

- Rapid and appropriate decision making
- Improved safety, fewer errors
- Improved outcomes
- More efficient use of resources
- GP's access to the opinion of a fully trained doctor
- Patient expectation of access to appropriate and skilled clinicians and information
- Benefits for the supervised training of junior doctors.

If the medical profession accepts that consultant-delivered care provides better patient outcomes, it would seem ethically unjustifiable to deprive patients of those benefits during the weekend. The Academy therefore instigated the Seven Day Consultant Present Care project to make recommendations to deliver a consistent high quality of care for patients in hospital across the whole week, for all specialities. The Academy took the view that this was best conceptualised in terms of generic patient care pathways rather than proposing specialty-specific consultant rotas, and should be focussed on developing patient-centred standards based on the principle of daily consultant review. *Seven Day Consultant Present Care* contained three standards:

Standard 1: Hospital inpatients should be reviewed by an on-site consultant at least once every 24 hours, seven days a week, unless it has been determined that this would not affect the patient's care pathway.

Standard 2: Consultant-supervised interventions and investigations along with reports should be provided seven days a week if the results will change the outcome or status of the patient's care pathway before the next 'normal' working day. This should include interventions which will enable immediate discharge or a shortened length of hospital stay.

Standard 3: Support services both in hospitals and in the primary care setting in the community should be available seven days a week to ensure that the next steps in the patient's care pathway, as determined by the daily consultant-led review, can be taken.

Seven Day Consultant Present Care noted that the implementation of these standards would have different implications for different patient groups in hospitals. This follow-up report documents the results of a survey of a wide range of specialty organisations to determine both common and specialty-specific implementation implications.

1.4 Terminology

As with the *Seven Day Consultant Present Care* Report, the term 'consultant' is being used in this report because it is believed that it is a term broadly understood by doctors and the public. In using the term 'consultant' the Academy is referring to the level of expertise and skill required of the individual, not their contract of employment. The Academy therefore recognises that the appropriate level of expertise and skill may be found in those not on a consultant contract, or in a formal consultant grade, but with a Certificate of Completion of Training (CCT) or Certificate of Eligibility for Specialist Registration (CESR) or certain senior doctors with appropriate competencies, to include those in Staff and Associate Specialist and Senior Specialty Doctor (SAS) grade posts.

It is also important to state that the Academy is not suggesting that it should only be consultants (or GPs in the primary care setting) who deliver medical care. The Academy and medical Royal Colleges fully recognise and support the principle that successful care is based on a team approach where a range of clinicians along the care pathway contribute to the delivery of a successful outcome. Consultants, SAS doctors, trainee doctors, nurses and the many other allied healthcare and healthcare science professionals all play a fundamental role in the provision of care, as do clerical and administrative staff members. This is strongly borne out by the findings of this follow-up report.

1.5 Links with other relevant projects

NHS Services, Seven Days a Week Forum

The NHS Commissioning Board (now known as NHS England) report *Everyone Counts: Planning for Patients 2013/14*,[4] published in December 2012, sets out five offers to NHS commissioners to give them the insights and evidence that they need to produce better local health outcomes. Offer 1 is 'NHS services, seven days a week'.

To progress this offer, the National Medical Director established the NHS Services, Seven Days a Week Forum (the Forum) in February 2013, to identify how to optimise access to routine services seven days a week.

The Forum's focus, for this first stage, was urgent and emergency care admissions in England. The Forum is due to report on this aspect of its work in late 2013. The Academy's standards relate to all inpatients and to all four home nations. There is considerable synergy between the

two projects, and the three standards from the Academy's *Seven Day Consultant Present Care* report have been a key contributing factor to the wider set of ten standards being developed by the Forum. The links between the two projects have been actively managed through Professor Terence Stephenson, Chair of the Academy, being a member of the Forum, and the Academy project being an integral part of the Forum alignment meetings.

The provision of experienced, professional central support through the NHS Improving Quality's Seven Day Transformation Programme, initiated by the Forum, should be invaluable to service providers and Clinical Commissioning Groups.

Royal College of Physicians of London Future Hospital Commission

The Future Hospital Commission (FHC) is the Royal College of Physicians of London's independent project to review all aspects of the design and delivery of inpatient hospital care (in relation to internal medicine and England). Some members of the Academy Seven Day Consultant Present Care follow up project have also been members of the FHC governance structure and the FHC project has also been represented at the Forum alignment meetings. The FHC report was published on 12 September 2013.[5]

The Future Hospital: Caring for Medical Patients report contains a proposed new model for clinical care that states seven day services should be available in the hospital and in the community. Consultant presence across the whole week, continuity of care and seven day provision of services is a theme running throughout the report, along with the need for a greater number of consultants with 'generalist' skills.

1.6 Project method

An executive Steering Group provided oversight of the Academy's project, which was delivered through a core Project Team, supported by content experts as required. A Project Assurance Group with widespread representation, acted as a sounding board and reviewer of draft findings. Details of those involved in the project are shown at Appendix A.

Specialty organisations with hospital inpatients were invited to provide written responses to ten questions in relation to consultant-led daily reviews and the three standards from *Seven Day Consultant Present Care*. The questions, and details of the 36 specialties who responded, are shown at Appendix B.

The results of the survey have formed the basis of this report, either directly or by guiding discussions with other specialties and professional organisations to follow-up on the survey findings.

In presenting the survey findings, this report has considered the specialties that make up the majority of inpatients. The source for this was the KH03 report *Average daily number of available and occupied beds open overnight by sector*, Jan-Mar 2013, published 23 May 2013.[6] These data do not include critical care beds – there are 3,788 adult critical care beds [7] in England. The data for Scotland is based on episodes, rather than overnight occupancy, so it is not possible to readily see the inpatient numbers by specialty for Scotland. However, the proportions for Scotland reflect the proportions for the England statistics.[8]

The KH03 statistical report shows that 85% of 121,000 beds are occupied by patients managed by the following ten specialties:

- General medicine
- Psychiatry
- Geriatric medicine
- General surgery
- Trauma and orthopaedic surgery
- Obstetrics and gynaecology
- Intensive care
- Respiratory medicine
- Cardiology
- Paediatrics.

The survey results from these ‘top ten’ specialties have been highlighted alongside the overall returns in Part 1, Chapters 2 to 4 of this report.

02/ Standard One.

Standard 1:
Hospital inpatients should be reviewed by an on-site consultant at least once every 24 hours, seven days per week, unless it has been determined that this would not affect the patient's care pathway.

To deliver this standard, hospitals will need to put in place systems to monitor the status of inpatients every 24 hours, with the default that inpatients will be reviewed by a consultant unless certain criteria are met. These criteria may be based on:

- The patient's physiological safety (as indicated by an early warning score)
- The need for further investigations and revision of the patient's diagnosis
- Requirement for further therapeutic interventions
- The need for communication with the patient, their carers and with clinical colleagues
- The likelihood of the patient's imminent discharge from hospital.

This daily consultant-led review is distinct from the need to provide, 24 hours a day, consultant-delivered interventions as necessitated by the patient's clinical condition.

2.1 Proportion of patients that will require a daily consultant-led review – common messages

Ten specialties (four from the 'top ten') indicated that all inpatients would require a daily consultant-led review. For the remaining 26 specialties, the proportion that would not need a daily consultant-led review varied considerably.

Twenty-seven specialities indicated that patients would not require daily review if some or all of the following factors were present:

- Patient is physiologically stable
- Patient has a diagnosis either confirmed or appropriate tests underway
- Patient is on the correct care pathway and is progressing on schedule
- There are no specific communication tasks or care strategy questions outstanding.

The returns from the 'top ten' are as shown in the table below.

Table 1.
Proportion of patients who would benefit from a daily consultant-led review

Proportion of patients who would BENEFIT from a daily consultant-led review	0 %	1—10 %	11—20 %	21—30 %	31—20 %	41—50 %	51—60 %	61—70 %	71—80 %	81—90 %	91—99 %	100 %
General Internal medicine						X						
Psychiatry				X								
Geriatric medicine					X							
Surgery - general										X		
Surgery - trauma and orthopaedics											X	
Obstetrics & Gynaecology												X
Intensive care medicine												X
Respiratory medicine												X
Cardiology											X	
Paediatrics												X

General Internal Medicine and Geriatric Medicine indicated that over 50% of current inpatients would not need a daily consultant-led review. It is likely that this reflects the large proportion of current inpatients where discharge is delayed by non-medical factors; this is reflected in the comments from many of the medical specialities listed in Part 2. The proportion of patients in this category may reduce over time if discharge processes can be improved.[9]

Surgical specialities tended to indicate that a higher proportion of their patients required daily review, with comments reflecting the need for senior review to identify a group of patients whose condition may change rapidly and/or be discharged from hospital.

Patients in psychiatric inpatient units will often have a prolonged inpatient stay during which daily consultant review is not likely to influence the care pathway, once stability of their condition has been established (see Part 2, Chapter 2).

Some organisations have attempted to define those patients who would not benefit from a daily medical review by allocation of a traffic light colour to each patient on the ward. The consistent and effective use of Early Warning Scores (EWS) in hospitals allows tracking of the inpatient's clinical condition, alerting the clinical team to any clinical deterioration and triggering a timely clinical response.[10]

Some specialties are already providing a significant level of seven day services, for example many Trusts and obstetric consultants have been providing this service for a number of years. Examples of rotas to assist in the planning of weekend consultant presence can be found in the Royal College of Obstetricians and Gynaecologists (RCOG) Good Practice Guide *Labour Ward Solutions*.[11]

More details on this and further individual specialty specific responses are shown in Part 2, Chapter 2, where key themes include the need to identify patients suitable for criterion-led discharge which could be triggered by a nurse or other ward staff and establishing clear treatment plans, including ceilings of care, for all patients.

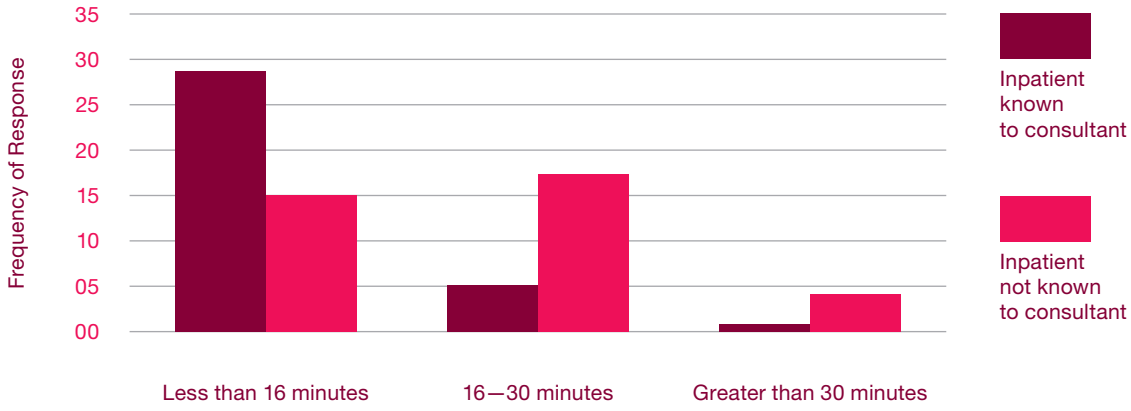
KEY FINDING:
The majority of hospital inpatients are likely to benefit from daily consultant review across the whole week, including weekends.

2.2 Length of time to undertake a consultant-led review of an inpatient – common messages

72% (26) of specialities indicated that patient review would take longer if the patient was not previously known to the consultant, emphasising the importance of designing systems which optimise continuity of care.

42% (15) of specialties estimated a consultant-led review for an inpatient not known to a consultant would take up to 15 minutes while 47% (17) estimated that this would take between 16-30 minutes. 81% (29) indicated a consultant-led review for an inpatient known to the consultant would take up to 15 minutes. These results are shown in Figure 1 below.

Figure 1.
Estimated time for consultant review according to responses from speciality organisations



For the 'top ten' specialties, five estimated up to 15 minutes and five estimated 16-30 minutes patient review time for an inpatient not known to the consultant. Eight of the ten indicated up to 15 minutes for an inpatient known to the consultant.

Estimated review times for patients under the care of surgical specialities tended to be shorter than those under the care of medical teams.

For most specialities, where the average time taken for patient review is between 10-15 minutes, the total amount of consultant time required at weekends would equate to around six hours per day for every 30 inpatients.

Specialty specific responses to the survey are shown in Part 2, where one key theme was the need to recognise that the time required for patient review at weekends frequently needs to incorporate time speaking with a patient's carer, communication with ward staff and documentation in the patient record.

KEY FINDING:
Consultant review is likely to take less time if a patient is already known to the consultant; rota patterns which optimise continuity of care should be designed to ensure best use of consultant time.

KEY FINDING:
The total amount of consultant time required at weekends for most specialties will equate to around six hours per day for every 30 inpatients.

2.3 Resources for undertaking a consultant-led review of an inpatient – common messages

53% (19) of the 36 specialties indicated that the daily consultant-led review could be undertaken by a consultant from another specialty – the most frequently cited specialties to provide this cross-cover were Acute Medicine (cited nine times), General Internal Medicine (cited nine times) and Geriatric Medicine (cited four times). These potential synergies could be taken into account when determining the resources required for consultant-led care at a local level.

General Internal Medicine, Acute Medicine and Geriatric Medicine all cited each other as being able to cross-cover for the purpose of a daily consultant-led review. Psychiatry noted the ability for cross-cover between the sub-specialties, and also felt General Psychiatry and Medical Psychotherapy specialists could cross-cover for the purpose of a daily consultant-led review.

The Royal College of Obstetricians and Gynaecologists (RCOG) noted that, as a discipline which encompasses both medicine and surgery, the requirements for seven day care and the division of consultant time covering each area must be carefully considered. There is a need to balance rotas in managing the demands of the labour ward. Not all units operate split rotas and the demands of maternity care during extremely busy periods can sometimes result in gaps in gynaecology rotas. For example, early pregnancy clinics need to run seven days and ward rounds need to be consultant-led. There are constraints placed on consultant workload if they are also expected to cover a busy labour ward.

Specialties were asked their views on employing methods of patient review which did not entail a face-to-face bedside review of all patients by the consultant. 69% (25) of the 36 specialties indicated that a bedside review by a non-consultant followed by discussion of the results and plans with the consultant would be acceptable. 47% (17) indicated that a board-based review by consultant and team together would be acceptable.

The availability of consultants seven days a week allows the opportunity for greater active supervision of trainees at weekends. However, it is important to ensure that the increase in consultant presence does not discourage trainees from developing decision making skills.

In considering the resourcing of consultant-led daily reviews, it is also worth noting that the number of doctors who are not in consultant or trainee posts varies considerably by specialty. SAS doctors comprise 37% of the medical workforce (excluding trainees) in Accident & Emergency, 24% in surgical specialties, 19% in Anaesthetics and 16% in Medical specialties.[12] A small proportion of SAS doctors work at Consultant level and the contribution of these individuals should be acknowledged.

The important role of administrative staff, physiotherapy assistants, pharmacy technicians and the other staff in improving seven day working has been detailed in the NHS Improvement's work on seven day service provision.[13] This work demonstrates skill-mix is key and some permanent staff providing support is invaluable.

Consultants and career grade doctors need to be as adqeuately supported at the weekend as on weekdays when carrying out bedside reviews. The support should be provided by as wide a range of healthcare professionals as possible to ensure that patients receive full advantage of their expertise, including senior nursing staff and trainees with time dedicated to supporting consultants on ward rounds. The growing cadre of Physician Associates could also play a key role in supporting consultants, as proposed by the Future Hospital Commission.

The importance of the multi-disciplinary team can be seen when considering maternity services which rely heavily on other clinicians. Key to offering high quality maternity services in labour wards with complex caseloads is the availability of support from other specialists (for example, cardiac and pulmonary physicians, diabetologists, radiologists and anaesthetists) to deal with emergencies that may occur during the weekend. Clinical input from other specialties also adds to the training experience in obstetrics. The RCOG report *Tomorrow's Specialist*[14] noted that professional relationships with other specialities need to be formalised in consultant contracts to enable the seven day model of care provision.

Other reports[15] have suggested that an extra 1-2 unselected patients per hour could be seen when other staff were available to do more administrative or portering duties. Introducing electronic patient records has the potential to improve care and documentation, but its implementation requires increased administrative support for clinical staff.[16]

In establishing seven day consultant present care, consideration should be given to work patterns that reflect weekend working through time off in lieu elsewhere in the week, so that staff can maintain a work-life balance.

Specialty specific responses to the survey are shown in Part 2, Chapter 2.

KEY FINDING:

Factors which will determine the resources required to deliver seven day consultant-present care at a Trust level include:

- The degree to which seven day working is already provided within an individual organisation or specialty
- The case mix and complexity of patients within a Trust, some of whom may require a high level of specialty expertise
- The skill mix of the Trust's current workforce and in particular the numbers of consultants or SAS doctors with the necessary skills to provide meaningful review of patients across different specialty areas.

KEY FINDING:

A greater proportion of consultants with the skills to manage patients across different specialty areas ('generalists') will increase the flexibility of the consultant workforce delivering daily reviews at weekends.

KEY FINDING:
While some Trusts may have developed services to provide full consultant cover, delivering consultant present care at weekends is likely to require additional consultant appointments as well as reorganisation of the existing consultant workforce and increased resourcing for community based services; careful job planning is essential to minimise the impact on patient care during weekdays.

KEY FINDING:
Optimal value from consultant weekend presence will be achieved if the consultant is leading a team of healthcare professionals with the competencies required to carry out the plans made at the time of patient review.

KEY FINDING:
Consultant presence at weekends will enable greater coaching and supervision of doctors in training, and time should be allowed for consultants to deliver training as well as service at weekends. However, this must not discourage the development of decision making skills in junior doctors.

03/ Standard Two.

Standard 2:
Consultant-supervised interventions and investigations, and their reports should be provided, seven days per week, if the results will change the outcome or status of the patient's care pathway before the next 'normal' working day – this should include interventions and investigations which will enable immediate discharge or a shortened length of hospital stay.

What this means in practice is that the progress of an inpatient along their care pathway should not be delayed because investigations or interventions are not available on certain days of the week. While the delivery of the intervention or investigation may be delegated to any appropriately trained and competent clinician, the overall provision of the service should be supervised by a consultant.

3.1 Consultant-supervised investigations – common messages

Specialties were asked which investigations and their reports are regularly[i] needed to support a daily consultant-led review at weekends. The investigations cited by more than ten of the 36 respondents and by more than five of the 'top ten' bed occupancy specialties are shown in Table 2 below.

i Required in order to progress the care pathway for at least one patient under a consultant's care over the course of an average weekend

Table 2.
Consultant supervised investigations regularly needed at weekends

Consultant supervised Investigation	Proportion of specialties indicating a regular need at the weekend (%)	
	'Top Ten' specialties	36 survey respondents
Haematology	100	97
Microbiology	100	97
Clinical biochemistry / chemical pathology	100	97
Ultrasound	90	83
Computed Tomography (CT) scan	90	78
Plain radiology	80	89
Access to expert imaging opinion	70	58
Magnetic Resonance Imaging (MRI)	60	56
Diagnostic upper gastrointestinal endoscopy	60	42
Echocardiogram	60*	19*

* As echocardiography was not included as an option in the drop-down menu in the survey, these figures may underestimate the actual demand for echocardiography across different specialities.

Access to laboratory services including haematology, clinical chemistry and microbiology is required by almost all specialities at weekends. Specialty specific responses to the survey are shown in Part 2.

The vast majority of specialities indicated the need for diagnostic radiology services including ultrasound, computerised tomography (CT), magnetic resonance imaging (MRI) and access to

an expert radiology opinion. The particular importance of access to abdominal CT scanning and radiological expertise in the management of surgical patients at weekends was also highlighted (see Part 2, Chapter 2).

The Royal College of Radiologists' commentary recognises the importance of seven day access to radiology, both for the management of patients in emergencies and to progress the care pathway to enable earlier discharge; a variety of models by which this can be achieved are proposed, highlighting the need for appropriate allocation of resources to this area (see Part 2, Chapter 5).

KEY FINDING:
Most specialities will require timely access to laboratory services, radiology, ultrasound and cross sectional imaging on a seven day basis to ensure that the patient's care pathway can progress following consultant review.

3.2 Consultant-supervised interventions – common messages

Specialties were asked which interventions are regularly[ii] needed to support a daily consultant-led review at weekends. The interventions cited by more than ten of the 36 respondents or by five or more of the 'top ten' bed occupancy specialties are as follows:

ii Required in order to progress the care pathway for at least one patient under a consultant's care over the course of an average weekend

Table 3.
Consultant supervised investigations regularly needed at weekends

Consultant-supervised Intervention	Proportion of specialties indicating a regular need at the weekend (%)	
	'Top Ten' specialties	36 survey respondents
Emergency surgery	70	58
Interventional radiology	50	47
Therapeutic upper gastrointestinal endoscopy	50	39
Percutaneous coronary angiography	50	25
Radiological feeding tube placement	40	31
Haemodialysis	40	31
Bronchoscopy	20	33

Specialty specific responses to the survey are shown in Part 2, Chapter 2.

It is noted that access to emergency surgery at weekends is the intervention cited most frequently by acute specialties as important at weekends. The Association of Surgeons of Great Britain and Ireland notes in its commentary (Part 2, Chapter 7) that there needs to be robust arrangements for pre-operative assessment and post-operative care. Anaesthetists, who may

be Consultants or SAS doctors, need to be available to provide anaesthetic services, including Acute Pain Teams to manage post-operative pain pathways, where this would help the patient. This may need re-organisation of job plans so that a dedicated anaesthetist with appropriate competencies can provide for a Trauma list on a Sunday morning. Theatre access at weekends is critical to the quality of patient care (for example, patients sustaining hip fractures need surgery within 24-36 hours[17,18]). A 2010 survey by the Association of Surgeons of Great Britain and Ireland showed a majority of general surgeon respondents reporting critical deficiencies in emergency theatre access.[19]

Interventional radiology was cited by almost half of respondents; as indicated in the response of the Royal College of Radiologists, this will produce challenges for smaller hospitals with fewer radiologists with the necessary skills to deliver this service. Some potential solutions are highlighted in their commentary in Part 2, Chapter 5.

Therapeutic upper gastrointestinal endoscopy is a key intervention for many specialities and 24 hour access to an emergency service is necessary for any hospital which admits patients with suspected upper gastrointestinal haemorrhage; the commentary from the British Society of Gastroenterology indicates that many hospitals are not able to provide this service at present (Part 2, Chapter 6).

Professional body commentary on provision of seven day consultant-led investigations and interventions is contained Part 2 of the report in the following chapters:

- Royal College of Pathologists – Chapter 04
- Royal College of Radiologists – Chapter 05
- British Society of Gastroenterology – Chapter 06
- Association of Surgeons of Great Britain and Ireland – Chapter 07
- Royal College of Anaesthetists – Chapter 08
- British Cardiovascular Society – Chapter 09
- Renal Association – Chapter 10
- British Thoracic Society – Chapter 11

KEY FINDING:

Most specialties will require timely access to emergency surgery, interventional radiology and therapeutic upper gastrointestinal endoscopies on a seven day basis to ensure that the patient's care pathway can progress following consultant review.

04/ Standard Three.

Standard 3:
Support services both in hospital and in the community and primary care setting should be available seven days per week to ensure that the next steps in the patient's care pathway, as determined by the daily consultant review, can be taken.

As with Standard 2, this means that the progress of an inpatient along their care pathway should not be delayed because a support service, either in hospital or in the community, is not available on certain days of the week. This includes the ability to ensure safe discharge from hospital.

4.1 Hospital based services – common messages

Specialties were asked which hospital based services are regularly[iii] needed to support a daily consultant-led review at weekends. The hospital based services cited by more than ten of the 36 respondents or by more than five of the 'top ten' bed occupancy specialties are shown in Table 4.

iii Required in order to progress the care pathway for at least one patient under a consultant's care over the course of an average weekend

Table 4. Hospital based services regularly needed at weekends

Hospital based services	Proportion of specialties indicating a regular need at the weekend (%)	
	'Top Ten' specialties	36 survey respondents
Pharmacy	100	100
Physiotherapy	90	83
Specialist nurse review	70	61
Dietetics/Nutrition	70	44
Occupational therapy	40	47
Swallow assessment	40	17
Speech & Language therapy*	30	31

* whilst appropriately trained professionals carry out swallow screen assessments, specialist swallow assessment and treatment is carried out by speech and language therapists.

Specialty specific responses to the survey are shown in Part 2, Chapter 2.

It is of particular note that all specialities indicated the need for pharmacy support at weekends; the Royal Pharmaceutical Society commentary highlights the importance of daily medicines reconciliation and prescription review at weekends, in line with National Patient Safety Agency and NICE guidance. This will help to reduce prescription errors, support timely and effective decision making and reduce the likelihood of prescription-related readmissions following weekend discharge from hospital (Part 2, Chapter 12).

The Chartered Society of Physiotherapy emphasised the need for Trusts to review the staffing levels and skill mix of the full multi-disciplinary team to reflect the altered demands on service provision, adding that staffing changes must "be properly funded and resourced, including appropriate consideration of staffing levels and skill mix and thought given to the investment into the likely cultural change necessary to ensure successful implementation" (Part 2, Chapter 13).

The value of dietetic support has also been highlighted by a high proportion of respondents. The British Dietetic Association has recommended that services should focus on those areas where:

- Intensive and/or early intervention improves outcomes; or
- Dietetic services support early and safe discharge to community services.

These areas could include intensive care, tertiary specialities, major trauma, and those specialities where nutritional care is an integral component of care such as diabetes and for individuals requiring home enteral tube feeding. (Part 2, Chapter 15).

Professional body commentary on seven day provision of hospital based services is contained in Part 2 in the following chapters:

- Royal Pharmaceutical Society – Chapter 12
- Chartered Society of Physiotherapy – Chapter 13
- Royal College of Nursing – Chapter 14
- British Dietetic Association – Chapter 15
- British Association/College of Occupational Therapists – Chapter 16
- Royal College of Speech and Language Therapists – Chapter 17

KEY FINDING:

Most specialties will require timely access to physiotherapy, occupational therapy, pharmacy, dietetics, specialist nursing, administrative and clerical support on a seven day basis to ensure that the patient's care pathway can progress following consultant review.

4.2 Community based services – common messages

Specialties were asked which non-hospital based services are regularly needed to support a daily consultant-led review at weekends. The non-hospital based services cited by more than ten of the 36 respondents or by more than five of the 'top ten' bed occupancy specialties are shown in Table 5.

Table 5. Community based services regularly needed at weekends

Community based services	Proportion of specialties indicating a regular need at the weekend (%)	
	'Top ten' specialties	36 survey respondents
Social care team	90	67
Specialty community care team	80	58
Real time conversation with GP	70	47
Electronic communication with GP	60	50
Real time conversation with community practice team	60	50
Electronic communication with community practice team	50	44

Almost all of the 'top ten' specialties and the majority of the remainder cited social work as a key community-based service requirement at weekends.

Access to a specialist community team and the ability to communicate with primary care were also considered to be important by most specialities who responded to the survey.

Specialty specific responses to the survey are shown in Part 2, Chapter 2. Key themes included the importance of access to community beds, step-down facilities and home care services in order to facilitate the transfer of care of the patient from the hospital to the community. Facilities for early outpatient review or ward assessment for patients discharged at weekends may also help support safe discharge.

Currently 11% of people occupying acute hospital beds do not have an on-going acute medical problem, but their discharge is delayed by non-medical factors.[9]

The results from the Academy survey were used as the basis of a specific Academy-led workshop to explore the current barriers and examples of good practice with regard to provision of non-hospital based services at a weekend, with a particular focus on enabling discharge processes to progress.

The 2004 Department of Health report *Achieving timely 'simple' discharge from hospital: A toolkit for the multi-disciplinary team*[20] notes that 80% of discharges from hospital can be classified as simple discharges: patients are discharged to their own home and have simple ongoing health care needs which can be met without complex planning.

The workshop highlighted a number of constraining factors on weekend discharge, both within and outside the hospital, including a common presumption that a Saturday or Sunday could not be a planned discharge day. Discussion at the workshop indicated that if planning for the

transfer of care starts during the week, and involves Social Care and Primary Care, the ability to discharge on a Saturday or Sunday with appropriate provision from out-of-hours services may be greater than presently perceived. However, the resource constraints currently experienced in community-based care, including general practice, were also noted as a limiting factor on the level and responsiveness of services that can be provided at a weekend. Meeting the Academy's Standard 3 will require joint effort across secondary, primary and social care to understand the scale of resource demand and how to address it.

Whilst situations where it is safe and appropriate to discharge a patient at a weekend who requires a GP visit before Monday (such as a terminally ill patient who wishes to die at home) might be felt to be relatively rare, advance discharge planning will again assist in identifying and preparing for such circumstances.

A detailed summary of the workshop is included in Part 2, Chapter 3.

KEY FINDING:
Most specialties will require timely access to patient transport and community support services, particularly social care teams, community nurses and the ability to liaise directly with primary care on a seven day basis to ensure that the patient's care pathway can progress following consultant review.

KEY FINDING:
Early, weekday engagement and advance discharge planning between the patient and their carers, hospital and community-based staff and equipment providers should lead to an increase in the ability to make a safe transfer of care from the hospital on a Saturday or Sunday for those patients who require community-based services.

05/ Summary of Academy Findings and Next Steps.

Specialty organisations recognise the need to provide a consultant-present service for hospital inpatients, seven days per week.

Effective delivery of a consultant-present service requires access to a range of investigations, interventions and support services, both in hospital and in the community.

This project has identified some key findings to assist local Trusts and commissioners in making the most effective use of resources. These findings are:

- The majority of hospital inpatients are likely to benefit from daily consultant review across the whole week, including at weekends
- Consultant review is likely to take less time if a patient is already known to the consultant; rota patterns which optimise continuity of care should be designed to ensure best use of consultant time
- The total amount of consultant time required at weekends for most specialities will equate to around six hours per day for every 30 inpatients
- Factors which will determine the resources required to deliver seven day consultant-present care at a Trust level include:
    - The degree to which seven day working is already provided within an individual organisation or specialty
    - The case mix and complexity of patients within a Trust, some of whom may require a high level of specialty expertise
    - The skill mix of the Trust's current workforce and in particular the numbers of consultants or SAS doctors with the necessary skills to provide meaningful review of patients across different specialty areas
- A greater proportion of consultants with the skills to manage patients across different specialty areas ('generalists') will increase the flexibility of the consultant workforce delivering daily reviews at weekends
- While some Trusts may have developed services to provide full consultant cover, delivering consultant present care at weekends is likely to require additional consultant appointments as well as reorganisation of the existing consultant workforce and increased resourcing for community based services; careful job planning is essential to minimise the impact on patient care during weekdays
- Optimal value from consultant weekend presence will be achieved if the consultant is leading a team of health care professionals with the competencies required to carry out the plans made at the time of patient review
- Consultant presence at weekends will enable greater coaching and supervision of doctors in training, and time should be allowed for consultants to deliver training as well as service at weekends. However, this must not discourage the development of decision making skills in junior doctors

- Progression of the patient's care pathway following weekend consultant review in most specialty areas will require timely seven day access to:
    - Investigations including (but not limited to) laboratory services, radiology, ultrasound and cross sectional imaging
    - Interventions, including (but not limited to) emergency surgery, interventional radiology and therapeutic upper gastrointestinal endoscopy
    - Support services within hospital, including (but not limited to) physiotherapy, occupational therapy, pharmacy, dietetics, specialist nursing, administrative and clerical support
    - Patient transport and community support services, particularly social care teams, community nurses and the ability to liaise directly with primary care
- Early, weekday engagement and advance discharge planning between the patient and their carers, hospital and community-based staff and equipment providers should lead to an increase in the ability to make a safe transfer of care from the hospital on a Saturday or Sunday for those patients who require community-based services.

Across the UK, there are already examples of successful seven day service models in certain specialties. Dissemination of these existing innovations, with the assistance of the NHS England and NHS IQ Seven Day Transformation Programme, will aid more widespread adoption of these models. In addition, implementation of the recommendations from the Future Hospital Commission (FHC) will help drive configuration of seven day services.

The benefits of seven day consultant present care will be evaluated over the next three years, with National Institute of Health Research evaluation projects for both hospital medicine and surgery: Evaluation of the Impact of High-Intensity Specialist-Led Acute Care (HiSLAC) on Emergency Medical Admissions to NHS Hospitals at Weekends;[21] and Enhanced Peri-Operative Care for High-risk patients (EPOCH) Trial.[22]

Part Two/

Specialty Specific Contributions.

01/ Introduction.

This part of the report contains seven day services commentary provided by professional organisations. This commentary was sought in response to the survey findings and provides detail on a specialty specific basis from the professional organisations relevant to the interventions, investigations and hospital based services seen as of particular priority in supporting effective weekend consultant-led daily reviews and progression of care pathways.

The submissions from each of the professional organisations are generally structured to provide information on current levels of weekend provision, the views of the organisation on weekend provision and examples of existing good practice.

02/ Academy Survey Responses.

2.1 Proportion of patients that will require a daily consultant-led review

The table on the following pages shows the specialty returns in an order (guided by the largest to smallest) of average number of overnight occupied beds under the care of a consultant[6] Key for the 'Factors' column:

A – Patient is physiologically stable

B – Diagnosis either confirmed or appropriate tests underway

C – On correct care pathway and progress on schedule

D – No specific communication tasks or care strategy questions outstanding

Specialty	Factors that would indicate patient might not need daily consultant-led review	Estimated proportion of patients that would meet the factors (%)	Commentary
General Internal Medicine	A (plus other factors)	51-60	Likely to be more than one factor present. A patient needing active treatment but is physiologically stable may not need a consultant review. A patient who is simply physiologically stable needs a review regarding possible discharge. Daily consultant review at weekends is not needed where patients are waiting for packages of care, care home placement, social work review and funding decisions, assessment from prospective care home.
Geriatric Medicine	Some – but not all of A to D	61-70	Evidence suggests that frequent senior review reduces length of stay and also enables more patients to be turned around within 0-2 days straight back home so it may not be helpful to say which patients benefit. On the other hand a consultant doing weekend cover for large numbers of beds can't see everyone. So we need to focus on expected discharge dates and criterion-led discharge for all patients which can then be triggered by nurses or ward cover juniors if the criteria are met. And putting clear weekend plans in place for patients including limits of treatment. Should see: Anyone recently admitted should have consultant review preferably at front door but within 12 hours max; Anyone who is causing concern due to physiological instability/ diagnostic uncertainty, worried relatives etc; Anyone who we have a chance of getting home. The thing to do ideally is a quick board round of all patients then select those who need review. If we have consultants on take, not post take, seven days a week and seeing people early and with clear discharge plans from the outset and if we do board rounds to identify patients who might benefit, probably only one in three geriatric inpatients would need daily consultant review at weekends.
Psychiatry	All factors A to D plus additional factors must be present	71-80	We take A to mean 'psychiatrically stable'. In Psychiatry, patients are under named consultant team and an average length of stay for a patient in a psychiatric inpatient unit is much longer as compared to acute hospital settings. The majority of patients will benefit from review by their own consultant team, if it occurs towards the end of the week. On average, 20% of patients on a ward will be new to services and this will be essential for them, and 10% will be quite unstable and would benefit from this. All the new admissions especially those detained under provisions of Mental Health Act occurring on the latter half of Fridays (after midday), Saturdays and Sundays would benefit from consultant-led review to initiate a treatment plan including observation levels, immediate physical and psychosocial investigations and referrals.
General Surgery	All factors A to D must be present	11-20	D could be replaced by senior specialist nursing staff with sufficient time and patient knowledge. Relatively few general surgery patients do not need/benefit from senior input – now essentially a consultant based process.

Specialty	Factors that would indicate patient might not need daily consultant-led review	Estimated proportion of patients that would meet the factors (%)	Commentary
Surgery – trauma & orthopaedics	All inpatients require daily review	1-10	For surgical specialties, seven day inpatient service would mean additional elective theatre sessions on top of the emergency service. These inpatients will ALWAYS benefit from consultant based service.
Obstetrics & gynaecology	All inpatients require daily review	None – all require daily review	The key areas requiring consultant input have been set out in the RCOG Good Practice guide *Responsibility of the consultant on-call*.[23] High quality care in gynae-oncology requires arrangements for consultant review during the weekends for patients recovering from surgery. In maternity services, addressing the needs of the patients on the wards can be challenge. Antenatal and postnatal inpatients (especially those who have pregnancy complications or a difficult childbirth respectively) require daily review on weekends. Ideally, all delivery suites require seven day cover with 168 hour presence, especially in units with more than 5,000 deliveries. In gynaecology, acute patients and those who have had complex operations on a Friday need senior review on the Saturday/Sunday.
Respiratory medicine	All factors A to D must be present	0	
Cardiology	B & C?	1-10	
Paediatrics	No factors – all require daily review	None – all require daily review	All children should receive a daily consultant review (Facing the Future standards)
Gastroenterology	All factors A to D must be present	21-30	Could say only patients who have completed their episode of clinical care and are awaiting discharge arrangements to be finalised do not require review. Junior doctor support is essential, although nurses know what is going on and who needs review. Danger that trainees may stop taking clinical decisions if a consultant will be along soon. There should be a facility to see patients discharged at a weekend as an outpatient very soon.
Rehabilitation medicine	All factors A to D must be present	71-80	
Renal medicine	All factors A to D must be present	11-20	Likely more than one factor present. A patient needing active treatment plus physiologically stable may not need a consultant review. A patient who is simply physiologically stable needs a review regarding possible discharge. Daily consultant review at weekends not needed where patients waiting packages of care, care home placement, social work review and funding decisions, assessment from prospective care home – all of which do not happen at weekends.

Specialty	Factors that would indicate patient might not need daily consultant-led review	Estimated proportion of patients that would meet the factors (%)	Commentary
Surgery - neurological	All factors A to D must be present	50	
Stroke medicine	All factors A to D must be present	1-10	Some would argue it is the consultant-led review that makes sure all above factors are in place, i.e. to prevent “slippage”. Will differ between hyper-acute (broadly defined as 0-48 hours from onset of symptoms), acute (broadly defined as 2-14 days from onset of symptoms) and rehabilitation units with the latter being much more nurse / therapist led. 0% on hyper-acute unit, 10% on an acute unit, 91-99% on a rehab unit.
Endocrinology & diabetes	All factors A to D must be present	50-80	Variable view from members: some felt 50-80%, some felt 100%.
Emergency medicine	All inpatients require daily review	None – all require daily review	All Emergency Department (ED) ward patients are new admissions and little information is known about previous medical history etc. Senior staff are best suited to this undifferentiated group of patients. They are not patients who are known to be stable a day or two before.
Clinical oncology	All factors A to D must be present	50	
Surgery – plastic	All factors A to D must be present	11-20	
Palliative care medicine	All factors A to D must be present		Levels of pain and other symptoms also need to be effectively controlled and no urgent review of strategy is needed in response to significant change.
Infectious diseases	All inpatients require daily review	None – all require daily review	Most of our patients have complex infections, and we would at least glance at the patient and any new results every day (seven days per week), regardless of criteria suggested.
Rheumatology	All factors A to D must be present	25	
Intensive care medicine	All inpatients require daily review	None – all require daily review	Complex critically ill patients require a minimum of twice-daily consultant review, and frequently need consultant-delivered care.
Ophthalmology	B & C must be present	41-50	
Dermatology		81-90	Existing inpatients will have a treatment plan in place and will not require regular review. Only new admissions, those with severe skin disease such as Toxic Epidermal Necrolysis or those who experience an acute deterioration in status will require daily review.
Paediatric cardiology	B & C must be present	1-10	

Specialty	Factors that would indicate patient might not need daily consultant-led review	Estimated proportion of patients that would meet the factors (%)	Commentary
Surgery – Ear Nose Throat (ENT)	C must be present	1-10	ENT patients mostly stay in for less than 24 hours so get seen in the morning and then discharged if they stay in overnight. However, this is not the case for our head and neck patients, many of whom stay in for several days. Therefore they would be seen every day unless so stable and progressing so well that review is not required. This is very rare though as when things go wrong, they do so very quickly.
Haematology	All factors A to D must be present	31-40	
Urology	All inpatients require daily review	Less than 10	All patients need access to consultant review to ensure timely discharge, prompt investigation and management of any post-operative complications.
Acute Internal Medicine	All factors A to D must be present	0	
Clinical Pharmacology	All factors A to D must be present	75	A sensible ward doctor review is needed however, to confirm things are on track and to liaise as needed. For the great majority of patients, established pathways of investigation and treatment are being followed, and the issue is generally the waiting time to get these done. Another group comprises stable patients needing community/social services – they do not need review.
Genito-urinary medicine	C must be present	33	
Nuclear medicine		100	As discharges planned and related to radiation dose, no consultant review needed.
Surgery – renal transplantation	All inpatients require daily review	None – all require daily review	New renal transplants require review seven days a week irrespective of clinical state. This is Unit policy in most, if not all renal transplant units.
Surgery – vascular	All inpatients require daily review	None – all require daily review	If don't need a consultant-led review, shouldn't be in hospital.
Surgery – colorectal	All inpatients require daily review	None – all require daily review	All patients benefit in some way from daily consultant review – if only to push forward bottle necks in care pathway.
Sports & exercise medicine	All factors A to D must be present	61-70	

2.2 Length of time to undertake a consultant-led review of an inpatient

The following table shows the specialty returns in an order (guided by the largest to smallest) of average number of overnight occupied beds under the care of a consultant.[6]

Specialty	Estimated duration for patient NOT known to consultant (Minutes)	Estimated duration for patient known to consultant (Minutes)	Commentary
General Internal Medicine	10-15	5-10	Not all patients meriting a review need this to be a bed-side review.
Geriatric Medicine	1-15	10	
Psychiatry	46-60	31-45	In addition to direct review with the patient, time will also be needed to speak to the carer, ward nurses and make entry into the paper based/ electronic case notes. If patient is known to the service, this process would be facilitated by having standard summary updates including crucial information in the notes. For child and adolescent psychiatric inpatients the consultant managing the young person also needs to have a good understanding of their social setting (family, school, social care support) in order to make sensible decisions about discharge. For a CAP inpatient unit, including talking to carers, a review is likely to take a minimum of 1 hour/ patient.
General surgery	1-15	1-15	For a patient not known – review varies from a brief visit to a stable ward patient to a detailed review of recent post-op cases or new referrals. Much easier and more effective with known patients.
Surgery – trauma & orthopaedics	10-20	1-15	We estimate that a typical bedside daily consultant-led Review would usually take around 10-20 minutes. For surgical specialties, seven day inpatient service would mean additional elective theatre sessions on top of the emergency service. These inpatients will ALWAYS benefit from consultant based service.
Surgery – vascular	10-15	5-10	With good handover, these times can be shortened.
Surgery – colorectal	5-10	3-5	Longer if patient deteriorating.
Obstetrics & gynaecology	20	15	
Respiratory medicine	16-30	1-15	
Cardiology	1-15	1-15	
Paediatrics	15-20	10-15	Each consultation takes as long as it takes and it depends on presence of junior staff.

Specialty	Estimated duration for patient NOT known to consultant (Minutes)	Estimated duration for patient known to consultant (Minutes)	Commentary
Gastroenterology	At least 20	10-15	
Rehabilitation medicine	16-30	1-15	
Renal medicine	16-30	1-15	Not all patients meriting a review need this to be a bed-side review.
Surgery - neurological	15	5	
Stroke medicine	1-15	1-15	
Endocrinology & diabetes	20	15	
Emergency medicine	20-30	n/a	Length of stay should be under 24 hours.
Clinical oncology	16-30	1-15	
Surgery – plastic	1-15	1-15	
Palliative care medicine	31-45	16-30	
Infectious diseases	16-30	1-15	Depends if previously seen by a speciality consultant colleague or only by a general medicine consultant or junior doctor.
Rheumatology	30	15	
Intensive care medicine	20-40	10-30	
Ophthalmology	30-60	10-20	Very dependent on complexity and very sub-specialty specific. Most emergency eye problems can be appropriately managed in an outpatient setting. Emergency surgery is invariably consultant-led or delivered anyway. Suitably experienced senior trainees (Fellows) also perform some emergency operations.
Dermatology	16-30	16-30	
Paediatric cardiology	16-30	16-30	
Surgery – ENT	10-15	5-15	Depends on the complexity and problem of the patient. Post-op follow ups who are well and due to go home may only take five minutes but complex head and neck, or emergency patient would take longer.
Haematology	1-15	1-15	

Specialty	Estimated duration for patient NOT known to consultant (Minutes)	Estimated duration for patient known to consultant (Minutes)	Commentary
Urology	1-15	1-15	Straight forward new cases 1-15 minutes, complex cases especially those with any untoward problems will need longer. Should be 1-15 minutes for known patients unless not progressing according to the care pathway.
Acute Internal Medicine	16-30	1-15	
Clinical Pharmacology	10-20	5-10	
Genito-urinary medicine	45	20	
Nuclear medicine	1-15	10-15	Consultant-led service – highly unlikely to not know inpatient.
Surgery – renal transplantation	16-30	1-15	
Sports & exercise medicine	16-30	1-15	

2.3 Resources for undertaking a consultant-led review of an inpatient

The table below shows the specialty returns in an order guided by the largest to smallest order of average number of overnight occupied beds under the care of a consultant.[6]

Specialty	Other specialties that could provide cross-cover for a daily consultant-led review	Acceptable alternatives to a consultant face to face bedside review	Commentary
General Internal Medicine	Acute Medicine Geriatric Medicine	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team.	For bedside review by non-consultant, need to specify acceptable grade – should be ST3 or above.
Geriatric Medicine	Acute Medicine General Internal Medicine	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team.	Whilst board-based review or review by non-consultant (including nurse specialist) might be acceptable – both approaches might then need to steer consultants to people they need to see in person.
Psychiatry	Forensic Psychiatry, Intellectual Disability Psychiatry, Old Age Psychiatry, and Liaison Psychiatry and Medical Psychotherapy Psychiatry, where available, could provide cover for General Adult Psychiatry.	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team. Remote technology solution.	Broadly, General Adult Psychiatry, Old Age Psychiatry, Forensic, Social and Rehabilitation Psychiatry, Intellectual Disability Psychiatry, and Liaison Psychiatry where provided, could cover each other, but there would need to be specialist cover for child and adolescent psychiatry. Any consultant with an interest in psychological issues could provide effective cover for Medical Psychotherapy, irrespective of specialty. Liaison Psychiatrists may be especially well-placed to provide cover for psychiatry colleagues, although not child and adolescent patients. Psychiatrists with a special interest in addictions, perinatal, eating disorders psychiatry and neuropsychiatry could also cross-cover for General Adult Psychiatry (Note: Old Age Psychiatry would ideally prefer to provide their own out-of-hours cover on a 7-day rota). All the above options could be considered depending on the requirements of the local organisation. In Mental Health, practices are likely to vary from one organisation to another depending on the size of the organisation, geographical spread, number of inpatient units and the staff on the on-call rota. Options from carrying out ward rounds for the newly admitted patients (not previously known to the services/ detained patients) to use of telemedicine/ teleconferencing for discussing care during weekends will be appropriate.

Specialty	Other specialties that could provide cross-cover for a daily consultant-led review	Acceptable alternatives to a consultant face to face bedside review	Commentary
General Surgery	None	None	Selective board based review may be an option but in practice all inpatients should be seen or discharged over a weekend.
Surgery – trauma & orthopaedics	None	None	
Surgery – vascular	None	Bedside review by non-consultant followed by discussion of results/plans with consultant.	Alternative option depends on experience and expertise – should be a senior trainee.
Surgery – colorectal	General Surgery	None	Patient is the centre of care and need to see patient to form own judgement.
Obstetrics & gynaecology	Cross-cover between Obstetrics and Gynaecology	None	There is a need to balance rotas in managing the demands of the labour ward. Not all units operate split rotas and the demands of maternity care during extremely busy periods can sometimes result in gaps in gynaecology rotas.
Respiratory medicine	None	Bedside review by non-consultant followed by discussion of results/plans with consultant.	Specialist patients need specialist review.
Cardiology	None	Bedside review by non-consultant followed by discussion of results/plans with consultant.	
Paediatrics	None	Bedside review by non-consultant followed by discussion of results/plans with consultant.	Must meet Facing the Future standards. Remote review might be relevant for network working – speciality & general paediatric services liaison.
Gastroenterology	General Internal Medicine	Remote technology solution.	
Rehabilitation medicine	None	Bedside review by non-consultant followed by discussion of results/plans with consultant. Remote technology solution.	

Specialty	Other specialties that could provide cross-cover for a daily consultant-led review	Acceptable alternatives to a consultant face to face bedside review	Commentary
Renal medicine	Acute Medicine General Internal Medicine	Bedside review by non-consultant followed by discussion of results/plans with consultant.	Specialties indicated could cross-cover for generic problems – not for patients in tertiary care. For bedside review by non-consultant, need to specify acceptable grade – should be ST3 or above. Non-consultant review is OK for patients already on a care pathway and progressing (about 30%).
Surgery - neurological	Intensive Care Neurology Trauma & Orthopaedic Surgery	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team. Remote technology solution.	Have some shared care with Intensive Therapy Unit (ITU)/ High Dependency Unit (HDU) patients, neuroscience patients and spinal patients. Board/non-consultant review only for non ICU/HDU; remote technology only for initial assessment.
Stroke medicine	Acute Medicine General Internal Medicine Geriatric Medicine Neurology	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team. Remote technology solution.	The British Association of Stroke Physicians has published details of the type of competencies that would be required for cover by consultants from other specialties. Once again rather depends whether you are discussing hyper-acute, acute or rehabilitation units. Alternative methods for review rather depend on the situation – alternatives probably not acceptable for hyper-acute units but more acceptable for acute units. Some stroke services have considerable experience with telemedicine – it is certainly feasible but experience suggests that each 'consultation' takes longer than when face to face.
Endocrinology & diabetes	Acute Medicine Clinical Pharmacology and Therapeutics Emergency Medicine General Internal Medicine General Practice Respiratory Medicine	Board-based review by consultant and team.	
Emergency medicine	None	None	Consultants from other specialties are able to see patients within their field of expertise who may be on an ED ward. However, the undifferentiated nature of the patient group means that they are best dealt with by an ED consultant with the broad base of clinical knowledge.

Specialty	Other specialties that could provide cross-cover for a daily consultant-led review	Acceptable alternatives to a consultant face to face bedside review	Commentary
Clinical oncology	Acute Internal Medicine Medical Oncology	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team.	59% of those informing the survey response feel board round acceptable, 90% feel non-consultant round (plus check with consultant) acceptable.
Surgery – plastic	None	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team.	
Palliative care medicine	None	Bedside review by non-consultant followed by discussion of results/plans with consultant. Remote technology solution.	Telephone discussion of management plan may suffice on a previously assessed patient. Seven day palliative care Clinical Nurse Specialist review is a peer review expectation supported by telephone advice and direct consultant review of specific patients. Consultants may be on-call for a wide area not just one organisation.
Infectious diseases	None	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team.	Will depend to some extent on diagnosis.
Rheumatology	Acute Medicine General Internal Medicine	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team. Remote technology solution.	Alternative daily review methods may be suitable sometimes.

Specialty	Other specialties that could provide cross-cover for a daily consultant-led review	Acceptable alternatives to a consultant face to face bedside review	Commentary
Intensive care medicine (ICM)	None	None	Cross-cover for ICM could be provided by Anaesthesia, acute medicine or emergency medicine if the specialists in these disciplines were dual accredited (i.e. trained in ICM as well as partner speciality). All consultant cover for ICM patients should be provided by specialists trained in ICM, irrespective of any secondary or partner speciality. All methods possible in addition to, but not as a substitute for, a consultant bedside review.
Ophthalmology	Medical Ophthalmology	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team. Remote technology solution.	Subspecialty review often provided ad hoc by consultant teams. Cross subspecialty review not appropriate under all circumstances. Medical Ophthalmology cover may be appropriate but surgical cases would require subspecialty input. Subspecialty dependent and may change with technological advances. The use of modern technology, for example remote reporting of radiology or histopathological specimens as well as video conferencing with the consultant off-site should also be considered.
Dermatology	Acute Medicine Rheumatology	Bedside review by non-consultant followed by discussion of results/plans with consultant.	Acute medicine could cover if treatment plan is in place and expert nursing care available. Rheumatology cross-cover possible for patients with connective tissue diseases. If a treatment plan is in place then no weekend review needed if patient progress is satisfactory. If the patient deteriorates, then specialist nurses discuss with acute medical team/on-call dermatology team with clinical review as appropriate.
Paediatric cardiology	None	Bedside review by non-consultant followed by discussion of results/plans with consultant.	
Surgery – ENT	None	None	It is possible that max/fax could cover some of the head and neck cancer and perhaps endocrinology or general surgery might cover thyroid cases, but in reality, no one else really does ENT and so no one else would really have a grasp of best management for the various conditions and age groups that we manage.
Haematology	None	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team.	

Specialty	Other specialties that could provide cross-cover for a daily consultant-led review	Acceptable alternatives to a consultant face to face bedside review	Commentary
Urology	None		
Acute Internal Medicine	General Internal Medicine Geriatric Medicine	Board-based review by consultant and team.	A board based review of patients with the team involved who have seen the patients first and consultant sees those where concerns arise.
Clinical Pharmacology	Acute Medicine General Internal Medicine	Board-based review by consultant and team.	With senior nurse and ward doctor who know the patients – then bedside review of patients with issues that merit consultant review.
Genito-urinary medicine	General Internal Medicine Infectious Diseases Respiratory Medicine	Bedside review by non-consultant followed by discussion of results/plans with consultant.	
Nuclear medicine	Clinical Oncology	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team. Remote technology solution.	Answers focused on use of method to agree a discharge. Physicist OK alternative to consultant. Remote solution OK if to confirm pre-arranged plans.
Surgery – renal transplantation	Renal Medicine	None	Cross-cover if transplant trained. In most renal units, the care of new transplants is already provided by both surgeons and physicians.
Sports & exercise medicine	Rehabilitation Medicine Rheumatology	Bedside review by non-consultant followed by discussion of results/plans with consultant. Board-based review by consultant and team.	

Consultant-supervised investigations	Bed occupancy order	Haematology	Microbiology	Clinical biochemistry / chemical pathology	Ultrasound	CT	Plain radiology	Access to expert imaging opinion	MRI	Upper GI endoscopy	Echo cardiogram	Pacemaker services	Cardiac stress imaging (e.g. treadmill ECG, stress ECG)	Pulmonary function testing	Flexible sigmoidoscopy	Colonoscopy	Nuclear medicine testing	Neurophysiological investigations (e.g. EEG, EMG, nerve conduction studies)	Access to cardiac angiography	Toxicology	Histopathology	Cardiac perfusion scanning	Anaesthetic service will need to match additional theatre output.	Bone marrow test	Radiation protection services	Ocular coherence tomography	Laser doppler imaging	Audiology	Total for all 36 specialties	Total for 'top ten'
Stroke medicine	?	1	1	1	1	1	1	1	1									1										35	11
Surgery - colorectal	?	1	1	1	1	1	1	1		1					1	1												35	11
Surgery - renal transplantation	?	1	1	1	1	1	1																					30	10
Surgery - vascular	?	1	1	1	1	1	1	1	1			1		1			1											32	9
Sports & Exercise medicine	31	1	1	1	1		1		1																			21	8
Nuclear medicine	30																1											20	7
GU Medicine	29	1	1	1	1	1	1	1																				20	7
Clinical pharmacology	28	1	1	1	1	1	1		1		1	1	1						1	1		1						15	7
Surgery - ENT	27	1	1	1	1	1	1	1	1																			21	8
Paediatric cardiology	26	1	1	1	1		1	1	1				1															20	7
Dermatology	25	1	1	1																	1							7	6
Ophthalmology	24	1	1	1	1	1	1		1																	1		20	7
Rheumatology	23	1	1	1	1	1	1	1	1	1																		21	8
Infectious diseases	22	1	1	1			1																					7	6
Palliative medicine	21	1	1	1	1		1		1																			7	6
Surgery - plastic	20	1	1	1			1																					7	6
Clinical oncology	19	1	1	1	1	1	1	1	1	1																		21	8
Emergency medicine	18	1	1	1	1	1	1	1		1																		21	8
Endocrinology and diabetes	17	1	1	1	1	1	1	1	1	1				1	1	1												28	10
Surgery - neurological	16	1	1	1		1	1		1																			7	6
Renal medicine	15	1	1	1	1	1	1	1		1																		21	8
Haematology	14	1	1	1	1	1	1	1	1	1					1	1												28	10
Urology	13	1	1	1	1	1	1						1															7	6
Rehabilitation medicine	12	1	1	1	1	1	1																					7	6
Gastroenterology	11	1	1	1	1	1	1	1		1					1	1												28	10
Paediatrics	10	1	1	1	1	1	1	1			1																	21	8
Cardiology	9	1	1	1	1	1	1	1	1	1	1	1	1						1	1			1					20	7
Respiratory medicine	8	1	1	1	1	1	1							1														7	6
Intensive Care medicine	7	1	1	1	1	1	1	1		1	1	1			1	1			1	1	1	1						20	7
Obstetrics & gynaecology	6	1	1	1	1	1	1	1	1																			7	6
Surgery - trauma and orthopaedics	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1							1				21	8
Surgery - General	4	1	1	1	1	1		1	1	1	1	1		1	1	1	1											21	8
Geriatric medicine	3	1	1	1	1	1	1	1	1	1		1																15	7
Psychiatry	2	1	1	1	1						1																	7	6
Acute medicine	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1								35	11
GIM	1	1	1	1	1	1	1	1	1	1		1	1		1	1												28	10
Total for all 36 specialties		35	35	35	30	28	32	21	20	15	7	7	7	6	7	7	4	3	3	2	2	2	1	1	1	1	1		
Total for 'top ten'		11	11	11	10	10	9	8	7	7	6	5	4	4	3	3	2	2	2	1	1	1	1	0	0	0	0		

* 'Regularly' should be taken to mean that the investigation / intervention or service is required in order to progress the care pathway for at least one patient under a consultant's care over the course of an average weekend

2.4 Consultant-supervised investigations

1) Which investigations and their reports are regularly* needed to support a daily consultant-led Review at weekends?

Specialty / Free text comment

Orthopaedic survey
For Trauma and Orthopaedics, we are already providing seven day consultant based service for Trauma. To extend it to elective Orthopaedic service, the most important support is radiology. Nearly all our surgical intervention will require fluoroscopy and additional radiographers to staff theatres and outpatients.

Emergency medicine
Responses given for patients under the care of an ED consultant in a ward area.

Gastroenterology
Without MRI, CT will be used – may change as concern over CT radiation over lifetime. Occasional rather than regular need for colonoscopy.

Psychiatry
Physical investigations are more commonly needed in the inpatient units for older adults, dementia, eating disorders, alcohol detoxification units and those with severe retarded or psychotic depression (patients refusing to eat or drink).

Renal medicine
Expert imaging opinion could be remote via computer link.

Rheumatology
The requirement for consultant-led Rheumatology inpatient review varies considerably between units. Many District General Hospital (DGH) services have no dedicated Rheumatology beds and only a limited capacity to offer on-call cover. In these units access to consultant advice at weekends will be helpful in patient management but there is likely to be only occasional requirement for review by a consultant in person. However, in large tertiary centres, with a high inpatient workload, senior review at weekends may be an important part of patient care.

Urology
Rarely need access to upper (GI) Gastrointesinal endoscopy, colonoscopy or access to expert imaging opinion – would use acute services. A rare need to access radiotherapy services for acute cord compression secondary to spinal mets in malignancy.

Vascular surgery
Although a vascular consultant could manage the majority of vascular imaging diagnoses, they would not necessarily be able to screen CTs or MRIs for other synchronous pathology that could alter management; most recent imaging is needed (could be duplex, CT or MRI).

Consultant-supervised interventions	Bed occupancy order	Physiotherapy	Emergency surgery	Interventional radiology	Therapeutic upper GI endoscopy	Percutaneous coronary angiography	Radiological feeding tube placement	Bronchoscopy	Haemodialysis	Therapeutic lower GI endoscopy	Endoscopic feeding tube placement	Interventional neuroradiology	Cardiac electro physiological intervention	Radiotherapy	Dialysis	Vascular ultrasound duplex	Audiology	Occupational therapy	Neuropsychology	Podiatry
Stroke medicine	?	1					1					1						1		
Surgery - colorectal	?	1	1	1	1			1	1	1										
Surgery - renal transplantation	?	1	1	1					1											
Surgery - vascular	?	1	1	1	1	1	1	1	1	1	1	1	1		1	1				1
Sports & Exercise medicine	31	1																		
Nuclear medicine	30																			
GU medicine	29	1		1				1			1									
Clinical pharmacology	28	1	1	1	1	1		1	1		1									
Surgery - ENT	27	1	1		1		1	1			1			1			1			
Paediatric cardiology	26																			
Dermatology	25																			
Ophthalmology	24		1																	
Rheumatology	23	1			1			1	1											
Infectious diseases	22																			
Palliative medicine	21	1												1						
Surgery - plastic	20	1	1																	
Clinical oncology	19	1	1	1	1			1						1						
Emergency medicine	18	1	1	1																
Endocrinology and diabetes	17	1	1	1	1	1	1	1	1	1		1								
Surgery - neurological	16	1	1				1					1								
Renal medicine	15	1	1	1		1			1											
Haematology	14	1		1				1						1						
Urology	13	1	1	1																
Rehabilitation medicine	12	1					1				1							1	1	
Gastroenterology	11		1		1					1										
Paediatrics	10	1	1	1			1					1								
Cardiology	9	1				1							1							
Respiratory medicine	8	1																		
Intensive care medicine	7	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1			
Obstetrics and gynaecology	6	1	1																	
Surgery - trauma and orthopaedic	5	1	1	1	1				1	1										
Surgery - General	4	1	1	1	1		1		1	1										
Geriatric medicine	3	1	1		1	1														
Psychiatry	2																			
Acute medicine	1	1		1	1	1	1	1		1	1									
GIM	1	1	1	1	1	1	1	1	1				1							
Total for all 36 specialties		29	21	17	14	9	11	12	11	8	7	6	3	5	2	2	2	2	1	1
Total for ‘top ten’		10	7	6	6	5	5	3	4	4	2	2	2	1	1	1	1	0	0	0

* 'Regularly' should be taken to mean that the investigation / intervention or service is required in order to progress the care pathway for at least one patient under a consultant's care over the course of an average weekend

2.5 Consultant-supervised interventions

2) Which interventions are regularly* needed to support a daily consultant-led Review at weekends?

Specialty / Free text comment

Orthopaedic survey
Introvenous (IV) access service such as Hickman lines insertion will be needed, e.g. to treat infected cases.

Emergency medicine
Responses given for patients under the care of an ED consultant in a ward area.

Gastroenterology
Interventional colonoscopy occasionally needed. Tube feeding not normally needed as not ultra-urgent but there may be occasional instances where needed, e.g. four day weekend.

Ophthalmology
Ophthalmic equipment and staffing to support theatres. Increasingly dedicated ophthalmic inpatient beds are not available. Appropriate alternatives need to be utilised.

Palliative medicine
Radiography if MRI confirmed spinal cord compression.

Paediatrics
Have answered (all questions) as generally as possible – are 17 sub-specialties. Echocardiogram, interventional neuroradiology, radiological feeding tube placement, haemodialysis and interventional radiology would be for a small number of centres.

Psychiatry
Use of various provisions of the Mental Health Act (1983) which includes: a) Implementation of Sections 5 (2), recommendation of 2 and 3; b) Section 17 for any unplanned leave, if urgently required; c) Section 17A - Recall from / revocation of Community Treatment Order (CTO); d) Section 62 - for pharmacological and physical treatments for patients lacking capacity for urgent treatments to alleviate serious suffering; e) Capacity and Deprivation of Liberty (DOLS) assessments') Section 136 assessments.

Rehabilitation medicine
Although a vascular consultant could manage the majority of vascular imaging diagnoses, they would not necessarily be able to screen CTs or MRIs for other synchronous pathology that could alter management; most recent imaging is needed (could be duplex, CT or MRI).

Urology
Would use acute services for: endoscopic feeding tube placement; radiological feeding tube placement; haeomdialysis; therapeutic upper GI endoscopy; therapeutic lower GI endoscopy; bronchoscopy. Need vascular radiology for embolisation.

2.5.1 With regard to a general commentary on resource and implications for consultant-supervised interventions and investigations, it is worth noting the Royal College of Physicians of London 2013 report *The medical registrar: Empowering the unsung heroes of patient care*[24] and the Federation of the Royal Colleges of Physicians of the United Kingdom (2013) *Governance Statement regarding patient safety issues in relation to practical procedures carried out by trainee doctors in physicianly specialties.*[25]

2.5.2 Maternity services are staffed by multi-disciplinary teams and rely heavily on other clinicians. Key to offering high quality maternity services in labour wards with complex caseloads is the availability of support from other specialists (e.g. cardiac and pulmonary physicians, diabetologists, radiologists, anaesthetists etc.) to deal with emergencies that may occur during the weekend. Clinical input from other specialties also adds to the training experience in obstetrics.

2.5.3 As in the case for obstetrics, there is also the need to ensure the availability of complementary services that support surgical gynaecology such as ultrasound and haematologists, as set out in the Good Practice Guide *Gynaecology: Emergency services. Standards of practice and service organisation*.[26]

Hospital based services	Bed occupancy order	Pharmacy	Physiotherapy	Specialist nurse review	Step-down to intermediate care	Dietetics/Nutrition	Occupational therapy	Swallow assessment	Speech & Language therapy	Transport	Access to early support discharge team	Secretarial support	Psychiatry	Hospital based social worker	Admin and clerical	Access to old paper notes / records	Access to risk documents	Portering	Drug and alcohol services	Critical care	Acute pain team	Clinical outreach	IT in case of problems accessing etc	Increase in staffing level or even beds in ITU and HDU	Psychosocial investigations	Supportive and talking therapies	Investigations prior to ECT treatment	Access to trust-based care programme approach	Access to specialty opinion	Ophthalmic examination room + staff	Warfarin clinic	Podiatry	Vascular laboratory	Pre-assessment clinics	Access to results server for bloods, x-rays, microbiology and ability to request electronically
Stroke medicine	?	1	1	1	1	1	1	1	1		1																							
Surgery - colorectal	?	1	1	1	1																													
Surgery - renal transplantation	?	1	1		1																													
Surgery - vascular	?	1	1	1	1	1	1		1		1	1						1		1	1	1									1	1	1	
Sports & exercise medicine	31	1	1																															
Nuclear medicine	30	1																																
GU medicine	29	1	1	1	1	1																												
Clinical pharmacology	28	1	1	1	1	1	1		1	1					1				1															
Surgery - ENT	27	1	1	1		1	1	1	1																									
Paediatric cardiology	26	1		1																														
Dermatology	25	1																																
Ophthalmology	24	1		1						1								1												1				
Rheumatology	23	1	1		1																													
Infectious diseases	22	1																																
Palliative care medicine	21	1	1	1	1		1																											
Surgery - plastic	20	1	1																															
Clinical oncology	19	1	1	1	1	1	1	1	1	1					1																			
Emergency medicine	18	1	1				1																											
Endocrinology and diabetes	17	1	1	1	1	1	1	1	1				1																					
Surgery - neurological	16	1	1	1	1																													
Renal medicine	15	1	1		1		1	1																										
Haematology	14	1	1	1		1				1					1																			
Urology	13	1	1		1																													
Rehabilitation medicine	12	1	1	1		1	1	1	1	1					1																			
Gastroenterology	11	1	1				1																											
Paediatrics	10	1	1	1			1																											
Cardiology	9	1	1	1						1				1	1	1		1		1			1						1					1
Respiratory medicine	8	1	1			1																												
Intensive care medicine	7	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1												1
Obstetrics and gynaecology	6	1	1				1																											
Surgery - trauma and orthopaedic	5	1	1	1	1		1	1	1			1			1									1										
Surgery - General	4	1	1	1	1			1		1					1																			
Geriatric medicine	3	1	1	1	1	1	1	1	1		1		1																	1				
Psychiatry	2	1	1		1		1									1	1								1	1	1	1						1
Acute medicine	1	1	1	1	1	1	1	1	1																									
GIM	1	1	1	1	1	1	1	1	1					1																				
Total for all 36 specialties		36	30	22	21	17	16	6	11	8	4	3	3	3	8	3	2	4	2	3	2	2	2	1	1	1	1	2	1	1	1	1	1	
Total for 'top ten'		11	10	8	8	8	5	5	4	3	2	2	2	3	4	2	3	2	2	2	1	1	2	1	1	1	1	1	1	1	1	0	0	

* 'Regularly' should be taken to mean that the investigation / intervention or service is required in order to progress the care pathway for at least one patient under a consultant's care over the course of an average weekend

2.6 Hospital based services

3) Which hospital based services are regularly* needed to support a daily consultant-led Review at weekends?

Specialty / Free text comment

Emergency medicine
Responses given for patients under the care of an ED consultant in a ward area.

Clinical pharmacology
Pharmacy to include need to do dossette boxes; medications regularly changed and hard for patients to follow all the changes safely.

Gastroenterology
Occupational Therapist (OT) would expedite discharge. Junior doctor support is essential, although nurses know what is going on and who needs review. Dietetics needed if four day weekend (especially for anorexics) and to monitor patients.

Palliative medicine
Specialist palliative care review should be available at weekends to support patients under the care of other specialties.

Psychiatry
In order to facilitate early discharge of patients from inpatient facilities, the resources of community mental health services need to be strongly available to make the consultant led service beneficial. If the patient is known to services, this would be facilitated by having standard summary updates, including crucial information in the notes. Psychiatric Intensive Care Units (PICU)- will require consultant-led presence. On acute psychiatry units, there are daily meetings on weekdays involving medical and nursing staff, psychology, pharmacy and occupational therapy.

Vascular surgery
Patients in acute hospital beds awaiting social care packages or intermediate care stepdown remains a massive issue.

Geriatric medicine
Nearly all our patients need rehab, discharge planning etc. and lose ground over weekends without regular therapy input and the ability to discharge just as effectively on a weekend as on a weekday. Therapies should also be available at the front door of the hospital seven days a week and it is unacceptable for pharmacy to be an obstacle to discharge.

Rehabilitation
Seven day working is not required for long term slow stream rehabilitation (e.g. patients with prolonged disorders of consciousness).

Non-hospital based services	Bed occupancy order	Social care team	Speciality community care team	Real time conversation with community practice team	Real time conversation with GP	Electronic communication with GP	Electronic communication with community practice team	District nurse	Community mental health team	Ambulance service	Liaison psychiatry	Mental disabilities team	Palliative care	Home treatment teams	Approved mental health professionals (non-social workers)	Anticoagulation team	Emergency accommodation service
Stroke medicine	?	1	1			1	1										
Surgery - colorectal	?	1	1	1	1	1	1										
Surgery - renal transplantation	?																
Surgery - vascular	?	1	1	1	1	1	1	1									
Sports & exercise medicine	31																
Nuclear medicine	30																
GU Medicine	29	1	1	1	1	1	1										
Clinical Pharmacology	28	1	1		1	1	1									1	1
Surgery - ENT	27	1	1	1		1											
Paediatric cardiology	26																
Dermatology	25																
Ophthalmology	24				1	1											
Rheumatology	23	1		1			1										
Infectious diseases	22																
Palliative care	21	1	1	1	1	1	1										
Surgery - plastic	20	1	1	1		1											
Clinical oncology	19	1	1	1	1	1	1										
Emergency medicine	18	1															
Endocrinology and diabetes	17	1	1		1		1										
Surgery - neurological	16																
Renal medicine	15	1	1	1	1			1	1			1					
Haematology	14												1				
Urology	13																
Rehabilitation medicine	12																
Gastroenterology	11	1	1	1	1	1	1				1						
Paediatrics	10	1	1	1	1	1	1										
Cardiology	9	1			1	1											
Respiratory medicine	8	1	1			1											
Intensive care medicine	7	1	1		1	1		1	1	1	1		1				
Obstetrics and gynaecology	6																
Surgery - trauma and orthopaedic	5	1	1	1	1		1			1							
Surgery - General	4	1	1	1	1	1	1										
Geriatric medicine	3	1	1	1			1										
Psychiatry	2	1	1	1	1	1	1							1	1		
Acute medicine	1	1	1	1	1	1	1										
GIM	1	1	1	1	1			1	1			1					
Total for all 36 specialties		24	21	18	17	18	16	4	3	2	2	2	2	1	1	1	1
Total for 'top ten' (AM separated from GM)		10	9	7	8	7	6	2	2	2	1	1	1	1	1	0	0

* 'Regularly' should be taken to mean that the investigation / intervention or service is required in order to progress the care pathway for at least one patient under a consultant's care over the course of an average weekend

2.7 Non-hospital based services – Specialty specific responses

4) Which non-hospital based services are regularly* needed to support a daily consultant-led Review at weekends?

Specialty / Free text comment

Colorectal surgery
All options selected whilst not strictly necessary help discharge planning and keep smooth turnover of patients.

Orthopaedic surgery
Early discharges will only be possible if community services are also working seven days. Otherwise, patients will still be waiting on the ward until Monday.

Emergency medicine
Responses given for patients under the care of an ED consultant in a ward area.

Gastroenterology
Electronic communication needed as well as real-time conversation. Services specifically important if patients not totally stable are to be discharged.

General internal medicine
Social worker needed for assessment but also needed are home care services that can be initiated and access to care home beds.

Geriatric medicine
Need General Practice to provide same offer at weekends, evenings and bank holidays as during the week – including home visits and support to care homes and community hospitals/ teams. Community health and social care teams need to have the same ability to take people out of hospital or come in to access them at weekends as on weekdays.

Renal medicine
Social worker needed for assessment but also needed are home care services that can be initiated, and access to care home beds.

Palliative care medicine
Electronic communication and specialty community care team where rapid discharge is at a weekend.

Paediatrics
Specialist community team = children's community nursing team.

Psychiatry
Active provision and presence of community mental health teams (often their care coordinator), crisis and home treatment teams, and sometimes the community-based consultant psychiatrist, are essential in: a) potentially avoiding admissions, b) facilitating early discharges of patients c) ensuring safety, follow-up and continuity of care in the post-discharge phase. Also need access to social care records, primary care records (at a minimum, access to the summary care record); access to translators, interpreters and signers.

Stroke medicine
Services for early supported discharge vary around the country – some are run by community services and some by secondary care.

Vascular surgery
The above assumes that an active discharge policy is aimed for and that community care teams are in place; communication can be an issue during the week let alone at weekends.

Urology
Have rare need for non-hospital based services at a weekend.

03/ Findings from weekend discharge workshop.

3.1 Workshop Purpose

The purpose of the workshop was to generate content for this report. The workshop on 26 September was to specifically look at Standard 3 in relation to discharging patients.

Standard 3:
Support services both in hospitals and in the primary care setting in the community should be available seven days a week to ensure that the next steps in the patient's care pathway, as determined by the daily consultant-led review, can be taken.

3.2 Attendees

Ms Karin Bishop	College of Occupational Therapists
Dr Deirdre Bonner	Royal College of Psychiatrists
Dr Janet Butler	Royal College of Psychiatrists
Ms Teri Cranmer	College of Social Work
Dr Rowan Hillson	Diabetes & Endocrinology Joint Specialty Committee, RCPL
Ms Liz Maclennan	College of Occupational Therapists
Mrs Scarlett McNally	Royal College of Surgeons of England / AoMRC SAS Doctor Committee
Ms Caroline Millar	AoMRC Patient Lay Group
Dr Steve Mowle	Royal College of General Practitioners
Dr David Oliver	British Geriatrics Society
Dr Sonia Panchal	Academy of Medical Royal Colleges
Mr Peter Rees	AoMRC Patient Lay Group
Dr Chris Roseveare	Society for Acute Medicine / AoMRC Seven Day Project Team
Ms Liz Sheehan	Chartered Society of Physiotherapy
Mr Miguel Souto	Royal College of Physicians of London
Mr Keith Strahan	Health and Social Care Informatics Centre

3.3 Identified limiting factors

Limiting factor	How does this impact weekend discharge?
Hospital based staffing	
Availability of someone to make the decision	Some decision makers may be more risk averse than others and there may be a perception that the risk is greater at a weekend – this might be exacerbated if staff don't have full information access (social, primary and secondary care records).
Individual behaviour	Individuals may be more motivated by doing activity that they perceive as more urgent or important (e.g. treating the sick), than activity related to discharging patients (who are now well).
Availability of staff to actually process the discharge once decision is made	At a weekend, with fewer staff on duty, time is prioritised dealing with sick patients rather than those well enough to go home.
Prescription / drug availability	Can be harder to find a doctor to write the prescription at a weekend. Pharmacy may not be available at a weekend to allow patient to fill their prescription (and hospital prescriptions are chargeable to the patient if filled at a community pharmacy).
Access to specialty opinion to confirm discharge decision	Currently, consultants are not routinely on-site at a weekend to provide a specialty opinion.
Effective communication with the patient and carers	At a weekend there are generally fewer staff and they tend to be staff who have not been on duty during the week or may have been on duty during the week (but they may not be from the same team) working in a more generalist role and so do not know the patient. This means it is difficult to have clear, reassuring conversations with patients and their carers about leaving hospital and make a decisive discharge decision. At the weekend, there are also greater time pressures (due to fewer staff) so staff don't have time to go through the whole of the patient's background.
Allied health professions and social workers not usually on the ward on a weekend	A culture of Monday to Friday working and lack of clarity on the business case for seven day working.
Availability of senior therapists	Senior therapists can make decisions about when a patient is ready to go home, and can take them home themselves to ensure a smooth transition from hospital to home. However, senior therapists may currently not be on-site at weekends and so unable to accompany someone home.
Hospital based processes	
Movement of patient whilst in hospital	Too much movement between wards can add bed days and reduce continuity of care – potentially causing the patient to need a greater level of community based care, therefore making their discharge more complex.
Internal hospital case review processes	Certain cases might be reviewed at a weekly meeting for example an oncology multi-disciplinary meeting, so decisions on discharge may have to wait until that meeting is held – and these weekly meetings are usually on a week day not a weekend.
Patients are admitted/kept in in order to have tests done	Inpatients are seen as more urgent than outpatients, so tests and results will be done and available more quickly if the patient is an inpatient rather than an outpatient.
Lack of regular pre-arranged blood/ imaging lists at a weekend	Tests are needed to confirm problem resolved/resolving or to rule out a different diagnosis for example.

Limiting factor	How does this impact weekend discharge?
Lack of understanding that planned weekend discharges are doable	Social care does provide out-of-hours care, and if planning for a weekend discharge can take place during the week, it can often be enacted at the weekend. Similarly, planning weekend discharge of a patient can be undertaken with their general practice during the week. However, there tends to be a prevailing culture that Saturday or Sunday cannot be considered as a planned day of discharge.
Patient (& public) transport	Not available, too busy, or not available at the time needed to support weekend discharge.
Timing of discharge decisions	Decisions made too far in advance can lead to ineffective use of resources (e.g. if an adjustable bed is delivered to a patients home three weeks before the patient discharged there may be delays for other patients if a bed cannot then be made available for them). Also premature discharge dates can alarm relatives. Decisions made too late can be difficult to accommodate at short notice. Difficult to make changes if make decisions about take home drugs too far in advance.
Not all staff are trained in discharge planning	Staff at a weekend may not know how to effect a discharge.
Discharge plans may not be clear in the patient's notes	Staff available at the weekend, who may not know the patient, may find it difficult to understand what should be happening in order to effect discharge.
Tend to treat physical health first, then look to mental health sequentially, rather than in parallel	May get a patient to the point of 'ready for discharge', from a physical perspective, but then have to resolve mental health issues, causing a delay. Current working practices may mean mental health teams require patients to be 'medically cleared' before they will see them.
Preconceived perceptions of weekend discharge	There is a tendency not to consider a Saturday or Sunday as a 'normal' discharge day and so plan for a Friday or a Monday instead. The hospital discharge team/consultant tend to feel that everything has to be in place before discharge rather than consider having a couple of days of one level in place before then increasing the level of provision. There is a lack of awareness of what is possible with regard to weekend non-hospital based services.
Priority of discharge as an issue with Trust executive teams	Trusts may be focusing energy and resource on resolving other issues, such as Accident & Emergency targets and acute admissions rather than weekend discharge or discharging in general.
Integration	
Transferring responsibility for a patient	The process for this is not so clear at a weekend.
Effective communication between teams	A variety of hospital and non-hospital based teams are involved in the process of discharge and communication between them can be difficult due to: changing staff, shift patterns, getting through switchboards, multiple non-hospital staff with multiple ways of contacting them (no single point of contact).
There are a myriad of referral processes	A hospital will need to discharge patients to a number of different local authority areas who are all likely to have different processes and contact points.

Limiting factor	How does this impact weekend discharge?
Assessments of a patient before discharge	Rather than trusting assessments undertaken by other teams involved in the patients care, assessments are often repeated by each team, which adds delays to the discharge process – particularly if trying to arrange assessments at a weekend, e.g. care homes or intermediate care settings wanting to do their own assessments and not trusting those done by professionals in the acute trust.
Current examples of integrated care tend to be too specific	So it may be possible to arrange a weekend discharge for a particular care pathway, but not for another.
Funding	
Investment is required to make weekend resources available	May need to reconfigure services to enable access at a weekend – investment is needed to design and implement the change, and there may be subsequent consequences such as transport issues.
Current funding mechanisms	Current funding mechanisms don't necessarily support weekend discharge. Weekend and out-of-hours services may be particularly vulnerable to budget limitations. Rigid service agreements prevent flexibility to support patient need.
Non-hospital based staffing	
Care home availability	If a patient is being discharged to a care home, social care have to undertake an assessment of the care home, and this subsequently requires availability of care home staff if happening at a weekend. Care home managers also like to assess the patients for suitability – and they usually work Monday to Friday. Intermediate care/care home facilities often don't accept patients at the weekend.
Availability of community mental health teams	Community mental health teams may not be resourced to provide weekend support.
Non-hospital based processes	
Home kit delivery	The organisations that deliver home care kit are less / not available at a weekend.
Care agency rota planning processes	Care agencies pre-plan their rotas for weekend cover and don't tend to have surplus 'just in case' staff to deal with unplanned weekend requirements.
Personal healthcare budgets	If a patient has a personal healthcare budget, social services will find it more difficult to know what community based care has been arranged by whom. This makes it harder for social care to ensure the care required to support discharge is in place.
Local Authority processes	To approve budgets for social care provision, Local Authorities generally have a weekly meeting to review applications, and can be insistent about having all the right information. This can delay the ability to put social care provision in place and therefore allow discharge and the panel meetings.
Patient and carer perspective	
Patient and carer anxiety about community based services at a weekend	Patients and carers may have a perception about the availability of community based care should there be an unforeseen problem at a weekend, and may feel safer in hospital.
Patient engagement in discharge planning	Hospitals may not have access to social care information and may not involve patients early enough (or the patient may be too ill to be involved) to understand their home circumstances and the impact of this on discharge planning. (Therefore important to work with relatives).

3.4 Good practice examples and resources

The following good practice examples and resources were identified by members of the workshop:

- The Health Foundation Programme: Improving patient flow[27] generated two detailed case studies:
  - Improving the flow of older people: Sheffield Teaching Hospital NHS Trust
  - Unblocking a hospital in gridlock: South Warwickshire NHS Foundation Trust
- Homerton Surgical Rehabilitation Team: work six days a week to facilitate the discharge of surgical patients – same team sees the patient for the community episode so no transfer to community teams required.
- Aneurin Bevan Health Board – pan Wales seven day therapy services[28]
- National Voices work on what patients want from integrated care[29]
- Derby Hospitals Trust[30]
- St Helens and Knowsley Teaching Hospitals NHS Trust[31]
- Integrated Care Pioneer sites[32]
- *Simulation of patient flows in A&E and elective surgery Discharge Priority: reducing length of stay and bed occupancy* (2010).[33]

04/ Royal College of Pathologists.

4.1 Current level of weekend service provision

There is currently 24/7 access for all clinical users to blood science (chemical pathology and haematology), transfusion and microbiology laboratory services to support the care of the acutely ill patient in hospital. During normal working hours non-urgent work is processed either in batches or in a continuous flow system. The level of scientific and technical cover is reduced overnight and at weekends and bank holidays to cover urgent work only, even with extended shift working (8am until 8pm). In many but not all hospitals these technical and scientific services are supported by continual access to expert clinical interpretation by pathologists. Full shift systems of analytical staff to provide the same level of service 24/7 are not possible with current staffing levels and restricted budgets. Outside “normal working hours” it is possible therefore to provide only an emergency technical/analytical service and consultant cover at weekends in many hospitals has been lost because of reduced funding.

Cellular pathology departments are also committed to providing a patient centred service and are run to meet the needs of patient pathways and to direct immediate patient management where required. These pathways need and get reports which are accurate, clinically helpful and timely with an informed clinical opinion. Processing time required for the vast bulk of cellular pathology work means that there is very little demand or need for urgent or intra-operative reporting but it is available where required. Much cellular pathology workflow is batched e.g. processing machines go on at night. There are systems that allow for a more continuous flow approach. Many services and pathways already batch work (for example, to support a regular weekly multi-disciplinary team review meeting) obviating the need an urgent report unless there is a critical or unexpected finding. Increasingly bigger departments are open for weekend working to preserve sensitivity in testing end of week biopsy samples and to keep abreast of the increasing volume of work particularly in sub-specialties.

4.2 What level of weekend service should be provided?

The provision of pathology services must be patient-centred and in response to need and demand. An equal standard of care should be provided every day and throughout the whole day to all patients. Provision of pathology services should be designed to mirror the level of care delivered in other clinical areas.

4.3 Recommendations for pathology service redesign

New demands for clinical care have always determined redesign of blood science, microbiology and cellular pathology services. These services will look to this redesign as required for 24/7 or seven day working to meet the needs of patient and clinicians. Identifying priorities for service redesign will require close working with clinical teams to ensure the optimal use of resources.

Weekend and overnight working in all pathology disciplines should only happen if it meets the needs of individual patients and agreed clinical pathways. Evening out workflow is generally good management but limited staff numbers and budgets will require significant changes in rotas and cover and the reconfiguration of laboratories on the basis of need rather than cost and the use of new technology (e.g. telepathology).

Responses to the demand for increased flexibility of overall clinical care will inevitably lead to larger pathology units with mergers of services at fewer sites. The need for accuracy will determine access to proficient specialists (meeting high Quality Assurance standards) and again this implies service provision from fewer, larger units. There must be explicit discussion and acceptance of the consequences of moving parts of the living or whole dead bodies which centralisation brings. These include the absolute needs of access to sampling (convenience of patients and clinicians), for integrated transport and electronic reporting (safe delivery of samples and results) and for the humane management of the deceased and their bereaved relatives.

05/ Royal College of Radiologists.

5.1 Current level of weekend service provision

The Royal College of Radiologists (RCR) is of the view that all imaging services currently provide a weekend on-call service for acute imaging, and this is consultant-led.

However, provision of weekend services are highly variable. For example, the RCR understands that there is a Trust which has outsourced all its weekend on-call and has no local consultant radiologist availability at weekends i.e. no ultrasound, no intervention and so on. Every hospital should have 24/7 rapid availability of ultrasound at least for renal scanning. [34]

Most hospitals have a consultant 'emergency on-call service' which is increasingly pressurised to provide non-emergency work to facilitate discharge, relieve bed pressures, meet patient and clinician expectations and so on.

Other hospitals now have one or more consultants in the department at daytimes on Saturday, Sunday or both doing 'routine work'.

Some departments outsource CT scans at night and weekends in order to maintain a service due to shortage of radiologists.

Interventional Radiology services may operate on a hub and spoke model with small hospitals transferring patients to a tertiary centre.

Skills mix is also used extensively to provide acute imaging, this may be provided by radiographers reporting on plain x-rays, sonographers performing ultrasound (US) and also for example, midwives and gynaecologists for early pregnancy/obstetric scanning, nurses for leg doppler and so on.

Emergency patients are among the most difficult to manage and benefit most from high quality imaging and image interpretation – hospitals with low death rates from emergency surgery make significantly more use of CT and US than those with high death rates.[35]

Changes in clinical practice (including moves to seven day working) are resulting in a marked increase in demand for complex and specialised imaging at weekends. The skillset of the traditional 'on-call radiologist' is increasingly inadequate to support everything that is required in terms of neuro, head & neck, paediatric, Musculoskeletal Zone, gastrointestinal etc.

Few if any Trusts will be able to provide a seven day service in all imaging specialties utilising only their own consultant staff.

Outsourcing of the whole on-call service is a poor option – lack of specialist reporting, lack of dialogue between clinician and radiologist – but networking between adjacent hospitals can provide a good solution.

5.2 What level of weekend service should be provided?

The RCR believes that a consultant-led imaging service is essential for timely and effective patient management. Almost all out-of-hours medical and surgical management decisions now require some form of radiological imaging or radiological intervention, and a timely radiological opinion is an integral part of any patient management.

There are significant resource issues in delivering the emergency and inpatient work which are outlined in this Chapter.

In principle the RCR also supports a more patient-centred approach to extended access to imaging for planned care although it does not believe that there is the financial or workforce resource available to deliver this at present.

The RCR published standards for providing a 24 hour diagnostic radiology service in 2009.[36] This document is supportive of various models of a consultant-led service for inpatient and emergencies, provided the standard of care is the same as during the 'normal' working week and appropriate governance arrangements are in place and compliance with standards for teleradiology where appropriate. The need for appropriate clinical support of the patients while in an imaging department is a priority provided by trained nursing staff.

The RCR has also collaborated with the Society and College of Radiographers (SCoR) on models for delivery of a consultant-led imaging service, jointly publishing *Team working in clinical imaging* in 2012.[37]

Radiographer reporting of plain films, and extending ultrasound services at weekends can facilitate prompt in patient investigation. However, there are also national shortages of radiographers and particularly sonographers which challenge this potential contribution to the solution.

A report from the National Imaging Clinical Advisory Group, *Implementing 7 Day working in Imaging Departments: Good Practice Guidance*[38] discusses the evidence in favour of seven day working for imaging departments for both emergency and elective work.

There is a strong argument for extended working with an expert opinion, at consultant level, being available 24 hours a day. However, there is little point changing diagnostic services to undertake investigations and generate reports for up to 18 hours a day if those who make decisions based on those test results do not work to a similar time frame.

It is not enough just to provide additional imaging services. Support services also need to be considered, for example, porters, reception and secretarial support, especially in the absence of digital dictation or voice recognition software to facilitate reporting.

5.3 RCR proposed models for delivery of inpatient and emergency imaging

The models issues can be divided into diagnostic radiology and interventional radiology.

Diagnostic radiology

Any out-of-hours service should be consultant-led, and needs to ensure that all the necessary supporting services are in place e.g. trained radiographers, clerical support, porters, nursing support for transfer of sick and unstable patients.

There is no single solution, and options will depend on numbers of radiologists available and local circumstances. Underpinning any proposed solution will be patient safety, patient outcomes and patient experience and improved efficiency.

These models include:

- *Traditional on-call rotas*
  Traditional on-call rotas may provide adequate inpatient cover provided there are sufficient radiologists and radiographers in post to provide appropriate compensatory rest following a night on-call the following day without compromising the service during the normal working day

- *Model analogous to GP out-of-hours service provision with regional collaboration*
  This model relies on collaborative radiology on-call rotas between a network of hospitals, communication between Picture Archiving and Communications System (PACS)/Radiology Information Systems (RIS) and proper governance arrangements to support transfer of images and patient data

- *Use of skills mix*
  The radiographic workforce is already being utilised to provide out-of-hours ultrasound and plain film reporting

- *Use of dedicated CT and US lists weekend mornings/daytime*
  This would enable rapid inpatient investigation of patients who are not defined as urgent, but would facilitate prompt management decision-making and discharge

- *Hub-and-spoke or network arrangement*
  Small and medium sized Trusts and hospitals may utilise better staffed larger departments to provide an out-of-hours imaging service. This has implications regarding funding and requires imaging transfer support and governance arrangements

- *Outsourcing*
  The use of other providers to provide out-of-hours reporting services. Currently many short staffed Trusts and hospitals make use of an outsourced service for Computer Tomography (CT) and plain films enabling them to continue to provide an adequate service in normal working hours.

Certain services e.g. mammography, Positron Emission Tomography (PET)-CT and radionuclide studies are unsuitable for out-of-hours provision and have not been considered.

The RCR considers none of the above options to be cost neutral.

Interventional radiology

Many small and medium sized acute Trusts and hospitals only have two or three radiologists with interventional radiology as a sub-speciality interest. It is impractical for such Trusts to be able to provide a 24/7 acute interventional service with such low numbers, lack of appropriate nursing and radiographic support etc.

There is no single model which will solve this issue, and the solution(s) will depend on local circumstances. These include:

- A network of several local NHS Trusts collaborating to provide an interventional on-call rota. This has the disadvantage of removing interventional radiologists from general radiology rotas further compromising the ability of the remaining cohort to provide an out-of-hours service

- Provision of an acute interventional radiology service via a hub and spoke model with a regional centre providing an out-of-hours service.

Both of the above will require movement of sick patients. Regional centres risk concentration of interventional radiologist specialist skills (with attendant risks: to the patient who has to be moved, deskilling of radiologists in peripheral hospitals etc.).

The interventional procedures which can safely be undertaken outside normal working hours by small District General Hospital Trusts (DGH) will depend on the local expertise, facilities and support available.

Cost Implications, advantages and disadvantages

The cost implications, advantages and disadvantages of the various proposals above are briefly discussed below.

Traditional on-call rotas, use of skills mix, use of dedicated CT and US lists on weekend mornings/days

Advantages:

- Less expensive
- Utilises existing staff and equipment effectively.

Disadvantages:

- The knock-on effect for provision of weekday working if staff are utilised at weekends
- Requires adequate support services to ensure effective and efficient utilisation: e.g. nursing, portering etc
- There is a national shortage of CT radiographers and sonographers.

Outsourcing

Some Trusts and hospitals already out-source all their out-of-hours (OOH) radiology to private teleradiology companies.

Advantages:

- No knock on effect for radiology provision in the week (compensatory rest etc)
- Better quality of life for small and medium Trust radiologists who have onerous on-call rotas
- Timely service for patients.

Disadvantages:

- Cost
- Reporting radiologists currently have no access to previous imaging
- Governance arrangements would be needed for reporting radiologists
- The knock-on effect of reporting out of context
- Examinations having to be reported again by local radiologists, therefore inefficient and not cost-effective
- It cannot cover all aspects of imaging such as hands on diagnostic (e.g. ultrasound) and therapeutic procedures.

Hub-and-spoke or network arrangement; and Model analogous to with GP out-of-hours service provision with regional collaboration

Both of these models rely on appropriate IT and governance arrangements.

Some hospitals in the UK (mainly in England) are linked via the Image Exchange Portal (IEP), and have Information Governance (IG) agreements in place to allow the transmission of imaging studies, and their reports, between hospitals using this mechanism and NHSnet as a secure and tested means of imaging study transfer. The IEP was set up by the Department of Health (England), and has now been bought by the multi-national RIS/PACS (radiology information system/picture archiving and communication system) vendor Sectra.

Sectra has agreed to host regional archives where imaging studies requiring urgent reporting will be temporarily stored, and whence they can be retrieved by duty radiologists for immediate reporting. The issued OOH reports will be integrated back into the RIS/PACS of the hospital where the patient is located and where the imaging study was generated.

The regions could be defined by extant geographical patient referral patterns and multi-disciplinary team meeting clusters.

Advantages:

- On-call radiologists are likely to be known and trusted by the local clinicians in that region
- On-call radiologists are likely to be familiar with imaging protocols and clinical practice within their region, and may already (or easily could) take part in regional multi-disciplinary team meetings
- Potentially cheaper than outsourcing to teleradiology company
- It would allow many DGHs (who are struggling to recruit radiologists) to concentrate stretched resources on daytime work for seven day radiology service delivery.

Disadvantages

- Would require strong management arrangements to organise a complex on-call rota across a number of Trusts
- Potential workload is unknown which makes costing business model difficult.

Conclusions

Most hospitals currently provide seven day access to imaging investigations and interventional radiology for emergencies. However, the same level of service may be required in less urgent circumstances in order to facilitate a change in the patient's management pathway. This may be a change in diagnosis, alteration in treatment or an earlier discharge from hospital. The Royal College of Radiologists is pleased to see it is recognised in the Part 1 of this Academy report (Chapter 3) that it is essential that appropriate priority is afforded to the provision of radiological services (including cross sectional imaging and ultrasound). Effective and timely use of imaging services can ensure patients receive the most appropriate treatment by the appropriate clinical team and can shorten inpatient stay.

There is no single solution to the problem of providing seven day access to imaging investigations and interventional radiology and solutions will depend on local service staffing and governance arrangements.

Any of the above proposals would need investment in more staff, both medical and support staff; it is not sustainable to spread staff already under pressure even more thinly. There needs to be investment in infrastructure in terms of support staff and IT and the development of regional co-operation and governance structures.

5.4 Good practice examples

A Consultant in an East Midlands Trust has set up multiple specialist rotas covering a number of hospitals in the East Midlands with networked speciality on-call arrangements e.g. six paediatric radiologists, six/seven musculoskeletal radiologists covering trauma, seven/eight gastrointestinal radiologists covering acute abdomen etc.

5.5 Background to the Royal College of Radiologists comments

The RCR conducts an annual workforce census, which provides credible data essential for workforce planning. There are currently too few radiologists in the UK, unevenly spread amongst geographic regions, to deliver the quality and breadth of service that we would aspire to. Despite extensive efforts in service redesign and skill mix the current workforce is unable to support consultant-led out-of-hours seven day working in its traditional format. The development of PACS will facilitate other options including the potential for regional reporting networks. However, as with other specialties, the RCR believes that there needs to be local access to a consultant-led service.

A Centre for Workforce Intelligence (CfWI) Clinical Radiology Stocktake report[39] contained the following key findings in relation to the workforce in England:

- There have been year-on-year increases in all imaging modalities and the CfWI expects this trend to continue
- Complex imaging, which is more consultant intensive, is increasing as a percentage of total imaging and the CfWI expects this trend to continue
- There is an increasing imbalance between supply and demand and the consultant workforce may not be able to cope with the additional imaging demands expected in the future
- Current training numbers are not adequate to meet future demand as the service is presently configured
- An expansion of clinical radiology trainee numbers is required until the next CfWI review
- There is evidence to support expansion of the interventional and paediatric radiology workforces
- Growth of the non-medical workforce, particularly radiographers, is required to support any workforce expansion in clinical radiology.

There will be a five-year lag time before the extra radiologists in training will join the workforce.

06/ British Society of Gastroenterology.

6.1 Current level of weekend service provision

The provision of acute gastroenterology services out of hours is variable with some units having on site or formal network pathways and others currently having no out of hours provision.

6.2 What level of weekend service should be provided?

Bleeding in the oesophagus, stomach or duodenum is the most common emergency managed by gastroenterologists in the UK, with at least 50,000 hospital admissions per year. Despite changes in management, mortality has not improved over the past 50 years. It is estimated that around one in ten hospital admissions for upper gastrointestinal bleeding results in the patient's death – around 5,000 deaths per year in the UK.

Upper gastrointestinal bleeding is usually caused by peptic ulcers, which can bleed as the ulcer erodes into an underlying artery, or oesophago-gastric varices (dilated veins in the oesophagus).

The June 2012 NICE guideline CG141 *Gastrointestinal bleeding: the management of acute upper gastrointestinal bleeding* [40] makes a number of key recommendations, including:

- Offer endoscopy to unstable patients with severe acute upper gastrointestinal bleeding immediately after resuscitation
- Offer endoscopy within 24 hours of admission to all other patients with upper gastrointestinal bleeding
- Offer interventional radiology to unstable patients who re-bleed after endoscopic treatment. Refer urgently for surgery if interventional radiology is not promptly available.

These recommendations mean a 24 hour endoscopy service must be available to all patients presenting with acute upper gastrointestinal bleeding (AUGIB): out-of-hours, weekends and bank holidays. Some hospitals do have Saturday, and even Sunday, endoscopy lists which does help provide a more structured service to urgent patients but by no means all hospitals do this. Indeed following NICE guidance does not mean having to have such planned weekend lists but it does mean that there should be an on-call team ready to spring into scoping action round the clock. Most large hospitals have such a service but the audit that NHS England have done with the British Society of Gastroenterology shows just how patchy the service is around England.

6.3 Good practice examples

Royal Liverpool and Broadgreen University Hospitals NHS Trust – extended endoscopy service. [41]

Southampton University Hospital Trust. [42]

The setting up and running of a cross-county out-of-hours gastrointestinal bleed service: a possible blueprint for the future.[43]

Education in practice: Provision of an out-of-hours emergency endoscopy service: the Leicester experience.[44]

07/ Association of Surgeons of Great Britain and Ireland.

7.1 Current level of weekend service provision

The Association of Surgeons of Great Britain and Ireland (ASGBI) represents general surgeons and with the Royal College of Surgeons of England has produced a range of documents to set standards and provide guidance to commissioners and others.

Emergency general surgery (EGS) is primarily concerned with the assessment of new abdominal emergencies and urgent gastrointestinal (GI) surgery. In smaller units, EGS may cover a much wider range of practice and in larger units the GI service may be subspecialised into upper GI and colorectal. However, EGS remains a service on which many other hospital services rely as an acute fallback. It is the largest of the surgical services. Emergency laparotomy, of which there are over 35,000 annually, still carries a formidable mortality of 15% overall and substantially higher among the elderly. Remarkably, at least one third of these cases are still not admitted to a critical care environment. Mortality varies between hospitals between two and three fold and improved outcomes are associated with better levels of critical care and radiology provision.

Recent years have seen major changes in consultant-delivery of EGS with consultant-led post take rounds and consultant-presence at every emergency laparotomy the expected norm. National standards of practice have been defined in several publications which have become widely utilised and audited against locally (The Higher Risk General Surgical Patient: Towards Improved Care for a Forgotten Group. The Royal College of Surgeons of England and Department of Health Report on the *Peri-operative Care of the Higher Risk General Surgical Patient 2011*.[45] These standards lay out expected timescale and seniority of assessment and intervention. The surgical on-call weekend is now a misnomer. The modern consultant can expect to be present and working on site for most of the waking hours and out of bed typically one night in three. Part of this increased workload reflects the reduced support available from shift based juniors who are concomitantly less-experienced and often unable to operate independently.

Apart from assessing new emergencies, a major weekend activity is the review of general surgical inpatients, almost all of whom require daily review to maintain safety and clinical progress. Many have had major surgery and serious complications among these cases are not uncommon. They provide one in six emergency laparotomies and a proportionately higher rate of “lesser” critical events out-of-hours. An increasing number of hospitals recognise that given the heavy workload of EGS and the degree of specialisation of elective surgery that a different consultant is required for effective review of specialty elective inpatients. Perhaps not surprisingly, outcomes from the management of complications differ tangibly between units and can be used to define successful teams.

7.2 What level of weekend service should be provided?

The Higher Risk General Surgical Patient document referred to above lays out modern standards of care for critically ill surgical patients. These include:

- Trusts should formalise their pathways for Unscheduled Adult General Surgical Care. All patients should have a clear diagnostic and monitoring plan documented on admission which matches the competency of the doctor to the needs of the patient
- Prompt recognition and treatment of emergencies and complications is essential to improve outcomes and reduce costs. Surgical patients often require complex management and delay worsens outcomes. The adoption of an escalation strategy which incorporates defined time-points and the early involvement of senior staff when necessary are strongly advised

- Trusts should ensure emergency theatre access matches need and ensure that prioritisation of access is given to emergency surgical patients ahead of elective patients whenever necessary, as significant delays are common and affect outcomes. For example, the commonest group (85%) of emergency laparotomy patients, who have organ dysfunction but no septic shock or active haemorrhage, should be in theatre within no more than six hours of the onset of deterioration

- Each patient should have their expected risk of death estimated and documented prior to intervention and due adjustments made in urgency of care and seniority of staff involved

- High risk patients are defined by a predicted hospital mortality ≥ 5%: they should have active consultant input in diagnostic, surgical, anaesthetic and critical care elements of the pathway

- Surgical procedures with a predicted mortality of ≥ 10% should be conducted under the direct supervision of a Consultant Surgeon and Consultant Anaesthetist unless the responsible consultants have satisfied themselves that their delegated staff have adequate competency, experience, manpower and are adequately free of competing responsibilities

- Risks should be jointly re-assessed at the end of surgery, using an “End of Surgery Bundle” to determine optimal location for immediate post-operative care

- All high risk patients should be considered for critical care and as a minimum, all patients with an estimated risk of death of ≥ 10% should be admitted to a Critical Care Unit.

Numerous publications from ASGBI, Colleges and the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) have defined the shortfall in provision of key resources for emergency surgery. Resources with critical shortfalls include theatre access, critical care support and radiology. Improvement of these will improve patient outcomes.

Theatre access may seem fundamental but when surveyed in 2010, a majority of general surgeons reported critical deficiencies in emergency theatre access. Trusts need direction and support to prioritise emergency theatre access as colleagues report that elective pressures often impinge.

Current audit figures show that emergency laparotomy has consultant surgeon involvement in at least 75% of cases. Achieving close to 100% Consultant Surgeon and Anaesthetist involvement is a priority.

Elective cardiac surgery carries a mortality of around 2% and routinely utilises critical care. Emergency laparotomy mortality exceeds that seven-fold but one third of patients still do not go to critical care after surgery. Recent work has associated outcomes with units who utilise more critical care and have better radiology support for these patients.

Radiology is completely fundamental to acute general surgical practice.

The assessment of acute abdominal pain requires liberal and rapid access to ultrasound and CT. Early imaging can allow more rapid turnover of patients with acute abdominal pain thereby relieving bed pressure and reducing costs. Approximately one fifth of surgical admissions could probably be avoided by structured ambulatory assessment with imaging.

Computed Tomography is utilised in almost all major cases and it is recognised that specialist senior reporting (GI consultant) changes the scan interpretation significantly in some 10 to 20% of cases such that the treatment plan would be influenced. From the surgeons’ perspective, diagnostic scanning is available in every hospital but restricted access limits effective practice.

The role of interventional radiology in acute general surgery is now very significant and represents the treatment of choice for a range of conditions. However, only 20% of surgeons report that they have comprehensive access around the clock with patients therefore facing an alternative treatment, potentially critical delay or complex transfer.

Consultant input to emergency surgery is now fundamental but relatively unsupported. Measures to maintain sustainability need addressing such as the location of acute surgical patients within a defined location/ward. Treating these patients optimally is time critical and complex and having them scattered around the hospital facilitates avoidable adverse outcomes.

Part of the debate around EGS centres on service rationalisation and in some cases amalgamation. The number of cases with which an Emergency General Surgery team, and its related necessary services, can effectively cope has not been explored in detail in relation to outcomes, manpower and service delivery close to patients homes but it is becoming clear that the better access to services and specialisation available in larger centres has to be balanced against some aspects of functionality and local access. Current thinking also sees advantages in defining some hospitals as providers of comprehensive “higher risk” services and others as local providers of lower risk care at least in metropolitan areas where numbers and relative proximity of hospitals permit this.

As indicated above, separate subspecialty weekend ward rounds by each major subspecialty could improve care.

7.3 Good practice examples

Many units are already delivering a hands-on consultant Emergency General Surgery service and some deliver separate consultant-led care to complex elective inpatients at weekends in addition.

There is active debate within the profession and change continues in many units and regions. The trend to increased specialisation is strong and larger units will likely deliver increasingly specialised services in future although the precise pattern will vary.

The National Laparotomy Audit (NELA) is compulsory for all acute units and is now underway.

7.4 Resources

- Royal College of Surgeons of England (2011) *Emergency Surgery: Standards for unscheduled surgical care. Guidance for providers, commissioners and service planners*. [46]
- The Royal College of Surgeons of England and Department of Health Report on the Peri-operative Care of the Higher Risk General Surgical Patient (2011) *The Higher Risk General Surgical Patient: Towards Improved Care for a Forgotten Group*. [45]
- Association of Surgeons of GB & Ireland (2012) *Emergency General Surgery. Issues in Professional Practice* [47]
- Royal College of Surgeons of England and Association of Surgeons of GB & Ireland (2013) *Emergency General Surgery*. [48]

08/ Royal College of Anaesthetists

Hospital consultant services should not be viewed in isolation from community services. There would be little benefit in increasing anaesthetic services provision without appropriate in-hospital support, for example, from diagnostic radiology and laboratory services.

The Royal College of Anaesthetists consider that there should be stronger emphasis on the use of Early Warning Scores (EWS) in hospitals, which would raise the standards of care for patients 24/7. This is an issue that has already been addressed by the RCP report *National Early Warning Score – Standardising the Assessment of Acute-Illness severity in the NHS*.[10]

Increased consultant-presence out-of-hours would be an opportunity to increase the delivery of training in the management of emergencies, but should not reduce the acquisition by trainees of vital skills such as decision making, resource management and team leadership. There are clear resource implications for this increase in service provision and without an increase in appropriate personnel there may be a negative impact on routine elective work.

Many hospitals have bespoke anaesthetic rotas which provide consultant-delivered care reflecting local needs, particularly during weekends, and this successful modelling may provide a template for other medical specialties to consider. There are well established examples of sub-speciality rotas in anaesthesia (such as obstetric, paediatric, cardiac anaesthesia and intensive care), to ensure direct consultant care.

It is important to emphasise that patient outcomes cannot be improved by simply increasing the number of senior and junior doctors. Increased surgical activity will necessarily require increased nursing levels during the perioperative period.

Anaesthesia is similar to radiology in that it is not a speciality measured in terms of bed occupancy, but is nevertheless central in relation to enabling timely surgical interventions.

09/ British Cardiovascular Society.

9.1 Current level of weekend service provision

Provisions of seven day services and 24/7 services are already commonplace in certain areas of cardiology.

Primary Percutaneous Coronary Intervention (PPCI) for the treatment of ST elevation myocardial infarction in 2012 was performed in 99 centres in the UK of which 58 were providing a 24/7 service.[49]

Many centres, mainly large regional centres perform urgent device implantation, coronary angiography and coronary intervention at weekends for inpatients but very few centres are also providing weekend catheter lab lists for elective patients.

There is now a requirement in the Heart Rhythm UK Standards document[50] for centres that implant complex devices to have a 24 hour on-call system in place to allow interrogation and management of complex devices. Provision of cardiac physiology device interrogation is becoming increasingly common in large centres.

9.2 What level of weekend service should be provided?

All new admissions should be seen by a Consultant within 24 hours (and ideally 12 hours) – this includes inter-hospital transfers to regional centres.

All patients should be seen by a consultant or specialist registrar at least once during the Saturday/Sunday period.

Primary Percutaneous Coronary Intervention (PCI) centres treating ST elevation myocardial infarction should be available 24/7 without exception.

All Non-ST elevation myocardial infarction patients requiring coronary angiography +/- PCI should have access to invasive catheter lab investigation within 48 hours.

All patients requiring urgent permanent pacing should have their procedure within 48 hours of presentation – where possible (and clinically appropriate), a permanent system should be inserted as the first definitive procedure rather than a temporary wire with appropriate facilities/ expertise for device checking and interrogation.

There should be a planned coronary angiography +/- PCI list and provision for permanent pacemaker insertion on either Saturday or Sunday (both days for larger centres) in all regional cardiac centres.

Echocardiography services (whether delivered by a trained doctor or physiologist) should be provided 24/7 for centres within an acute cardiac care unit.[51] The current level of this provision is unknown but, in larger centres, is mainly performed out-of-hours by cardiology trainees. In a small number of centres there is limited provision of weekend daytime echocardiography services by cardiac physiologists.

Echocardiography services (whether delivered by a trained doctor or physiologist) should be available every day, including weekends, for urgent inpatient and some urgent elective patients.

10/ Renal Association.

10.1 Current level of weekend service provision

The vast majority of haemodialysis patients in the UK dialyse three times weekly on either Mon/Wed/Fri or Tue/Thu/Sat. Dialysis units are usually closed on Sundays. Emergency dialysis is available at virtually all Centres 24 hours a day, seven days a week.

10.2 What level of weekend service should be provided?

There is reasonably good evidence to suggest that offering more frequent or longer haemodialysis sessions improves outcomes. There is also some evidence to suggest that the "long gap" (Friday to Monday or Saturday to Tuesday) is associated with a higher risk of adverse events including sudden death as compared to other times of the week.[52] Thus the provision of dialysis services seven days a week would open up the possibility for more frequent dialysis treatment or true alternate day therapy for patients.

10.3 Good practice examples

Most units offer home haemodialysis therapy, which allows patients to dialyse when and as often as they wish.

11/ British Thoracic Society.

11.1 Current level of weekend service provision

Respiratory Medicine is a core medical specialty delivering emergency care via the emergency medical take, managing large numbers of patients on specialist wards and delivering specialist procedures (e.g. bronchoscopy).

The British Thoracic Society (BTS) and its members recognise the need to deliver high quality care to its patients. However, there is currently a lack of information regarding delivery of many of these core services. There is no robust data about the current level of weekend service provision in respiratory medicine for any of these facets of medical care. It is unclear what proportion of the emergency medical take is delivered by respiratory physicians in the UK. The bed holding capacity of respiratory medicine in the UK is not easily identifiable and, possibly more importantly, whether the number of respiratory beds available matches the number of emergency or inpatients requiring specialist respiratory input (as determined by Healthcare Resource Group coding or Hospital Episode Statistics data). There is also a paucity of information regarding the access to bronchoscopy (not confined to weekend working).

A seven day service is already provided in a number of Trusts. These are the larger Centres, predominantly those acting as Regional Centres, which have sufficient consultant numbers to provide a 24/7 specialist respiratory on-call service. In these Trusts the weekend service provision is geared towards management of acute admissions, and inpatients will be reviewed. Non-emergency work takes place almost exclusively Monday-Friday.

Smaller Trusts with fewer Respiratory Consultants find it more difficult to provide specialist input seven days per week. The vast majority of Respiratory Consultants in these Trusts contribute to the acute medical admissions take over the weekend, but there will be periods when a specialist respiratory opinion is not available on site. As with larger Centres, non-emergency work takes place almost exclusively Monday-Friday.

Bronchoscopy is usually a semi-urgent procedure which is performed in many hospitals in the Endoscopy unit. Most hospitals have lists between Monday-Friday, the number varying with the size of the hospital; we are not aware of any current provision for routine lists at the weekend.

The clinical context(s) for an urgent bronchoscopy are limited (see below). Non-specialist assessment for indications and fitness for fibre-optic bronchoscopy carry with them severe negative implications for patient safety.

11.2 What level of weekend service should be provided?

All new admissions should be seen by a consultant within 24 hours, ideally within 12 hours. This includes inter-hospital transfers to regional centres. Consultant review should also be readily available for any patient whose condition deteriorates during a weekend.

We note that some specialties have included bronchoscopy as an investigation which should be available as part of seven day working. The implication is that delivering a weekend bronchoscopy service would have an immediate impact on clinical management. By providing some clinical scenarios for a bronchoscopy it is possible to demonstrate that this is not necessarily the case:

Cancer: most patients require CT first and should have specialist (respiratory) assessment as to the most appropriate diagnostic test. This test (usually bronchoscopy or fine needle aspiration) is not an immediate requirement and can await the next available list. Cancer pathways set tight target times for achieving diagnosis and these are currently achieved in most cases without weekend lists.

Haemoptysis: if it is life threatening or large volume, rigid bronchoscopy offers a safer alternative with more therapeutic options as the suction channel is small in a fibre-optic bronchoscope and putting any therapeutic instrument through the fibre-optic bronchoscope occludes the suction port. Similarly only a few fibre-optic bronchoscopists have therapeutic skills. Minor haemoptysis does not require urgent assessment.

Infection: urgent bronchoscopy may be of benefit in some cases. However, with severe pneumonia many patients are too sick/unstable to tolerate an urgent bronchoscopy and yield is limited. Patients at risk of opportunistic infection require a soon bronchoscopy and weekend bronchoscopy may help here, but most are treated empirically pending further sampling, and for pneumocystis there exists a five day window.

Lobar/lung collapse: access to weekend bronchoscopy may be helpful, although patients are often too unstable to tolerate the procedure safely. This scenario may be secondary to cancer and thus would require pathological sample taking and so on.

The nursing skills required for bronchoscopy are similar, but not identical, to those required for GI Endoscopy procedures and there are insufficient numbers of trained nursing staff to provide routine weekend lists (unless this is at the expense of lists during the traditional working week).

As indicated above, there are few indications for bronchoscopy over the weekend, and having this routinely available is unnecessary. Many Trusts have provision for emergency bronchoscopy but this may involve carrying out the procedure with the help of support staff who do not perform the procedure routinely (usually GI endoscopy nurses) and therefore needs a careful individualised assessment of risk/benefit.

12/ Royal Pharmaceutical Society.

12.1 Current level of weekend service provision

Prescribing errors remain a major issue in hospitals and an emergency inpatient phase presents significant risk of miscommunication and unintended changes to medicine as patients are transferred between care settings. A 2010 audit across 50 acute Trusts found that most of over 8,600 patients involved had at least one omitted drug or wrong dose following admission.[53] Clinical pharmacy services play an essential role in managing patient's medicines. Where the clinical pharmacy service is limited or unavailable at weekends, hospitals report increases in missed or delayed doses, higher prescription errors, lack of medicines reconciliation and delays to discharge.

12.2 What level of weekend service should be provided?

Pharmacy support to emergency admissions units should be available seven days a week to incorporate medicines reconciliation and prescription review service within 24 hours of all admissions, in-line with NICE and National Patient Safety Association guidance. This would ensure appropriate prescription review takes place over the weekend and the correct medicines start early in a patient's admission; timely and effective decision-making on post-take ward rounds would be supported by pharmacy staff; medicines supply will be made quicker, with significantly fewer drug charts leaving a ward area; and more efficient weekend discharge can be facilitated leading to a decreased risk of medicines related readmissions.

12.3 Good practice example

Anecdotal findings from the introduction of a weekend clinical pharmacy service at Northumbria Healthcare NHS Trust saw emergency duty call-out rates for supply on Sundays decrease by 84%; critical medicines call-out rate decreased by 75%; and the percentage of patients admitted on Mondays who had medicines reconciliation within 24 hours, increased from 22% to 73%.

13/ Chartered Society of Physiotherapy.

13.1 Introduction

The Chartered Society of Physiotherapy (CSP) welcomes the Academy's work in the area of seven day care, the identification of standards related to seven day consultant-present care, and the additional detailed views of each of the medical Royal Colleges. This work is of real value in supporting the quality assurance of future policy and operational developments, and the CSP is pleased to be able to contribute to the debate.

In particular, the Society welcomes the Academy and medical Royal Colleges' full recognition, and support of the principle, that successful care is based on a team approach where a range of clinicians along the care pathway, including physiotherapists, contribute to the delivery of a successful outcome for patients.

The CSP also welcomes the acknowledgement within this report that meeting quality standards of patient care is unlikely to be cost-neutral and that there is a need to align national levers to facilitate and support the achievement of the ambition '*NHS Services, seven days a week*'.

13.2 The CSP's Position

The CSP supports the principle that physiotherapy services should be available to patients when they need it, and that changes to existing service organisation should be introduced to have a positive impact on patient care and to improve the quality, timeliness, accessibility and efficiency of service provision.

With regards to the introduction of seven day services, the CSP's position is the same as for any other proposed change to service organisation. This is that the introduction of seven day services must:

- Be focused on improving the quality of care for patients in terms of outcomes and their experience
- Be based on the principles of integrated service delivery, in the interests of patient care, across teams, professions, settings and sectors
- Be properly funded and resourced, including through appropriate consideration and action taken relating to achieve effective staffing levels and skill mix, and with investment made in staff development and support to achieve the likely cultural change necessary to ensure successful implementation
- Maintain quality employment for all those delivering the services, as an integral part of delivering quality services; i.e. early consultation, engagement and involvement of staff and trade union representatives in decision making, with appropriate terms and conditions of employment maintained or put in place.

13.3 Critical steps to successful implementation

The view of the CSP is that a number of steps must be taken if seven day care is to be implemented successfully. The Society believes that these areas and actions need careful consideration prior to the establishment of any seven day service.

The steps outlined below are drawn from interviews with a range of CSP members who have been involved in developing and implementing six- or seven day services, or who have extended the hours of a service. The most significant emergent themes from these interviews are that:

- The introduction of seven day services alone does not necessarily achieve improved quality, outcomes for patients or efficiencies in service delivery
- To achieve successful outcomes, and effective service implementation, the full range of team members and partner agencies must be brought together at the start of the process.

The Steps:

- Identify the driver for change to ensure that the expansion of the provision of services into weekends or extended hours is primarily driven by the need to deliver improvements for patients in terms of clinical outcomes, patient-reported outcomes and experience
- Identify the baseline data set, upon which the introduction of seven day care can effectively be benchmarked, measured and evaluated
- Consider a pilot of the proposals prior to any permanent change so that this is enacted based on an evaluation of results and learning with regards the change process; in addition, all partners should be involved in the evaluation process and analysis of results
- Challenge and examine the local approach to service improvement; it may be that a broader range of service improvement initiatives should be considered, along with the introduction of seven day consultant-present care, to optimise the impact and value of change (e.g. this might include extending initiatives such as enhanced recovery)
- Consider the necessary interventions across the whole pathway from acute to community in ways that involve all the relevant team members and agencies across teams, professions, setting and agencies and the consideration of both service design and implementation
- Review the staffing levels and skill mix of the full multi-disciplinary team, and change it to reflect the altered demands on service provision resulting from the new design of services developed in order to optimise arrangements for the delivery of safe, effective, quality patient care
- Ensure that the new model provides for a continuity of staffing, e.g. it is helpful, with regards to safety and effectiveness, that staff members know patients and that staff are not parachuted in from other ward, or service areas, to provide cover two days a week
- Assess and provide the necessary Information, Communication and Technology (ICT) infrastructure to support data collection and operational management, such as provision of appropriate online rota systems. Engage and consult with staff and trade union representatives early in the process of change, as this will have a significant impact on the progress of the consultation process, the success of the consultation and on the whole change process

- Consultation on proposals must include the ability for staff to be able to influence the organisation with regard to new working patterns and hours and to achieve consensus on how the new working patterns will be implemented and operated; this includes in ways that uphold quality employment for all staff involved or affected by new arrangements

- Engage and consult with staff and representatives early in the process of change to identify the range of practice, personal and employment issues that will be of concern; this needs to include identifying the time out required for frontline staff across the whole pathway to support the cultural change process that is necessary for successful implementation of this, or any new model of service

- Consider and secure the funding model and appropriate level of funding necessary to provide the agreed service that reflects the set-up costs and possible released efficiencies (savings)

- Consideration of the pay budget must take account of the impact of the change of any increase in activity levels and demand for physiotherapy, and changes to working patterns (e.g. emergency duty and pay enhancements may either decrease or increase depending on the staffing model used to provide increased service hours)

- Agree the level of flexibility required that will address both the requirements of Improving Working Lives[54] and changes to service demand.

An imperative underpinning the progression of seven day models of care is that these are the subject of on-going research and evaluation. Emerging evidence of what works well needs to contribute to future approaches to service development and delivery, and to decision-making about how services are commissioned, resourced and subject to review.

The principal focus of research and evaluation needs to be on how patient care (outcomes and experience) can be enhanced through specific seven day care models for particular patient groups, and within particular patient pathways, specialties and settings, with the aim of developing new evidence and supporting evidence implementation and knowledge transfer.

Activity also needs to be focused on measuring the impact of seven day care on cost-effectiveness and affordability (including that which can be gained in the long-term through meeting population and patient needs in more timely, integrated ways – across health and social care, and acute and community settings), quality employment, skill mix and role development, and education and training (at pre- and post-registration levels, for support staff, and including to promote inter-professional and inter-agency collaboration and leadership).

13.4 Conclusion

The consensus from physiotherapists who have evaluated the introduction of seven day care is that it requires significant investment in both time and resource. This is required to ensure that the design and implementation of a model is agreed by a whole pathway of providers, or team, and is one that will deliver successful and improved patient outcomes. Efficiencies can be made, but it must be recognised that these may not always be seen within the immediate area of provision; e.g. there may be an increase demand on physiotherapy services with an associated increased pay bill, but efficiencies may be gained elsewhere through a reduction of patients' length of stay. Service improvement may be evaluated in many ways and the evaluation framework must be linked to the clearly defined need that drove the introduction of the new model.

14/ Royal College of Nursing.

The Royal College of Nursing (RCN) recommendations on nurse staffing recognise that the complexity of acute sector nursing requires the use of workforce planning tools that take account of both the level of nursing dependency and the physiological acuity of patients – and that this is done dynamically 24/7. Similarly the college are mindful of the diverse roles of nurses within the acute sector and the need for workforce planners to be mindful of the managerial and leadership role of the nurse as well as the clinical roles – general, specialist and advanced practice. In order for acute sector processes to move at a consistent pace over seven days the nursing workforce elements linked to patient's movement through pathways of care need to also be consistent seven days per week.

As in medicine and allied professions nursing has developed specialities and sub-specialities to keep pace with advances in care delivery and the changing requirements of the inpatient population and outpatient service user. It is important to recognise that specialist areas within the acute sector need an appropriate level of specialist nursing at all times. Specialist nursing includes nurses based permanently on the department, unit or ward who have a post-graduate qualification in the nursing care of a particular patient population and also multi-disciplinary team linked nurse specialist who operate across the hospital and in some instances cross boundary into the community.

Department, unit and ward level nurse leadership is a theme of the RCN's Future Nurse Future Workforce project as well at the Future Hospital Commission and the Francis report. It is vital that senior nurse leadership is available at department, unit and ward level seven days per week and that this leader is in addition to the nurses assigned to specific patients or clinical specialist roles. Through strengthening the supervisory role of the nurse leader across the hospital the team performance can be managed across shifts and equity of experience for patients achieved across seven days.

It is important that the nursing workforce model has the ability to respond to changes in case mix and/or operational changes seven days per week. This is particularly important in areas where there may be a varied level of dependency from both basic nursing care and physiological perspectives.

The nursing workforce required to enable consistent movement of patients through the acute sector in a safe and timely manner seven days per week includes our colleagues in the community and in domiciliary settings. District nurses, community nurses (general and specialist) as well as nurses in domiciliary settings will need to be supported and resourced to receive the care of their patients at weekends.

15/ British Dietetic Association.

15.1 Introduction

There is good evidence that providing nutrition support of adults who are malnourished or at high risk of becoming malnourished within 72 hours of admission leads to improved clinical outcomes; including reduction of nutrition related complications and reduced length of stay and readmission risk.

Many other long term conditions including inflammatory bowel disease, diabetes, kidney disease and cystic fibrosis also require timely, high quality and effective nutrition and dietetic care and can benefit from early intervention which aims to reduce symptoms and nutrition related complications.

15.2 Recommendations

The British Dietetic Association (BDA) recommendations for provision of seven day services:

Where seven day consultant services are in place or planned, consideration should be given to how the necessary dietetic and nutrition services will be provided. This will include:

- The dietetic knowledge and skills necessary to provide the service
- Different demand on services across the week, ensuring safe levels of service at all time
- Different models of service provision to meet different circumstances and needs.

Services should focus on those areas where:

- Intensive and/or early intervention improves outcomes, or
- Dietetic services support early and safe discharge to community services.

These areas could include intensive care, tertiary specialities, major trauma, and those specialities where nutritional care is an integral component of care such as diabetes and for individuals requiring home enteral tube feeding.

Safe and effective dietetic services require:

- Suitably experienced staff with the competence to provide the necessary services
- Less experienced dieticians along with dietetic support workers can provide the service
- Where less experienced dieticians and support workers provide the service, access to more expert dieticians is essential.

Access to other necessary services is essential

- Necessary services include primary care, pharmacy, catering services, community services
- Support services will vary with the dietetic service provided and need to be integrated into planning of seven day services.

16/ British Association / College of Occupational Therapists.

16.1 Current level of weekend service provision

The British Association/College of Occupational Therapists obtained information from 22 Trusts across all four home countries. There was a wide range of weekend cover, with the vast majority of the 22 Trusts providing some form of weekend occupational therapy (OT) service.

The weekend services provided tended to be service specific (e.g. elective surgery; stroke; A&E), though some were focused on supporting discharge across different clinical services. Examples of the variety of where weekend occupational therapy services are being provided include:

- Acute medical inpatient beds
- Elective orthopaedics inpatient beds
- Neurology; stroke and neurosurgical inpatient beds
- Elderly acute inpatient beds
- Community rehabilitation teams
- Accident and Emergency
- Spinal Injury Units
- Vascular surgery
- Assessment Units.

Whilst a formal audit of all Trusts has not been undertaken, it is highly likely that most Trusts across the UK have weekend OT services, but the specialties supported and the level of service provision will vary significantly. It is recognised that services have adopted different models in order to address the limitations of a fixed five day service, these include earlier and later daily service availability and either six or seven day models. The rationale is based primarily on service need, but is also related to resources.

16.2 What level of weekend service should be provided?

The British Association/College of Occupational Therapists supports the provision of seven day services, where patients benefit from having client centred services that are offered through extended hours and at weekends. Although seven day services are not required for all occupational therapy client groups, more evidence is becoming available as to which services, when provided on a seven day basis provide improved outcomes for patients.

Key benefits identified by occupational therapists relate to reduced length of stay in hospital, more timely discharge and prevention of avoidable admissions. Examples include working in accident and emergency services to prevent avoidable admissions, continuation of rehabilitation for stroke services to reduce length of stay, assessments carried out at weekends facilitate easier discharges on Mondays and ensuring discharge planning continues at weekends. Other areas where occupational therapy is providing weekend services include reablement support, provision of activities in mental health wards, and provision of post discharge support

The British Association/College of Occupational Therapists are aware of different organisational arrangements being utilised to provide additional weekend services. These include voluntary rotas, use of bank staff, and on call practices. Some organisations received additional funding

to increase service provision, while others spread their existing resource across the seven days. In order for these arrangements to be sustainable, they need to be appropriately planned and resourced.

An important caveat is that there needs to be a multi-disciplinary team approach to extended hours provision. The patient needs the right services, from the right staff at the right time and most importantly with the right resources. This will only happen if a whole systems approach adopted and that that planning and appropriate investment is identified.

Forward planning is therefore required to ensure that all necessary requirements for patients to receive the appropriate care throughout the whole week, is available on a long term sustainable and safe basis. This will require consultation with staff, unions, and across boundaries and with the patients themselves.

16.3 Recommendations

Services should be configured around the client and focused on improving the quality of care to improve outcomes and patient experience.

A whole systems approach, crossing traditional sector boundaries is required to ensure that the patient receives a coordinated and integrated service throughout their care journey.

It is important to identify which are the services where occupational therapy can provide most patient benefit when provided on a seven day or extended basis. This should be based on positive patient outcomes.

More research and evidence is needed to fully understand the impact of new models of service, in terms of benefits for patients and also efficiency and affordability for the service and organisation.

Occupational therapists recognise that their contribution to patient care spans seven days and are responding by redesigning services to accommodate this. In order to achieve the right staff, with the right skills, being available at the right time, to provide the right outcomes for the patient, the issue of the right resources and planning will need to be addressed.

16.4 Good practice examples

The College of Occupational Therapists have identified the following good practice examples:

- Great Western Hospital, Swindon – weekend Acute OT service
- Ipswich Hospital – Emergency Assessment Unit Therapy Team
- Ayr Hospital, NHS Tayside – whole AHP seven day model

17/ Royal College of Speech and Language Therapists.

Speech and language therapists have a pivotal role in assessing, diagnosing and treating children and adults with disorders of communication and feeding/swallowing in the acute/community sectors by:

- Identifying problems and implementing appropriate management strategies
- Supporting early discharge
- Reducing the incidence of delayed discharge
- Reducing the risk of readmission
- Care planning and training of the wider workforce to promote understanding of these issues and ensure that the needs of each patient can be met at all times.

Accurate and timely assessment and management of communication and swallowing conditions avoids unnecessary admission to hospital, reduces length of hospital stay and costs by:

- Reducing the sequelae of feeding difficulties/dysphagia, e.g. choking, chest infection, failure to thrive and aspiration pneumonia
- Ensuring patients are nourished and hydrated appropriately
- Reducing nil-by-mouth days, while waiting for assessment
- Reducing unnecessary tube feeding
- Supporting other staff members to help them establish capacity for specific decisions for communication-impaired patients and to assist the patients in expressing those decisions
- Facilitating patient engagement in transition arrangements and treatment options through the establishment of effective methods of communication
- Supporting effective communication between health and social care staff and patients and their families
- Contribution of information that informs the overall medical diagnosis or surgical plan.

17.1 Current level of weekend service provision

The implementation of seven day service practice for speech and language therapy is being trialled in several locations across the UK, across acute and community sectors. These examples suggest that seven day working could be beneficial in acute services, both for throughput and quality of care.

Seven day working has enabled adult community services to provide rapid response assessment and intervention, particularly in end of life care. Seven day working is also beneficial for the ever increasing elderly and frail population, who often present with swallowing (dysphagia) as one of their aetiologies. Swallowing difficulties for both end of life care and the elderly population can be dealt with in the patient's home so avoiding hospital admission.

17.2 What level of weekend service should be provided?

The level and type of service provision, both with respect to skillmix and staffing will vary according to the following local factors:

- The clinical caseload and associated risk factors (e.g. ratio of specialist to general speech and language therapists)
- Commissioning of emergency/high risk level provision versus whole service provision
- Individual patient and caseload benefits versus whole service impact
- Existing staffing levels
- Patient consultation and established demand
- The availability of seven day community services to support more through flow
- Required levels of administrative/support staffing to maintain clinical functions
- Clinical supervision requirements.

Resources should be provided where there is evidence that seven day working improves clinical outcomes and the care pathway for a specific caseload.

Risks associated with seven day working are as follows:

- Reduced staff safety and security in isolated or small service areas where lone working is likely
- Insufficient specialism with associated governance issues. Staff need to have the appropriate skills to work with particular groups such as head and neck oncology patients and ventilated patients
- Reduced cover for existing five day clinical service (including multi-disciplinary clinics) where additional resource is not provided
- Inability to achieve effective onward discharge due to lack of weekend cover in community based services.

17.3 Good practice examples

Heart of England acute on-call service

Heart of England NHS Trust in Birmingham, has provided an 'on-call' service for urgent dysphagia referrals within the adult acute service since April 2011. This service aims to improve quality of care and facilitate hospital flow by reducing unnecessary 'nil by mouth' days and admissions. Between April 2012 and 2013, the out-of-hours service saw 179 patients. Of these, 112 were moved from 'nil by mouth' to some form of oral diet and fluids. The service saved 189 potential 'nil by mouth' days (i.e. if patients had waited until Monday to see a speech and language therapist). The weekend service also enabled some patients to go home or prevented their admission in the first place. The knock on effects of the service are also seen on Fridays and Mondays – staff now have time to attend to their planned workload rather than attending to the backlog of activity built up over the weekend.

The service did not have enough specialist staff to provide a service to certain areas and still stay within its one-to-five weekend ratio, so specified the following exclusions:

- Patients who have been tracheotomised/ventilated
- Patients on non-invasive ventilation
- Patients with a head and neck oncology diagnosis.

In addition, patients who had had a stroke were required to have had a documented dysphagia screen before being seen.

Sandwell and West Birmingham community six day service

Sandwell and West Birmingham NHS Trust's Adult Community Speech and Language Therapy Service provide a 'community admission avoidance' service to adults over 16 years of age with acquired communication and/or swallowing difficulties. 4.8 whole time equivalent speech and language therapists provide a six day a week service to a population of 320,000. Specialist and non-specialist speech and language therapists contribute to the service. Patients are seen within three hours for admission avoidance and 72 hours for high priority referrals in the community.

Between October 2012 and October 2013, 240 urgent and high priority referrals were received. 95% resulted in an avoided admission and sign off by the GP for the management of feeding, nutrition and hydration in the community. The community service only place patients as nil by mouth if they are to be admitted to hospital or if the patients are referred to the service having left hospital as nil by mouth, with enteral feeding.

This six day service was funded through service redesign and existing monies. Referral systems do not currently support seven day working but this is reviewed regularly.

Appendix A – Membership of the Academy Project

Academy Steering Group

Professor Norman Williams	Royal College of Surgeons of England (Chair)
Professor Terence Stephenson	Academy of Medical Royal Colleges
Professor Sue Bailey	Royal College of Psychiatrists
Professor Mike Pringle	Royal College of General Practitioners
Dr Chris Roseveare	Royal College of Physicians of London (Academy Clinical Project Lead)
Ms Carol Sheppard	Academy of Medical Royal Colleges (Academy Staff Project Lead)

Academy Assurance Group

Professor Julian Bion	Faculty Intensive Care Medicine, Chair
Dr Steve Mowle	Royal College of General Practitioners
Dr Mike Jones	Royal College of Physicians of Edinburgh
Dr Sue Barter	Royal College of Radiology - Radiology
Dr Liz Junor	Royal College of Radiology - Oncology
Dr Debbie Nolan	Royal College of Anaesthetists
Professor David Black	Royal College of Physicians of London
Dr Peter Wilson	Royal College of Paediatrics and Child Health
Mr Peter Rees	Academy Patient Lay Group
Mr Robin Beal	College of Emergency Medicine
Mrs Scarlett McNally	Royal College of Surgeons of England / SAS Doctor Group
Mr Tim Dabbs	Royal College of Ophthalmologists
Dr Safi Afghan	Royal College of Psychiatrists
Mr Ian Currie	Royal College of Obstetricians and Gynaecologists
Mr JP Nolan	Royal College of Nursing
Ms Susie Shepherd	RCP London – Patient & Lay Group
Mr Ian Bullock	National Clinical Guideline Centre (RCPL)
Mr Steve Griffin	NHS Employers
Mr Patrick Mitchell	Health Education England
Ms Susan Hayward-Giles	Chartered Society for Physiotherapy

Appendix B – Survey Questions and Respondents

Questions

1. Which investigations and their reports are regularly needed to support a daily consultant-led review at weekends?
2. Which interventions are regularly needed to support a daily consultant-led review at weekends?
3. Which hospital based services are regularly needed to support a daily consultant-led review at weekends?
4. Which non-hospital based services are regularly needed to support a daily consultant-led review at weekends?
5. Assuming all investigations and reports, interventions and services are available if required, what factors would indicate a patient is NOT likely to benefit from a daily consultant-led review?
6. Please estimate the proportion of inpatients in your specialty who are NOT likely to benefit from a daily consultant-led review.
7. Which specialties (if any) could provide cross-cover for your specialty for the purpose of a daily consultant-led review at a weekend?
8. How long would you estimate a typical daily consultant-led review would take for a patient under the care of your specialty NOT known to the consultant?
9. How long would you estimate a typical daily consultant-led review would take for a patient under the care of your specialty who is known to the consultant?
10. What methods of daily consultant-led review do you consider acceptable alternatives to a bedside review by the consultant?

Respondents

Specialty	Organisation
Acute medicine	Society for Acute Medicine
Cardiology	British Cardiovascular Society
Clinical oncology	Royal College of Radiologists
Clinical pharmacology	RCPL JSC Clinical Pharmacology and Therapeutics
Dermatology	RCPL JSC Dermatology
Emergency medicine	College of Emergency Medicine
Endocrinology and diabetes	RCPL JSC Endocrinology and Diabetes
Gastroenterology	British Gastroenterology Society
Geriatric medicine	British Geriatrics Society
General internal medicine	Royal College of Physicians of London
GU medicine	RCPL JSC GU Medicine
Haematology	Royal College of Physicians of London
Infectious diseases	Royal College of Physicians of London
Intensive Care medicine	Faculty of Intensive Care Medicine
Nuclear medicine	Royal College of Physicians of London
Obstetrics & gynaecology	Royal College of Obstetricians and Gynaecologists
Ophthalmology	Royal College of Ophthalmology
Paediatric cardiology	Royal College of Physicians of London
Paediatrics	Royal College of Paediatrics and Child Health
Palliative medicine	RCPL JSC Palliative Medicine
Psychiatry	Royal College of Psychiatrists
Rehabilitation medicine	RCPL JSC Rehabilitation Medicine
Renal medicine	RCPL JSC Renal Medicine
Respiratory medicine	Royal College of Physicians of London
Rheumatology	RCPL JSC Rheumatology
Sports & Exercise medicine	Royal College of Physicians of London
Stroke medicine	Royal College of Physicians of London
Urology	British Association of Urological Surgeons
Surgery – colorectal	Association of Coloproctology of Great Britain and Ireland
Surgery - ENT	British Association of Otorhinolaryngologists
Surgery – general	Association of Surgeons of Great Britain and Ireland
Surgery - neurological	Society of British Neurological Surgeons
Surgery – plastic	British Association of Plastic, Reconstructive and Aesthetic Surgeons
Surgery - renal transplantation	British transplant Society
Surgery - renal transplantation	British Orthopaedic Association
Surgery – vascular	Vascular Society of Great Britain and Ireland

(RCPL JSC = Royal College of Physicians of London, Joint Specialty Committee)

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