NCEPOD REPORT RECOMMENDATIONS

FROM THE LATEST TO THE FIRST REPORT

This document lists all the recommendations made by NCEPOD since the beginning. Those greyed out have either been actioned nationally, updated in subsequent reports or by other organisations or been deemed by NCEPOD to be no longer be relevant or fit for purpose in the current healthcare climate.

Past reports are reviewed every two years to consider whether recommendations are still relevant, although, in principle, all recommendations made in the most recent report, and all reports in the previous five years are considered to remain relevant.

2022 - EPILEPSY: DISORDERED ACTIVITY?	ADDITIONAL INFORMATION
1. Have a system in place which enables emergency medicine/admitting clinicians to communicate with the patient's usual epilepsy clinical team (wherever the team is based) when the patient presents to hospital with a seizure (see also recommendations 3 and 13)	
2. Document pre-existing anti-seizure medication in the case notes of patients presenting with a seizure. *NB: This information should be accessed via current national systems if the patient is not able to provide their current anti-seizure medication regimen*	
3. Measure anti-seizure medication (ASM) levels in patients with epilepsy who arrive at hospital with a seizure if there is any concern about adherence to, absorption of, or dose of their ASM.* Notify the patient's usual epilepsy clinical team (wherever the team is based) or GP if there is no usual team, to follow-up on the results or to discuss any changes to medication or dosage. **Note that blood levels may not be a good indicator for all ASMs, and careful consideration should be given before they are measured.* *NB: Use an electronic alert system if available, or the patient's contact card if they are carrying one to identify the clinical team.*	
4. Prescribers should be aware of, and follow, current Medicines and Healthcare products Regulatory Agency (MHRA) guidance regarding the use of valproate medicines* in any	

woman or girl with child-bearing potential. *Associated links:* **Medicines and Healthcare products Regulatory Agency (MHRA) guidance – current guidance at the time of this report release in 2022: Valproate must not be used in any woman or girl able to have children unless there is a pregnancy prevention programme (PPP) in place. This is designed to make sure patients are fully aware of the risks and the need to avoid becoming pregnant*	
5. Develop a core set of investigations for all patients who present to the emergency department with a seizure.	
6. Develop a protocol that sets out the requirements for undertaking a CT scan of head in patients with known epilepsy.	
7. Ensure patients with suspected or treated status epilepticus have emergency access to an electroencephalogram (EEG) to confirm diagnosis and monitor the effects of treatment. *NB: This aligns with SIGN 143: Diagnosis and management of epilepsy in adults (revised 2018)*	
8. Commence and maintain a seizure chart for all patients admitted to hospital following a seizure.	
9. Ensure there is specialist neurology advice available 24/7, either in person or by telephone, for patients admitted with epilepsy.	
10. Provide dedicated sessions* for epilepsy specialist nurses to act as a point of contact and co-ordinate the pathway of care for patients who present to hospital with a seizure. *NB: This aligns with the Adult Epilepsy Specialist Nurse (ESN) Competency Framework* **The number of sessions needed should be assessed locally by determining how many patients are seen annually and the sessions could be shared across different sites as needed*	
11. For patients presenting to hospital with a first seizure: a. Refer to a first seizure clinic appointment either in person or virtual, within two weeks of a patient having their first seizure* b. Explain to the patient and their family members or carers the potential causes of, and risks associated with seizures c. Document the discussion in the case notes and discharge letter (see recommendation 14) d. Provide resources to support these discussions for example, patient information leaflets and details of useful websites (USEFUL LINKS)	

**This aligns with NICE guideline NG217: Epilepsies in children, young people and adults (2022)*	
12. For patients presenting to hospital with known epilepsy: a. Explain to the patient and their family members or carers the risks associated with epilepsy, including sudden unexpected death in epilepsy (SUDEP) b. Make a personalised risk reduction assessment, directly relevant to each patient c. Use all hospital presentations as an opportunity to reiterate the risks associated with epilepsy to the patient and their family members or carers d. Document the discussion in the case notes and discharge letter (see recommendation 14) e. Provide resources to support these discussions for example, patient information leaflets and details of useful websites	
13. Arrange follow-up plans before the patient is discharged from a hospital admission following a seizure to include: a. A first seizure clinic appointment either in person or virtual, within two weeks of a patient having their first seizure* b. Any investigations booked and reviewed by the patient's usual epilepsy team or neurology service and results sent to the GP (see also recommendations 3 and 14) c. Information for patients and their family or carers with details about local advice services and what action to take if a further seizure occurs **This aligns with NICE guideline NG217: Epilepsies in children, young people and adults (2022)*	
14. Include the following in discharge letters to the patient and their usual epilepsy clinical team and/or GP for patients who have presented to hospital with a seizure: a. Diagnosis b. Medication c. Cause of the seizure d. Risks associated with recurrent seizures e. Specific safety advice given to the patient and their family or carers f. Follow-up arrangements in place (see also recommendations 3, 11, 12 and 13)	
2022 - PHYSICAL HEALTH IN MENTAL HEALTH HOSPITALS: A PICTURE OF HEALTH?	**ADDITIONAL INFORMATION**

1. On arrival at a mental health inpatient setting, check if the patient faces any acute risks to their physical health, including physical health risks associated with rapid tranquilisation and take appropriate action.	
2. On admission to a mental health inpatient setting, carry out and record an initial physical health assessment on all patients. If the patient has the mental capacity to consent to undergo a physical health assessment but refuses, document this then and try again as soon as practicable. This should start within 4 hours* and include, but not limited to: a. Baseline observations including blood pressure, heart rate and respiratory rate and temperature and oxygen saturation; b. Details of existing physical health conditions and any acute changes since the last clinical review; c. Current medication (physical and mental health) including side effects and adherence; d. Whether the patient is at risk of withdrawal from drugs/alcohol; e. Height, weight, relevant blood tests (use recent blood tests if appropriate) and an ECG; f. Hydration status and a fluid balance plan; g. Dietary status, with input from the nutrition team as necessary; h. Review of physical health risks associated with rapid tranquilisation; and i. The frequency of repeat physical health observations, relevant to the patient's condition, using the National Early Warning Score (NEWS2) where appropriate. *This is in line with the Royal College of Psychiatrists Standards for Inpatient Mental Health Services (2022)	
3. Within 24 hours of admission to a mental health inpatient setting, collaboratively develop and document a physical healthcare plan with every patient, based on their initial physical health assessment. Where applicable include: a. The most appropriate healthcare location to treat the patient's physical healthcare needs (e.g. mental health or physical health hospital); b. Monitoring and treatment plans, including: - how frequently to review the physical	

health risk assessment, recognising acute or chronic health conditions - how often to repeat physical health observations and whether to use early warning tools (National Early Warning Score (NEWS2) - a nutrition plan; c. The physical health support needed; d. Escalation plans in the event of deterioration (linked to the NEWS2 score) or patient not consenting to be assessed, that include who to contact and when; and e. Identification of gaps in clinical history and a plan to address them.	
4. Within 24 hours of admission to a mental health inpatient setting, pharmacy staff (in the mental health inpatient setting, and where involved, in the physical health hospital) should undertake a full medicines reconciliation, including all medications for physical as well as mental health. This is in line with NICE Quality Standard 120 (Medicines optimisation 2016) https://www.nice.org.uk/guidance/qs120	
5. Develop and implement an organisational policy and protocol to ensure that patients in a mental health inpatient setting are properly assessed, and treated, for physical health conditions in a considerate and collaborative manner. This could be done by: a. Formalising existing clinical networks or pathways for diagnosing or treating common acute conditions for example, infection or existing long-term conditions; b. Training registered mental health nurses, healthcare assistants, or any other staff as appropriate to monitor and support the management of common long-term physical conditions, while ensuring their competencies are well defined and are kept up to date; and c. Collaborating with local physical health hospitals to develop a physical health liaison service.	
6. Develop and implement an organisational policy and protocol for the transfer to, and readmission from, a physical health hospital to a mental health inpatient setting. This should include: a. A comprehensive clinical summary which includes, but is not limited to:	

- Physical and mental health condition(s); - Current physical and mental health care plans; - Physical and mental health medications; - Monitoring and escalation plans; and - A mental health capacity assessment and the status of mental health legislation (if applicable). b. Prompt treatment in the physical health hospital; c. A plan for readmission to the mental health inpatient setting developed by the physical and mental healthcare teams working together. Include: - The estimated date of discharge and return to the original mental health ward; and - The planning for physical healthcare provision that goes beyond what is available in the mental health inpatient setting. d. A record of transfers to a physical health hospital due to a deterioration in the physical health of a patient – this should be regularly audited for unexpected transfers.	
7. Develop and implement an organisational policy and protocol to involve patients, carers/friends/family in the patient's physical healthcare. This could include: a. Enabling carers/family/friends to provide staff on the ward with information about the patient's physical health; b. Access to clear information on what general physical health assessments are carried out when a patient is admitted to the ward; c. Access to: - Healthy lifestyle advice - How family/friends/carers can support good physical health; and d. Ensuring that with patient consent, patients and their carers/family/friends can: - Receive updates on the patient's physical health including transfers to physical healthcare settings - Ask questions about the patient's physical health needs - Contribute to the development of and/or receive a copy of the patient's physical healthcare plan - Receive clear information about any post-discharge follow-up physical health plans.	

8. Use admissions to a mental health inpatient setting as an opportunity to assess and involve patients in their general health. A hospital policy, supporting training in a range of health improvement topics for staff who work directly with patients, could include: a. Exercise; b. Diet; c. Smoking cessation; d. Alcohol use; e. Substance use; f. Sexual and reproductive health; g. Immunisation; and h. Routine NHS screening programmes.	
9. Offer support to patients admitted to a mental health inpatient setting who smoke tobacco, drink alcohol at harmful or dependent levels, or use other drugs. Use defined substance misuse pathways and where needed, include: a. Assessment and screening tools; b. Specialist advice; c. Interventions and prescribed treatment (especially for dependence); and d. Follow-up after discharge, supported by the local alcohol or drugs recovery services (local health authority commissioned services). This is in line with Making Every Contact Count: https://www.makingeverycontactcount.co.uk/	
10. Record the correct physical health diagnosis, ICD-10/SNOMED CT codes (or equivalent) in mental health clinical records and discharge summaries.	
11. Ensure that electronic patient records in mental health inpatient settings: - Have the functionality to record physical health conditions - Have the facility for tasks to be set to aid disease and treatment monitoring - Are accessible, to allow handover between clinical teams and across healthcare providers.	
12. Provide a discharge summary to the patient, their carer/s, GP and community mental health team within 24 hours of discharge. This should include:	

- Mental and physical health diagnoses; - All medications for mental and physical health, including who will provide them and the reason for any prescription changes; - Follow-up arrangements with the community mental health team/GP; - Mental health and physical health care plans; and - Any support needed to carry out the care plans.	
2021 - DYSPHAGIA IN PARKINSON'S DISEASE: HARD TO SWALLOW?	**ADDITIONAL INFORMATION**
1. Document the swallow status of all patients with Parkinson's disease at the point of referral to hospital.	
2. Notify the specialist Parkinson's disease service (hospital and/or community) when a patient with Parkinson's disease is admitted, if there is any indication from the notes or following discussion with the patient or their relatives/carers, that there has been a deterioration or progression of their clinical state.	
3. Screen patients with Parkinson's disease for swallowing difficulties at admission, irrespective of the reason for admission. This should include: • Ability to swallow food, fluids and medication • Control of saliva • A history of pneumonia	
4. Refer patients with Parkinson's disease who have swallowing difficulties* (or who have problems with communication) to speech and language therapy.	
5. Ensure patients are able to take the medication they have been prescribed at, and throughout, their admission. If there are concerns about whether or not the patient can swallow safely consider other formulations of medication (e.g. liquid rather than a tablet) or ways of administering them.	
6. Ensure there is a hospital policy for the different ways of administering medication and the review of medications at the point of patient discharge. This includes the use of rotigotine patches.	

7. Screen the nutritional status of patients admitted to hospital with Parkinson's disease and act on the findings.	
8. Involve speech and language therapists, pharmacists, dietitians and nutrition team members in any multidisciplinary (MDT) discussion of patients with Parkinson's disease and swallowing difficulties.	
9. Formalise pathways for the provision of modified texture diet and fluids to include input from: • Speech and language therapists • Pharmacists • Dietitians or other nutrition team members • Hospital housekeeping and catering services • Community care	
10. Ensure there is a hospital policy for 'risk feeding' which includes the assessment or re-assessment (if already undertaken at admission) of mental capacity regarding this decision. The policy should state that discussion should involve: • Patients • Family members and/or carers • Speech and language therapists • Dietitians/nutrition team members • Pharmacists	

11. Provide written information at discharge on how to manage swallowing difficulties, including: • Swallow status • Ability to take oral medication • Changes to medication including any new ways of administering them • Nutrition screening tool score and care plan including any texture modifications to food and/or fluids • Positioning • Level of dysphagia risk in the community To: • The patient • Family members and/or carers • Community healthcare professionals (e.g. GP, community Parkinson's disease team, community pharmacist, care home staff) A proforma could be used for this discharge summary.	
2021 – IN HOSPITAL CARE OF OUT OF HOSPITAL CARDIAC ARRESTS: TIME MATTERS	**ADDITIONAL INFORMATION**
1. Implement whole population strategies to increase the rate of cardiopulmonary resuscitation (CPR) by bystanders and the use of public access defibrillators.	
2. Put effective systems in place to share existing advance treatment plans (such as ReSPECT*) between primary care services, ambulance trusts and hospitals so that people receive treatments based on what matters to them and what is realistic in terms of their care and treatment.	
3. Do not use a single factor such as time to the return of spontaneous circulation, blood lactate or pH to make decisions about organ support or interventions in critical care. No single factor on admission accurately predicts survival after an out-of-hospital cardiac arrest.	
4. Optimise oxygenation for patients with a return of spontaneous circulation as soon as	

possible after hospital admission, by: • Measuring arterial blood gasses • Prescribing oxygen • Documenting inspired oxygen concentration (or flow rate) and • Monitoring oxygen saturation • Adjusting inspired oxygen concentration to achieve an arterial oxygenation saturation target of 94–98%	
5. On admission after an out-of-hospital cardiac arrest, prioritise patients for coronary intervention, in line with the European Society of Cardiology current guidelines, because a primary cardiac cause for their cardiac arrest is likely.	
6. Use active targeted temperature management during the first 72 hours in critical care to prevent fever (temperature over 37.5^{o}C) in unconscious patients after an out-of-hospital cardiac arrest.	
7. Assess neurological prognosis in unconscious patients after an out-of-hospital cardiac arrest, using at least two of the following methods: • Clinical assessment • Imaging • Neurophysiological assessment (including electroencephalogram, to exclude subclinical seizures and improve accuracy) • Biomarkers	
8. Delay the final assessment of neurological prognosis after an out-of-hospital cardiac arrest until AT LEAST 72 hours after return of spontaneous circulation AND the effects of sedation and temperature management can be excluded. This will ensure a reliable assessment. Repeat the assessment if there is any doubt. Target audiences: Critical care leads and critical care clinical staff	
9. Actively explore the potential for organ donation in all patients after an out-of-hospital cardiac arrest and return of spontaneous circulation, who have a planned withdrawal of life sustaining treatment.	

10. Identify all survivors of an out-of-hospital cardiac arrest who would benefit from physical rehabilitation before hospital discharge and ensure this is offered to them.	
11. Identify all inpatient survivors of an out-of-hospital cardiac arrest who would benefit from cardiac rehabilitation before hospital discharge and ensure this is offered to them.	
12. Identify all inpatient survivors of an out-of-hospital cardiac arrest who would benefit from neurological rehabilitation before hospital discharge and ensure this is offered to them.	
13. Identify all inpatient survivors of an out-of-hospital cardiac arrest who would benefit from psychological intervention before hospital discharge and support and ensure this is offered to them.	
2020 - LONG TERM VENTILATION: BALANCING THE PRESSURES	**ADDITIONAL INFORMATION**
1. Ensure service planning/commissioning of integrated care pathways for long-term ventilation services includes formal contract arrangements and local standardisation where possible. These arrangements should bridge child and adult health as well as social care services, respite care and any other partnerships relevant to the local network. Networks should map commissioning arrangements to ensure integration and consistent standards of care and national commissioners should provide a forum to ensure that long-term ventilation provision is considered collectively and delivered to agreed standards.	
2. Ensure that it is possible to identify all people who are receiving long-term ventilation. a. Locally this should be achieved by implementing/maintaining a database as soon as possible b. Nationally this should be achieved by developing procedure codes for long-term ventilation to bring together the local data collection and support a national database to quantify service provision and facilitate quality improvement	

3. Ensure efficient care planning and discharge by providing a multidisciplinary team as part of an integrated care pathway. This team should work across community and hospital networks of care for child and adult long-term ventilation services, have an identified clinical lead and include as a minimum: a. Medical and nursing staff b. Physiotherapy c. Speech and language therapy d. Psychology Where applicable e. A specialist in tracheostomy care f. Palliative care/hospice care g. Local service planners/commissioners	
4. Undertake shared decision-making at the point of long-term ventilation initiation, particularly if it is likely to be a life-long therapy. The decision-making process should include input at all stages from: a. Children and young people (wherever possible) b. Parent carers c. The multidisciplinary team (MDT) listed in Recommendation 3 d. The person's general practitioner whenever practical/possible e. Palliative care when appropriate The process* should also include: f. Discussions over a period of time to ensure decisions are thoroughly considered g. Input from independent healthcare professionals for peer review/mediation as required h. Provision of approved written and/or online information i. Support from other families with a child on long-term ventilation should be considered *A nationally agreed decision-making and ethical framework for long-term ventilation care as proposed by Ray et al should be considered to aid the process. This should involve children,	

young people and their families as key partners in any development *Ray S et al. 2018. Towards developing an ethical framework for decision-making in LTV in children. Archives of Disease in Childhood. 103(11): 1080–1084*	
5. Ensure that the planning for transition from child to adult services, including the provision of joint transition clinics, has clearly identifiable clinical and executive leadership and forms part of an integrated care pathway for people on long-term ventilation. Developmentally appropriate and patient-centred transition planning should commence at the latest by the age of 14 years*	
6. Provide a structured training programme and associated resources for long-term ventilation which prepares: a. People on LTV and parent carers for home care b. Community providers for routine care c. Non-specialist clinicians for hospital admissions	
7. Standardise arrangements for long-term ventilation equipment including: a. Purchasing b. Servicing c. Consumables	
8. Standardise templates for personalised Emergency Healthcare Plans for all people on long-term ventilation. They should: a. Be easily accessible by all members of the care team b. Be clearly laid out so that information can be easily recognised by all members of the care team c. Be reviewed at least annually, and after every hospital admission, by the clinical team and the service user/parent carer d. Form part of any hand-held records e. Include a fast-track admission plan	
9. Ensure all people on long-term ventilation have access to age-appropriate emergency care by a team with the relevant competencies, regardless of location.	

10. Ensure good ventilation care when people on long-term ventilation are admitted to hospital for any reason by: a. Undertaking a standard clinical and respiratory assessment b. Undertaking routine vital signs monitoring which includes, as a minimum, respiration rate and oxygen saturation c. Involving the usual LTV team if not admitted under their care d. Identifying clinical leadership of ventilation care	
11. Ensure high quality discharge arrangements for people established on long-term ventilation who are admitted to hospital. Planning should: a. Commence on admission b. Be clearly documented in the case notes c. Include the community and usual LTV team d. Document any actual or anticipated changes to respiratory care	
12. Optimise the frequency of clinical review on an individual basis, for those on long-term ventilation who are at an increased risk of admission* **including people established on LTV < 2 years and those who have had an unplanned admission in the previous 6 months*	
2020 - ACUTE BOWEL OBSTRUCTION: DELAY IN TRANSIT	**ADDITIONAL INFORMATION**
1. Undertake a CT scan with intravenous contrast promptly, as the definitive method of imaging* for patients presenting with suspected acute bowel obstruction. Prompt radiological diagnosis will help ensure admission to the correct specialty, so the time to CT reporting should be audited locally. **unless the use of IV contrast is deemed inappropriate by a senior clinician, in which case CT without contrast should be performed – in line with NICE CG169*	
2. Undertake a consultant review in all patients diagnosed with acute bowel obstruction as soon as clinically indicated and at the latest within 14 hours of admission to hospital. Discussion with a consultant should occur within an hour for high-risk patients* **As recommended by the RCP London and NHS England ('High risk' is defined as where the risk of*	

mortality is greater than 10%, or where a patient is unstable and not responding to treatment as expected)	
3. Admit patients with symptoms of acute bowel obstruction as necessary, but patients who have a definitive diagnosis of acute bowel obstruction should be admitted under the care of a surgical team.	
4. Assess pain in all patients with symptoms of acute bowel obstruction and give analgesia in line with local and national guidelines. Ensure that: a. Pain is assessed at presentation to the emergency department b. Pain is assessed throughout the admission **c.** Referral to the acute pain team is undertaken when pain is difficult to manage, while ensuring the referral does not cause a delay in any definitive treatment.	
5. Measure and document hydration status in all patients presenting with symptoms of acute bowel obstruction in order to minimise the risk of acute kidney injury (AKI). Ensure that hydration status is: a. Assessed at presentation to the emergency department b. Assessed throughout the admission	
6. Undertake, record and act on nutritional screening in all patients who present with symptoms of acute bowel obstruction. This should include: a. A MUST score on admission to hospital b. A MUST score at least weekly throughout the admission c. Review by a dietitian/nutrition team once a diagnosis has been made d. A MUST score, and if required a dietitian/nutrition team assessment at discharge as recommended by BAPEN	
7. Ensure patients with a high frailty score (e.g., Rockwood 5 or more) receive: a. A multidisciplinary team discussion for shared decision-making, including care of the elderly b. A risk assessment, with input from critical care relevant to the patient's needs c. A treatment escalation plan d. Their resuscitation status recorded	

8. Ensure local policies are in place for the escalation of patients requiring surgery for acute bowel obstruction to enable rapid access to the operating theatre.* This should be regularly audited to ensure adequate emergency capacity planning. **e.g. The NCEPOD Classification of Intervention can be used to ensure that patients are treated within a clinically acceptable timeframe*	
9. Agree joint clinical network pathways of care that enable improved access to stenting services for those patients with acute large bowel obstruction who require the service.	
10. Calculate morbidity and mortality risk for all patients admitted with, and before any surgery for, acute bowel obstruction, to aid: a. Shared decision-making between the patient, carers and clinicians, with regard to the treatment options available and to ensure the appropriate informed consent is taken b. Assessment of the risk and predicted outcome associated with undertaking a laparotomy	
11. Minimise delays to diagnosis and treatment for acute bowel obstruction. Development of an evidence-based pathway for acute bowel obstruction, including recommendations 1-10 could facilitate this. The pathway should be audited at specific time points such as: a. Time from arrival to CT scan b. Time from arrival to diagnosis c. Time from decision to operate to start of anaesthesia	
2019 – PULMONARY EMBOLISM: KNOW THE SCORE	**ADDITIONAL INFORMATION**
1. Give an interim dose of anticoagulant to patients suspected of having an acute pulmonary embolism (unless contraindicated) when confirmation of the diagnosis is expected to be delayed by more than one hour. The anticoagulant selected, and its dose, should be personalised to the patient. This timing is in line with NICE QS29 2013.	
2. Document the severity of acute pulmonary embolism immediately after the confirmation of diagnosis. Severity should be assessed using a validated standardised tool, such as 'PESI' or 'sPESI'. This score should then be considered when deciding on the level of inpatient or ambulatory care.	

3. Standardise CT pulmonary angiogram reporting. The proforma should include the presence or absence of right ventricular strain. The completion of these proformas should be audited locally to monitor compliance and drive quality improvement. (At a national level, the Royal College of Radiologists with input from other clinical specialist societies such as the British Thoracic Society).	
4. Look for indicators of massive (high-risk) or sub-massive (intermediate-risk) pulmonary embolism, in addition to calculating the severity of acute pulmonary embolism in the form of: a. Haemodynamic instability (clinical) b. Right heart strain (imaging) c. Elevated troponin or brain natriuretic peptide (biochemical) Escalate promptly based on local guidance and document in the case notes.	
5. Assess patients suspected of having an acute pulmonary embolism for their suitability for ambulatory care and document the rationale for selecting or excluding it in the clinical notes.	
6. Provide every patient with an acute pulmonary embolism with a follow-up plan, patient information leaflet and, at discharge, a discharge letter which should include: a. The likely cause of the pulmonary embolism b. Whether it was provoked or unprovoked c. Details of follow-up appointment(s) d. Any further investigations required e. Details of anticoagulant prescribed and its duration, in line with NICE CG144	
7. Calculate the clinical probability of pulmonary embolism in all patients presenting to hospital with a suspected new diagnosis of pulmonary embolism using a validated score, such as the 'Wells' Score'. Record the score in the clinical notes. This is in line with NICE CG144.	
8. Ensure there are hospital protocols/guidance for assessing the severity of pulmonary embolism soon after diagnostic confirmation. Include timely access to point of care	

ultrasonography (POCUS)/ echocardiography and measuring biomarkers like troponin and BNP.	
9. Ensure there is a robust system in place to alert the clinician who requested a CTPA or V/Q scan or V/Q SPECT scan of any amendments or updates to the report.	
10. Develop and document a monitoring and treatment escalation plan for, and with, all patients diagnosed with acute pulmonary embolism. Any reason for not doing so should also be documented in the case notes.	
11. Document whether the inferior vena cava (IVC) filter inserted into a patient with pulmonary embolism is intended to be permanent or temporary. Temporary filters should have a retrieval date booked at the time of insertion and have a fail-safe tracking system to ensure the filter is removed, unless this becomes clinically inappropriate. This is in line with MHRA 2013 guidance.	
12. Ensure an ambulatory care pathway is available 7 days a week, at all hospitals where patients with an acute pulmonary embolism present.	
13. Formalise pulmonary embolism treatment networks for access to catheter-directed thrombolysis, surgical embolectomy or mechanical thrombectomy for the treatment of patients with pulmonary embolism who either fail to improve or have absolute contraindications to systemic thrombolysis.	
2019 - MENTAL HEALTHCARE IN YOUNG PEOPLE AND YOUNG ADULTS	**ADDITIONAL INFORMATION**
1. Develop and promote national guidance outlining the expectation required of general hospital staff in the care of children and young people with mental health conditions. Guidance should include: a. Training relevant to their role in the assessment, formulation and management for aspects of mental health conditions, including familiarity with specific terminology and language b. Routinely taking a physical and mental health history c. Undertaking and acting on simple and appropriate mental health risk assessments	

d. When and how a referral to mental health services should be made and what the content should be	
2. Nominate or appoint a clinical lead for children, and young people's mental health in all acute general hospitals to: a. Promote the integration of physical and mental healthcare b. Lead on implementation of existing training initiatives and future national guidance c. Identify staff training requirements in acute general hospitals to meet the needs of children and young people with mental health conditions d. Ensure policies and procedures are in place to provide: • Continuity of care between general and mental health services • Care during transition from child to adult mental health services e. Promote the use, and regular review, of an agreed joint care and risk management plan between general and mental health, which is integrated into the nursing plan when patients who require inpatient mental healthcare are temporarily accommodated on a general hospital ward f. Promote clear documentation and monitoring of mental health history, mental state examination and management plans	
3. Ensure children and young people admitted to acute general hospitals have prompt access to age-appropriate general hospital mental health liaison/crisis services when needed. These services should: a. Be staffed by clinicians fully trained in the specific needs of the age groups cared for b. Provide access to timely assessment, treatment and risk management during their episode of care, including those presenting in crisis both in or out of hours	

c. Enable general hospital staff to provide: • Appropriate and safe care of patients with a mental health condition on an inpatient ward • Care for children and young people where psychosocial factors affect physical illness presentation, treatment compliance and/or safeguarding d. Facilitate access to a range of psychological and psychosocial interventions based on a full mental health assessment and clinical formulation e. Work with general hospital staff to plan the patients mental healthcare needs upon discharge f. Involve children, young people and carers in agreeing and communicating after-care interventions and risk plans	
4. Use NICE Guideline 43 – 'Transition from Children's to Adults' Services for Young People using Health or Social Care Services' to support patients with mental health conditions during transition between child and adult physical and mental health services.	
5. Ensure continuation of mental health care within and across service providers, particularly at the transition from child to adult services including: a. The use of documented and joint care pathway b. The use of clinical networks of care c. Auditing against national standards locally	
6. Develop local clinical network arrangements between acute general health and mental health services to work more closely on: a. Identifying and remedying gaps in local care pathways to provide high quality mental healthcare in all settings b. Ensuring patient care records are effectively shared between care providers c. Considering whether there is sufficient capacity in inpatient mental health facilities to allow timely local admission d. Ensuring access to co-ordinated psychological and pharmacological interventions	
7. Ensure mental health risk management plans are clearly available in all general hospital patient records for patients admitted with a current mental health condition. If a plan is not	

needed, then this should also be recorded.	
8. Utilise electronic patient records to improve record sharing between mental health hospitals and general hospitals within and outside the NHS. In the absence of electronic records, patients should not be transferred between the hospitals without copies of all relevant notes accompanying them and could be encouraged to carry a 'patient passport' outlining an agreed care plan.	
9. Provide children and young people with mental health conditions an opportunity for private confidential discussions with physical and/ or mental health professionals where they are seen in an emergency department or ward within an acute general hospital or mental health facility. This should include a psychosocial assessment leading to an agreed, documented crisis and coping plan given to the patient.	
10. Document the competence and capacity of children and young people to be involved in decision-making and also to give their consent to treatment or an admission	
11. Implement evidence-based interventions in all healthcare and educational settings and organisations.	
12. Raise awareness, improve emotional literacy, tackle stigma and particularly engage with males in improving their help-seeking behaviour.	
13. Design mental health services to: a. Promote access for children and young people from the most deprived communities b. Provide access to developmentally appropriate healthcare c. Provide training initiatives to promote staff awareness of the impact of inequalities, such as deprivation d. Monitor the impact of any change in service provision on such inequalities	
14. Undertake local clinical audit of people with mental health conditions who 'do not attend' clinics to understand why and facilitate improvements thereafter through action plans and local quality improvement projects.	
2018 – PERIOPERATIVE DIABETES: HIGH AND LOWS	**ADDITIONAL INFORMATION**

1. Write and implement a national joint standard and policy for the multidisciplinary management of patients with diabetes who require surgery. Information should include responsibilities for diabetes management across all specialties during routine care and in high-risk patients.	
2. Appoint a clinical lead for perioperative diabetes care in hospitals where surgical services are provided. This person will be responsible for developing policies and processes to: a. Ensure diabetes management is optimised for surgery b. Ensure patients with diabetes are prioritised on the operating list, including the co-ordination of emergency surgery c. Identify when involvement of the diabetes multidisciplinary team, including diabetes specialist nurse, is required d. Ensure high-risk patients are identified, such as those with type 1 diabetes e. Identify patients with poor diabetes control who may need pre-operative optimisation or VRIII f. Audit cases of prolonged starvation g. Ensure high quality discharge planning.	
3. Use a standardised referral process for elective surgery to ensure appropriate assessment and optimisation of diabetes. This should include: a. Satisfactory HbA1c levels within 3 months of referral b. Control of co-morbidities c. A list of all current medications d. The patient's body mass index (BMI) e. Estimated glomerular filtration rate (eGFR) f. Perioperative risk rating.	

4. Ensure that patients with diabetes undergoing surgery are closely monitored and their glucose levels managed accordingly. Glucose monitoring should be included: a. at sign-in and sign-out stages of the surgical safety checklist (e.g., WHO safety checklist) b. in anaesthetic charts c. in theatre recovery d. in early warning scoring systems	
5. System markers and alerts should be used to raise awareness of glucose levels, e.g., tagging of electronic medical records, use of a patient passport or unique stickers in paper-based case notes.	
6. Ensure a safe handover of patients with diabetes from theatre recovery to ward, this should be documented in the case notes and include: a. Medications given in theatre b. Glucose level on leaving the recovery area c. Glucose level on arriving at the ward d. Ongoing management of diabetes, especially VRIII e. Criteria for contacting the diabetes team	
7. Develop a pre-operative assessment clinic policy and standards for the management of patients with diabetes. These should be developed by the lead anaesthetist* and the clinical lead for perioperative diabetes management, and include: a. Identification of high-risk patients, such as those with poorly controlled or type 1 diabetes b. Optimisation for surgery c. Criteria for involvement of the diabetes multidisciplinary team These policies should be audited locally, and the results acted upon.	
8. Ensure that patients with diabetes attending a pre-operative assessment clinic prior to elective surgery have: a. Access to the diabetes multidisciplinary team, including diabetes specialist nurse input b. Written instructions regarding their diabetes management plan prior to surgery	

9. A clinical lead for day surgery* should be in place in all hospitals providing day surgery services. This lead, along with the clinical lead for perioperative diabetes management should be responsible for ensuring that patients with diabetes are considered for day surgery, where appropriate. Policies should be developed to ensure patients with diabetes have equity of access to day surgery.	
10. Cancellation of elective surgery in patients with diabetes should be avoided, particularly for known clinical reasons. Cancellation rates should be audited locally, and the results acted upon.	
11. Develop and implement referral criteria for surgical inpatients with diabetes to: a. Diabetes specialist nurses b. Dietitians c. Pharmacists d. Other diabetes multidisciplinary team members as required.	
12. Record and monitor the time at which a patient begins fasting (for surgery or clinical reasons). If a patient misses more than one meal, their care should be escalated to the responsible medical team as this indicates prolonged starvation.	
13. Prioritise patients with diabetes on the operating list to avoid prolonged starvation.* Prioritisation of patients with diabetes on operating lists should be subject to local clinical audit and the results acted upon.	
14. Provide patients with diabetes with education and information about their diabetes management at discharge from hospital as part of the discharge planning process.	
2018 – CANCER IN CHILDREN, TEENS, AND YOUNG ADULTS: ON THE RIGHT COURSE	**ADDITIONAL INFORMATION**
1. Ensure that any new protocol of systemic anti-cancer therapy (SACT), to a given patient, is discussed at a multidisciplinary team meeting in advance of commencing treatment.	
2. Hospitals in which systemic anti-cancer therapy (SACT) is administered should have a policy for use prior to treatment with SACT, which includes an assessment of 'fitness for SACT' and	

a formal performance status score. This policy should be reviewed as part of the organisation's annual review.	
3. Ensure that discussions about systemic anti-cancer therapy (SACT) with patients and/or their parents are documented and include: a. The intent of therapy (curative versus palliative) b. The chances of cure or the benefits of palliative therapy c. The risk of toxicity including that SACT can be life threatening d. Ceilings of treatment in patients with a poor prognosis	
4. A nationally agreed consent form specific for systemic anti-cancer therapy (SACT) should be developed and implemented. It should include: a. The intent of therapy b. An assessment of the chance of cure c. The risk of toxicity and d. The potential risk of death	
5. Assent for systemic anti-cancer therapy (SACT) treatment should be sought from any young person with capacity up to the age of 15 years, with consent being sought from patients aged 16 years or older.	
6. Provide written information to patients and their families about the potential side effects of systemic anti-cancer therapy (SACT), in particular the recognition and management of febrile neutropaenia.	
7. The treating team should send appropriate information to General Practitioners and Paediatric Oncology Shared Care Units (POSCU) about the systemic anti-cancer therapy (SACT) patients under their care receive and the potential toxicities the patient may experience at the time of SACT administration.	
8. Assess at the point of prescribing, and again at the time of any subsequent cycles of systemic anti-cancer therapy (SACT), the following: a. Toxicity of any previous SACT cycles b. Disease response to treatment	

c. The patient's performance status	
9. Systemic anti-cancer therapy (SACT) prescriptions should be checked and validated by a suitably trained doctor, nurse or pharmacist in SACT, other than the prescriber.	
10. All systemic anti-cancer therapy (SACT) prescriptions should be available on hospital IT systems and all clinicians should have easy 'read only' access to them.	
11. Patients in hospital should receive appropriate antibiotics within one hour of recognition of sepsis or suspected sepsis, as outlined in NICE QS161	
12. Ensure consultant review within 14 hours of an acute admission in line with the Royal College of Paediatrics and Child Health in 'Facing the Future' and the Royal College of Physicians of London in the 'Acute Care Toolkit 4'.	
13. Ensure that prior to admission to critical care, or at the earliest opportunity after admission, ceilings of treatment are discussed with the patient and/or relatives and agreed between the referring clinician and admitting critical care consultant. If critical care is not available on-site, robust clinical protocols and pathways must be in place to ensure there is no delay in care of the critically ill patient. The discussion and plan should be documented clearly in the patient's case notes and reviewed during the admission. It is essential that all organisations recognise the advantage of access to on-site age-appropriate care.	
14. Local audit of the side effects and outcomes of systemic anti-cancer therapy (SACT) should be undertaken in hospitals in which SACT is administered. Action plans and quality improvement goals should be made and discussed, with findings reported at Board level.	
15. Hospitals in which systemic anti-cancer therapy (SACT) is administered should have a policy requiring all clinicians involved in the care of oncology patients to undertake morbidity and mortality reviews and attend morbidity and mortality meetings. This should also include the completion of an attendance log.	
16. Hospitals in which systemic anti-cancer therapy (SACT) is administered should have a	

person-focused policy for the transition of oncology care between paediatric, teenage and young adult and adult teams. This should be reviewed as part of the organisation's annual review.	
2018 - ACUTE HEART FAILURE: FAILURE TO FUNCTION	**ADDITIONAL INFORMATION**
1. A guideline for the clinical management of acute heart failure should be available in all hospitals. These guidelines should include standards for: a. The location of care - which should be on a specialist unit b. Arrangements for heart failure service review within 24 hours c. Initial investigations required to diagnose acute heart failure, including a standard protocol for the use of: • BNP/NTproBNP testing • Echocardiography d. Immediate treatments (medications guidance for treatment prior to specialist review) Hospitals should audit against these standards annually.	
2. All patients admitted with acute heart failure should be reviewed by a consultant within 14 hours of admission, or sooner as the clinical need dictates (e.g., cardiogenic shock or respiratory failure) and discussed with a member of the heart failure multidisciplinary team. For patients with worsening symptoms despite optimal specialist treatment, this discussion should include their palliative care needs.	
3. All heart failure patients should have access to a heart failure multidisciplinary team. Core membership of this team should include: a. A clinician with a sub-speciality interest in heart failure b. A specialist heart failure nurse c. A healthcare professional with expertise in specialist prescribing for heart failure d. The primary care team e. A specialist in palliative care Other services such as cardiac rehabilitation, physiotherapy, occupational therapy, clinical	

psychology, elderly care, dietetics and clerical support should be involved as needed.	
4. Due to the complexity of medications used by patients with acute heart failure and their common co-morbidities, medications should be reviewed by a pharmacist with specialist expertise in prescribing for heart failure on admission to and discharge from hospital	
5. Serum natriuretic peptide measurement should be included in the first set of blood tests in all patients with acute breathlessness and who may have new acute heart failure. It is central to the assessment of these patients to guide further investigation.	
6. An echocardiogram should be performed for all patients with suspected acute heart failure as early as possible after presentation to hospital, and within a maximum of 48 hours as it is the key to diagnosis, risk stratification and specialist management of acute heart failure.	
7. Due to the poor sensitivity of individual physiological parameters (in particular heart rate) in identifying severity of illness in acute heart failure, use of a composite physiology score such as the National Early Warning Score is recommended.	
8. For all patients with heart failure, best practice in escalation decision making includes: a. Assessment of the goals and benefits of treatment escalation b. Inclusion of the patient (and their family where possible) c. Involvement of the cardiology or heart failure consultant d. Agreement among members of the multidisciplinary team e. Communication of the decision with healthcare professionals across the whole care pathway	

For patients with advanced heart failure, pre-emptive discussion in the outpatient setting of treatments that would not be beneficial, along with consideration of palliative care needs, can prevent unnecessary admissions and should be encouraged. Escalation decisions should be reviewed at the time of all admissions with acute heart failure.	
9. All treatment escalation decisions that are not initially made by a consultant should be confirmed by a consultant at the earliest opportunity afterwards. The reasons for treatment escalation decisions should be fully documented in the patient's records.	
10. On discharge from hospital, all acute heart failure patients should receive a summary that includes: a. A named healthcare co-ordinator and their contact details b. Their diagnosis and the cause of their heart failure c. Current medications and description of any monitoring required d. Individualised guidance on self-management e. Functional abilities and social care needs f. Follow up plans g. Information on how to access the specialist heart failure team and urgent care	
11. After an admission with acute heart failure, all patients should be followed up by a member of the specialist heart failure team within two weeks of discharge from hospital as recommended in NICE guidance (CG187 rec 1.1.4).	
12. Patients with a confirmed diagnosis of heart failure benefit from ongoing review. In line with current NICE guidelines (CG108), this should occur at least every six months and more frequently in unstable patients or those with comorbidity. Review should include: a. Clinical assessment of cardiac rhythm and fluid status b. Assessment of functional and nutritional status c. Medication review; including side effects and the need for changes d. Measurement of renal function and electrolytes The individual responsible and location of this review should be tailored to meet each individual patient's needs and be guided by the heart failure multidisciplinary team. In advanced heart failure, the responsibility for follow-up may transfer from the heart failure	

team to the palliative care service.	
13. Heart failure patients should be offered an exercise-based programme of cardiac rehabilitation that also includes education and psychological support. This is in line with the NICE quality standard (QS9) for chronic heart failure in adults. A record should be kept of the number (and percentage) of suitable heart failure patients who receive cardiac rehabilitation.	
14. Pathways should be in place for patients with advanced heart failure who deteriorate to access palliative care in the community, in a hospice or in hospital when appropriate. Referral to specialist palliative care services should be based on patient-need and choice and not delayed until deterioration is considered irreversible. A full anticipatory care plan should be agreed with the patient and this should be communicated to and available to all those involved in the acute heart failure pathway.	
15. Hospitals should collect and audit data on the total number of heart failure patients under their care. These data should be submitted to the national heart failure audit.	
2018 – CHRONIC NEURODISABILITY: EACH AND EVERY NEED	**ADDITIONAL INFORMATION**
The overarching aim of this report is to improve the care provided to children and young people aged 0-25 years with a chronic neurodisability. The cerebral palsies have been used in the study as examples of neurodisabling conditions.	
1. Clinical coding of neurodisabling conditions in all healthcare records and routinely collected datasets must be accurate and consistent if data are to be meaningful, comparable and useful to inform health outcome reviews and patient care.	
2. Cerebral palsy and other chronic neurodisabling conditions should be added to the standard list that “must always be coded for any admitted patient care episode (including day case patients) when documented in the patient’s medical record for the current hospital provider spell, regardless of specialty.”	
3. Standardised healthcare data should be captured by clinicians each time a patient is seen, in ALL settings (to include community-based organisations)	

4. Data collection about patients with neurodisabling conditions must include measures of clinical severity and functional abilities to enable detailed analysis	
5. Clinical coding systems should be harmonised across routinely collected datasets in England, Wales, Scotland and Northern Ireland to enable data analysis throughout the UK	
6. Access to existing routinely collected national datasets needs to be improved. The governance and application process to the four nations should be harmonised to promote data linkage and encourage the use of population datasets more effectively and efficiently.	
7. Patients suspected of having a neurodisabling condition should have an expert assessment by clinicians who have the competences to consider the range of possible diagnoses. For those patients with a cerebral palsy, the clinician must be able to recognise and describe the tone variation and distribution pattern of motor impairment, as informed by 'NICE Guideline 62' and the 'Reference and Training Manual of the Surveillance of Cerebral Palsy in Europe'.	
8. Patients with a cerebral palsy should have the pattern of their motor impairment (e.g., unilateral/bilateral) and tone variation (spasticity, dyskinesia, dystonia, ataxia or choreoathetosis) assessed and recorded in the clinical notes by the clinician undertaking the assessment.	
9. Patients with a cerebral palsy should have their level of motor functioning described and documented in every clinical communication, using the Gross Motor Function Classification System.	
10. Clinicians offering assessments to consider neurodisabling conditions as possible diagnoses should have timely access to magnetic resonance neuroimaging (MRI), including facilities for sedation and/or general anaesthesia if required. These may be within a network of care. MRI should not be provided without appropriate neuroradiological expertise to inform the imaging protocols used and to accurately interpret the images obtained.	
11. Patients with a neurodisabling condition should have access to an appropriate multidisciplinary team to proactively monitor their health status when their needs are complex and/or when there is a change in their functional status, physical condition or environmental situation. For those patients with a cerebral palsy, this access should reflect	

'NICE Guideline 62'.	
12. Patients with neurodisabling conditions should have their weight and nutritional status considered at every healthcare encounter and assessed and recorded based on clinical need.	
13. As for all patients, those with a neurodisabling condition who also have a learning disability should have this clearly documented in their clinical records by all healthcare providers (e.g., in primary and/or specialist healthcare).	
14. Oral health and dental care for patients with a neurodisabling condition must be considered as a matter of routine by their lead clinician.	
15. All patients with complex needs and, where appropriate, their parent carers or legal guardians, should be offered the opportunity to develop a patient-held Emergency Health Care Plan/Emergency Care Summary to facilitate communication in the event of a healthcare emergency. This should include as a minimum: a. information about the patient's health conditions and treatment b. who to contact in a range of scenarios and what to do c. a statement about what has been discussed and agreed about levels of intervention including palliative care planning, and d. the existence of any advance directives (for those over 18 years), lasting power of attorney or any other measure	
16. The existence of this Emergency Health Care Plan/Emergency Care Summary must be recorded in all communication and case notes and this should be subjected to local audit.	
17. Patients with a neurodisabling condition should have an assessment completed by their lead clinician to determine their risk of respiratory compromise. This should be reviewed as appropriate for the complexity of the patient's needs. Those patients at significant risk of respiratory compromise should be assessed by clinicians with expertise in respiratory medicine, in order to discuss with the patient and their family the range of interventions most likely to lead to the best outcome. 'What to do' and 'who to contact' in the event of respiratory symptoms should be documented in the patient-held Emergency Health Care	

Plan.	
18. As for all patients, those with a neurodisabling condition admitted to an acute general hospital as an emergency should have timely assessment and senior review within 14 hours of admission by a specialist relevant to the emergency as recommended by the Royal College of Paediatrics and Child Health in 'Facing the Future' and the Royal College of Physicians of London in the 'Acute Care Toolkit 4'	
19. Patients should undergo timely review prior to major surgery and/or if they have complex comorbidity by key team members to ensure optimal preparation and planning. This must include senior members of the surgical, anaesthetic and medical teams.	
20. Pain scoring tools should be understood and used in the perioperative/peri-procedure period for patients with a neurodisabling condition. Healthcare staff should be trained in their use.	
21. Patients with a neurodisabling condition who need ongoing medical and therapeutic input should always have a named lead clinician to co-ordinate care across healthcare services and all age groups. Any change in lead clinician should include planning and a thorough handover.	
22. Patients with a neurodisabling condition should be on an appropriate care pathway. For those with a cerebral palsy this should include arrangements for surveillance of hips, spine and growth until skeletal maturity and in the longer term, nutritional surveillance and the identification and management of pain.	
23. Patients with a neurodisabling condition should have a clear care plan that describes and addresses all of their needs. For those with a cerebral palsy this should specifically include pain, growth, nutritional status, safety of eating and drinking and other medical conditions such as seizures or mental health or behavioural issues. This care plan should be reviewed and updated when in hospital and on discharge to the community. Where the patient has complex needs this should be readily accessible to patients, their parent carers and clinicians e.g., as part of a patient-held patient passport.	
24. All medically frail patients with a neurodisabling condition, and where appropriate, their	

parent carers or legal guardians, must be offered the opportunity to discuss with their lead clinician, their care wishes in the event of serious illness or sudden collapse. This should be recorded in their patient-held Emergency Health Care Plan. This may include discussing Do Not Attempt Cardio Pulmonary Resuscitation decisions and palliative care plans, which should be validated at each point of care according to the existing legal requirements and professional guidance. This is particularly important to have in place at handover during transition to adult services.	
25. To facilitate transition to adult services there must be a clear, documented plan developed between the young person with complex needs and their multidisciplinary team. NCEPOD supports 'NICE Guideline 43' that transition planning should have begun by the age of 14.	
26. Healthcare organisations must better consider the needs of young people in the organisation, planning and delivery of healthcare. Age-appropriate care must include dedicated physical space as well as agreed policies and procedures to be used in all clinical areas to facilitate patient privacy, dignity and inclusion.	
27. The transition plan between children to adults' services should be co-ordinated by the lead clinicians and integrated within other multiagency plans e.g., health education, social care planning and mental healthcare services. The patient's team in primary care must be part of the planning process	
28. Care pathways for adolescent patients should promote dignity and independence when a hospital stay is needed and include ready access to single room accommodation, space for special equipment and the facility for parent carers to stay on-site when required and as recommended by the Royal College of Physicians of London in the 'Acute Care Toolkit 13'.	
29. General Practitioner Networks, Federations, Clusters, Health Boards and Partnerships, should consider developing Clinical Champions for neurodisabled patients to lead and help 'bridge the gap' between specialist neurodisability teams and primary/community care. Leads could be engaged in care from the early teens and function as an essential link with the wider paediatric multidisciplinary teams.	
30. As for all patients, those with neurodisabling conditions should have their preferred method	

of communication clearly documented in their clinical records (electronic and/or paper) across all healthcare providers (e.g., in primary and/or specialist healthcare).	
31. Each consultation with patients with a neurodisabling condition should be used as an opportunity to enquire whether they and their family have the information and support they need.	
32. All healthcare professionals who might work with patients with a neurodisabling condition should be able to make a range of reasonable adjustments to accommodate them, such as providing support for a range of communication, learning and physical access needs. 'Disability Matters' is a key resource that should be embedded in the training of all healthcare professionals.	
33. Patients with a neurodisabling condition, and where appropriate, their parent carers or legal guardians should have access to information and training in optimum self-management, problem-solving and how to get the right help and support as required in line with 'NICE Guideline 62'.	
34. Clinicians should be aware of, and comply with, the ethical and legal requirements for consent to surgery as defined by the General Medical Council and requirements for mental capacity assessments which will vary depending on UK country in which they live. These requirements must be communicated clearly to patients and parent carers and documented in the case notes.	
35. Patients with a neurodisabling condition should be involved in all communications and decision-making about their care and management where possible, and where appropriate, with adjustments in place to support their involvement, including specialist speech and language therapists as required. Parent carers or legal guardians must also be included in these conversations as appropriate.	
36. After a period of inpatient care patients with a neurodisabling condition should have their ongoing function and daily needs assessed and documented. Any significant change which would necessitate a planned alteration to day-to-day care must be clearly communicated in discharge plans. The discharge plan should be sent to the patient and their parent carers	

and their multidisciplinary team including their GP.	
37. Clinicians should be trained to be able to communicate effectively with patients with a range of communication needs. They must be able to make a structured assessment of overall needs alongside management of the presenting condition.	
38. All providers of healthcare for patients with a cerebral palsy or other chronic neurodisability should have clear care pathways described for patients, parent carers and referrers which are easily available e.g., on the hospital website with named contact details.	
39. To accommodate patients with neurodisabling conditions all healthcare facilities should: a) Be fully accessible; b) Have appropriate high-quality equipment available including hoists, weighing scales, height measuring facilities, places to allow changing and wheelchairs to support participation in everyday activities and proactive independence. These should be easily available and maintained regularly.	
40. Hospitals should review their day-case facilities and policies to ensure they are inclusive for neurodisabled patients with complex needs.	
2017 - NON-INVASIVE VENTILATION: INSPIRING CHANGE	**ADDITIONAL INFORMATION**
1. All hospitals should have a clinical lead for their acute non-invasive ventilation (NIV) service. The clinical lead should have time allocated in their job plan with clear objectives, including audit and governance for this service.	
2. Continuous positive airways pressure (CPAP) and non-invasive ventilation (NIV) should be coded separately. They are two distinct treatments given for different conditions and separate coding will reduce clinical confusion and improve reporting of outcomes.	
3. Acute non-invasive ventilation treatment should only be provided in clinical areas equipped with: a. Continuous pulse oximetry b. Continuous ECG monitoring; and c. Rapid access to the results of blood gas analysis	

4. In line with current British Thoracic Society guidelines, patients with known chronic obstructive pulmonary disease, or other known risk factors for hypercapnic respiratory failure, should have an oxygen saturation of 88-92% maintained, both prior to admission and on admission to hospital. The device used for oxygen delivery, the concentration of oxygen administered, and the target saturation should be documented in the relevant patient record.	
5. Treatment with acute non-invasive ventilation (NIV) must be started within a maximum of one hour of the blood gas measurement that identified the need for it, regardless of the patient's location. A service model whereby the NIV machine is taken to the patient to start treatment prior to transfer for ongoing ventilation will improve access to acute NIV.	
6. In all areas providing acute non-invasive ventilation (NIV), a minimum staffing ratio of one nurse to two acute NIV patients must be in place, as recommended in the British Thoracic Society guideline. The duration for which this should continue will be determined by each individual patient's response to ventilation.	
7. All hospitals where acute non-invasive ventilation (NIV) is provided must have an operational policy that includes, but is not limited to: a. Appropriate clinical areas where acute NIV can be provided, and in those areas the minimum safe level of staff competencies b. Staff to acute NIV patient ratios c. Escalation of treatment and step-down care procedures d. Standardised documentation, and e. Minimum frequency of clinical review, and seniority of reviewing clinician Compliance with this policy should be part of the annual audit process.	
8. All staff who prescribe/make changes to acute non-invasive ventilation treatment must have the required level of competency as stated in their hospital operational policy. A list of competent staff should be maintained. (Medical Directors and Nursing Directors)	

9. All patients treated with acute non-invasive ventilation (NIV) must have a treatment escalation plan in place prior to starting treatment. This should be considered part of the prescription for acute NIV and include plans in relation to: a. Escalation to critical care b. Appropriateness of invasive ventilation, and c. Ceilings of treatment. This should take into account: d. The underlying diagnosis e. The risk of acute NIV failure, and f. The overall management plan	
10. All patients treated with acute non-invasive ventilation (NIV) must be discussed with a specialist competent in the management of acute NIV at the time treatment is started or at the earliest opportunity afterwards.	
11. Consultant specialist review to plan ongoing treatment should take place within a maximum of 14 hours.	
12. All patients receiving acute non-invasive ventilation (NIV) should receive, as a minimum, daily consultant review while they remain on ventilation. This consultant must be competent in acute NIV management.	
13. All patients treated with acute non-invasive ventilation must have their vital signs recorded at least hourly until the respiratory acidosis has resolved. A standardised approach such as the National Early Warning Score is recommended.	
14. Documentation of all changes to ventilator settings is essential and the use of a standardised proforma is recommended.	
15. The use of acute non-invasive ventilation could act as a flag to consider referral to palliative care services, as this may be valuable for both active symptom control and end of life care.	
16. Following an acute non-invasive ventilation episode, a structured plan for future treatment should be discussed with the patient and/or carer either at the point of discharge from hospital or at subsequent follow-up. This must be documented, and a copy of the plan given	

to the patient and to the patient's general practitioner.	
17. In the absence of a recognised indication for acute non-invasive ventilation (e.g., chronic obstructive pulmonary disease) patients with acute ventilatory failure and evidence of pneumonia have a high risk of death and acute NIV should not be considered standard treatment. Escalation of treatment should be actively considered. There should be close liaison between senior members of the medical and critical care teams to agree the most appropriate approach to management.	
18. Governance arrangements for acute non-invasive ventilation (NIV) services should be in place in all organisations that provide acute NIV treatment. These should include all disciplines and specialities involved in the delivery of NIV. Depending on the local service model, those involved in the governance of acute NIV services are likely to include medical, nursing and physiotherapy staff from Emergency Medicine, Acute Medicine, Respiratory Medicine and Critical Care.	
19. All acute non-invasive ventilation services should have a record kept of the number of patients treated, to aid service planning.	
20. All acute non-invasive ventilation services should be audited annually. The audit results should be reported to the Hospital Board.	
21. All hospitals should monitor their acute non-invasive ventilation mortality rate and quality of acute NIV care. This should be reported at Board level.	
22. A quality standard for acute non-invasive ventilation is required to facilitate quality improvement in acute non-invasive ventilation services.	
2017 - MENTAL HEALTH IN GENERAL HOSPITALS: TREAT AS ONE	**ADDITIONAL INFORMATION**
1. The overarching theme of this report is that the divide between mental and physical healthcare needs to be reduced. This will require long-term changes in both organisational structures and individual clinical practice to produce a working environment where the mind and body are not approached separately. The following are a series of recommendations that should be undertaken now to help that process.	

2. Patients who present with known co-existing mental health conditions should have them documented and assessed along with any other clinical conditions that have brought them to hospital. These should be documented: a. In referral letters to hospital b. In any emergency department assessment c. In the documentation on admission to the hospital d. Existing guidance in these areas for specific groups should be followed which includes but is not limited to NICE CG16 and CG113	
3. The recognition of potential mental health conditions in all patients presenting to a general hospital would require routine screening at presentation and during the hospital stay. This would be an enormous change in practice and the benefits and challenges of this need to be investigated.	
4. National guidelines should be developed outlining the expectations of general hospital staff in the management of mental health conditions. These should include: a. The point at which a referral to liaison psychiatry should be made b. What should trigger a referral to liaison psychiatry, and c. What relevant information a referral should contain	
5. As recommended by the Psychiatric Liaison Accreditation Network, mental health liaison assessments should be made in an appropriate timeframe, and by a mental health professional of appropriate seniority to meet the needs of the patient.	
6. Patients who have been admitted to hospital and have been referred to liaison psychiatry should have a named liaison psychiatry consultant documented in the general hospital case notes and recorded centrally wherever possible.	

7. Liaison psychiatry review should provide clear and concise documented plans in the general hospital notes at the time of assessment. As a minimum the review should cover: a. What the problem is (diagnosis or formulation) b. The legal status of the patient and their mental capacity for any decision needing to be made if relevant c. A clear documentation of the mental health risk assessment – immediate and medium term d. Whether the patient requires any further risk management e.g., observation level e. A management plan including medication or therapeutic intervention f. Advice regarding contingencies e.g., if the patient wishes to self-discharge, please do this '…' g. A clear discharge plan in terms of mental health follow-up	
8. All healthcare professionals must work together to eradicate terms such as 'medically fit' or 'medical clearance'. The terms 'fit for assessment', 'fit for review' or 'fit for discharge' should be used instead to ensure parallel working.	
9. Patients with mental health conditions should be supported in overcoming/managing alcohol and/or substance abuse. Smoking cessation services and brief interventions must be offered to all patients who would benefit.	
10. All general hospital pharmacy departments should be able to undertake medicines reconciliation of medications for mental health conditions within the first 24 hours of admission. Communication between general hospital and mental health hospital pharmacists should be encouraged.	
11. The use of mental health one-to-one observation support needs to be available for patients in a general hospital setting. Organisations should determine whether this occurs via training of their own general hospital staff or by arrangement with the local mental health service. The sole use of security staff or other staff members who are not trained for this purpose must not occur.	
12. Mental capacity assessments should be documented in the case notes using the language of	

the relevant Act, and regular audits of the quality of the documentation undertaken.	
13. If the primary clinical team has concerns about mental capacity in patients who have a mental health condition, they should involve liaison psychiatry to assist in decision making.	
14. General hospitals must have a robust centralised hospital system for the management of mental health legislation processes whether by themselves or with their local mental healthcare providers. This should be audited regularly to ensure that the law is complied with.	
15. Mental healthcare should be routinely included in step-up and step-down documentation to critical care, with appropriate involvement from liaison psychiatry.	
16. Discharge planning for patients with mental health conditions should involve multidisciplinary input, including liaison psychiatry where appropriate and in all cases where the patient has been under the care of liaison psychiatry. The discharge letter should be copied to all specialties providing ongoing mental and physical healthcare outside of the general hospital. Sharing of clinical information between care providers using a Summary Care Record or equivalent should be utilised.	
17. All hospital staff who have interaction with patients, including clerical and security staff, should receive training in mental health conditions in general hospitals. Training should be developed and offered across the entire career pathway from undergraduate to workplace based continued professional development.	
18. In order to overcome the divide between mental and physical healthcare, liaison psychiatry services should be fully integrated into general hospitals. The structure and staffing of the liaison psychiatry service should be based on the clinical demand both within working hours and out-of-hours so that they can participate as part of the multidisciplinary team.	
19. Liaison psychiatry consultants and associated mental health staff should be actively integrated into all relevant general hospital governance structures and committees. This should include issues around audit, risk management, education and training, serious/adverse incident investigations and senior director level meetings.	
20. Record sharing (paper or electronic) between mental health hospitals and general hospitals	

needs to be improved. As a minimum patients should not be transferred between the different hospitals without copies of all relevant notes accompanying the patient.	
21. NCEPOD supports the continued successful implementation the Psychiatric Accreditation Liaison Network nationally.	
22. Diagnostic coding of mental health conditions must be improved. Liaison psychiatrists should enter the diagnosis in the general hospital notes so that they can be coded appropriately and included in discharge summaries made by general hospital doctors. This will help with local and national audit.	
2016 - ACUTE PANCREATITIS: TREAT THE CAUSE	**ADDITIONAL INFORMATION**
1. Hospital coders and clinicians should work more closely together to ensure coding for acute pancreatitis is accurate. This will aid local quality improvement initiatives and national reporting while facilitating the commissioning of services according to the needs of patients.	
2. Better management of co-morbidity in patients with acute pancreatitis is needed, especially through the involvement of the relevant specialists, as this represents an opportunity to improve overall outcomes.	
3. All patients presenting to the Emergency Department with an acute illness, such as acute pancreatitis, should have physiological parameters recorded as part of their initial assessment. These measurements should form part of an early warning score, such as the National Early Warning Score (NEWS).	
4. An early warning score should be used in the emergency department and throughout the patient's stay in hospital to aid recognition of deterioration. The score should be standardised within and across hospitals. Use of the National Early Warning Score (NEWS) would facilitate this standardisation.	
5. For all early warning scores and as recommended by the Royal College of Physicians of London for NEWS - all acute hospitals should have local arrangements to ensure an agreed response to each trigger level including: the speed of response, a clear escalation policy to ensure that an appropriate response always occurs and is guaranteed 24/7; the seniority	

and clinical competencies of the responder; the appropriate settings for ongoing acute care; timely access to high dependency care, if required; and the frequency of subsequent clinical monitoring.	
6. Acute Pancreatitis may require input from a number of different specialities. Therefore, it should be managed by a multidisciplinary team, comprising all specialities needed to treat the condition as well as the underlying co-morbidities.	
7. Antibiotic prophylaxis is not recommended in acute pancreatitis. All healthcare providers should ensure that antimicrobial policies are in place including prescription, review and the administration of antimicrobials as part of an antimicrobial stewardship process. These policies must be accessible, adhered to and frequently reviewed with training provided in their use.	
8. All patients admitted to hospital with acute pancreatitis should be assessed for their overall risk of malnutrition. This could be facilitated by using the Malnutrition Universal Screening Tool (MUST) and provides a basis for appropriate referral to a dietitian or a nutritional support team and subsequent timely and adequate nutrition support.	
9. Gallstones should be excluded in all patients with acute pancreatitis including those thought to have an alcohol-related acute pancreatitis, as gallstones are common in the general population. Abdominal ultrasound scanning is the minimum that should be performed.	
10. Definitive eradication of gallstones prevents the risk of a recurrent attack of acute pancreatitis. This usually involves cholecystectomy and ensuring that no stones remain in the bile duct. For those patients with an episode of mild acute pancreatitis, early definitive surgery should be undertaken, either during the index admission, as recommended by the International Recommendations Back to contents 72 Recommendations Association of Pancreatology (IAP), or on a planned list, within two weeks. For those patients with severe acute pancreatitis, cholecystectomy should be undertaken when clinically appropriate after resolution of pancreatitis.	
11. As recommended by the British Society of Gastroenterology, ERCP services should work collaboratively in a regional or hub-and-spoke model, with simple and rapid referral	

pathways established. Through this method, facilities for urgent or emergency ERCP should be widely available.	
12. As previously supported and recommended by NCEPOD, each hospital should have a 7-day Alcohol Specialist Service, to provide comprehensive physical and mental assessments, 'brief interventions' and access to services prior to discharge.	
13. All patients with suspected alcohol-related acute pancreatitis should be discussed with the hospital alcohol support service at every admission. Efforts to deal with this underlying cause of acute pancreatitis should equal those of gallstone acute pancreatitis. Future clinical guidelines on acute pancreatitis should incorporate this.	
14. Given the increasing complexity of the management of acute pancreatitis and its multidisciplinary nature, formal networks should be established so that every patient has access to specialist interventions, regardless of which hospital they present to and are initially managed in. Indications for when to refer a patient for discussion with a specialist tertiary centre and when a patient should be accepted for transfer, should be explicitly stated. Management in a specialist tertiary centre is necessary for patients with severe acute pancreatitis requiring radiological, endoscopic or surgical intervention.	
15. The 2012 IAP/APA guidelines provide recommendations concerning key aspects of medical and surgical management of acute pancreatitis based on the currently available evidence. These recommendations should serve as a reference standard for current management of acute pancreatitis.	
16. Specialist tertiary centres for acute pancreatitis should be commissioned. A specialist tertiary centre is defined by the IAP as a high-volume centre with intensive care facilities, daily access to radiological intervention, interventional endoscopy including EUS and ERCP and surgical expertise in managing necrotising pancreatitis. An example model to base this on from the English Department of Health could be the existing 'Improving Outcomes Guidance' compliant hepato-pancreato-biliary cancer units.	
17. NCEPOD supports the IAP recommendation that after excluding the commoner causes of acute pancreatitis, those in whom the cause remains unknown should undergo MRCP	

and/or endoscopic ultrasonography to detect occult microlithiasis, neoplasms or chronic pancreatitis as well as rare morphologic abnormalities. A CT of the abdomen should also be considered.	
18. All patient deaths should be discussed at morbidity and mortality meetings and learning should be shared through network meetings and their annual reports. Adequate time for structured assessment of deaths and complications should be provided by hospital Trusts/ Boards.	
2015 - JUST SAY SEPSIS!	**ADDITIONAL INFORMATION**
1. All hospitals should have a formal protocol for the early identification and immediate management of patients with sepsis. The protocol should be easily available to all clinical staff, who should receive training in its use. Compliance with the protocol should be regularly audited. This protocol should be updated in line with changes to national and international guidelines and local antimicrobial policies.	
2. Training in the recognition and management of sepsis in primary and secondary care should be included in educational materials for healthcare professionals undertaking new posts. Where appropriate this training should include the use of a standardised hospital protocol.	
3. A Clinical Lead in sepsis should be appointed in every Trust/Health Board to champion best practice and take responsibility for the clinical governance of patients with sepsis. This Lead should also work closely with those responsible for antimicrobial stewardship in their hospital(s).	
4. Trusts/Health Boards should use a standardised sepsis proforma to aid the identification, coding, treatment and ongoing management of patients with sepsis (some examples are available at sepsistrust.org and survivingsepsis.org). To ensure continuity of care, this proforma should be compatible, where possible with any similar proforma or system used in primary care and should permit the data to be shared electronically.	
5. An early warning score, such as the National Early Warning Score (NEWS) should be used in both primary care and secondary care for patients where sepsis is suspected. This will aid	

the recognition of the severity of sepsis and can be used to prioritise urgency of care.	
6. Primary care providers should ensure that robust safety netting arrangements are in place for those patients who are suspected to be at risk of sepsis.	
7. To facilitate the transition from primary to secondary care, a standard method of referral should be introduced in primary care for patients who are in need of a hospital admission for, or thought to be at risk of, sepsis. This should include a full set of observations/vital signs/risks/relevant history (such as previous sepsis) and any early warning scores used.	
8. On arrival in the emergency department a full set of vital signs, as stated in the Royal College of Emergency Medicine standards for sepsis and septic shock should be undertaken.	
9. Where sepsis is suspected, early consideration should be given to the likely source of infection and the ongoing management plan recorded. Once identified, control of the source of infection should be undertaken as soon as possible. Appropriate staffing and hospital facilities (including theatre/interventional radiology) should be available to allow this to occur.	
10. The importance of early identification and control of the source of sepsis should be emphasised to all clinicians and be reinforced in any future guidelines or tools for the management of sepsis.	
11. In line with previous NCEPOD and other national reports' recommendations on recognising and caring for the acutely deteriorating patients, hospitals should ensure that their staffing and resources enable a. All acutely ill patients to be reviewed by a consultant within the recommended national timeframes (max of 14 hours after admission) b. Formal arrangements for handover c. Access to critical care facilities if escalation is required; and d. Hospitals with critical care facilities to provide a Critical Care Outreach service (or equivalent) 24/7.	
12. All patients diagnosed with sepsis should benefit from management on a care bundle as part of their care pathway. The implementation of this bundle should be audited and reported on regularly. Trusts/Health Boards should aim to reach 100% compliance, and this should be encouraged by local and national commissioning arrangements.	

13. For any invasive procedure a surgical site bundle should be employed as specified in NICE Clinical Guideline 74.	
14. All healthcare providers should ensure that antimicrobial policies are in place including prescription, review and administration of antimicrobials as part of an antimicrobial stewardship process. These policies must be accessible, adhered to and frequently reviewed with training provided in their use.	
15. There should be senior microbiology input into the management of all patients identified with sepsis. This input should be available 24/7 and sought early in the care pathway.	
16. A booklet that provides patients and their relatives with easy-to-understand information on the recognition of sepsis, its long-term complications, recovery and risk of recurrence should be available from all healthcare providers and be provided to patients with sepsis at discharge from hospital. Some examples can be found at the UK Sepsis Trust (sepsistrust.org) and ICU Steps (icusteps.org).	
17. As for all acutely ill patients who are admitted to critical care, a follow-up service for patients with sepsis should be provided by the hospital which includes support and rehabilitation services, as recommended in NICE Clinical Guideline 83 and the Faculty of Intensive Care Medicine and Intensive Care Society Guidelines for the Provision of Intensive Care Services (GPICS).	
18. All patients discharged following a diagnosis of sepsis should have sepsis recorded on the discharge summary provided to the general practitioner so that it can be recorded in the patient's GP record.	
19. For patients who die with sepsis, the care provided should always be discussed at a hospital multidisciplinary mortality meeting to encourage learning, and, where the source of sepsis has not been identified, an autopsy should be undertaken.	
20. When diagnosed, sepsis should always be included on the death certificate, in addition to the underlying source of infection.	
21. The use of national coding for sepsis must be improved in order to aid clinical audit, national reporting and shared learning. Use of a standardised proforma as described in	The Sepsis Manual 5th Edition (2019), The UK Sepsis Trust

recommendation 4 should help improve this process and may help in the development of a national registry.	No registry yet ….impact of better care on quality of life after sepsis via the development of a national Sepsis Registry https://sepsistrust.org/wp-content/uploads/2020/01/5th-Edition-manual-080120.pdf Debated in parliament 2019 Sepsis National Register https://hansard.parliament.uk/lords/2019-01-30/debates/9D1BC81C-4539-4858-8AF2-C15626B6DE31/SepsisNationalRegister
2015 - GASTROINTESTINAL HAEMORRHAGE: TIME TO GET CONTROL?	**ADDITIONAL INFORMATION**
1. Patients with any acute GI bleed should only be admitted to hospitals with 24/7 access to on-site endoscopy, interventional radiology (on-site or covered by a formal network), on-site GI bleed surgery, on-site critical care and anaesthesia.	
2. Hospitals that do not admit patients with GI bleeds must have 24/7 access to endoscopy, interventional radiology and GI bleed surgery for patients who develop a GI bleed while as an inpatient for another condition by either an on-site service or a formal network.	
3. Network arrangements for GI bleeds must include repatriation as well as referral, transfer and admission in their protocols and should take into account any existing networks for other conditions which require these services and integrate with them.	
4. The traditional separation of care for upper and lower GI bleeding in hospitals should stop. All acute hospitals should have a Lead Clinician who is responsible for local integrated care pathways for both upper and lower GI bleeding and their clinical governance, including identifying named consultants, ideally gastroenterologists, who would be responsible for	

the emergency and on-going care of all major GI bleeds.	
5. Care pathways for all GI bleeds should include, as a minimum, risk assessment, escalation of care, transfusion documentation, core procedural documentation, network arrangements and re-bleed plans. The pathway needs to be clearly documented.	
6. All patients who present with a major upper or lower GI bleed, either on admission or as an inpatient, should be discussed with the duty or on-call (out-of-hours) consultant responsible for major GI bleeds*, within one hour of the diagnosis of a major bleed.	
7. The ongoing management of care for patients with a major bleed should rest with and be directed by the named consultant responsible for GI bleeds*; to ensure timely investigation and treatment to stop bleeding and reduce unnecessary blood transfusion.	
8. As previously stated by NICE (QS38), all patients with a GI bleed and haemodynamic instability should have 24/7access to an OGD within two hours of optimal resuscitation.	
9. Endoscopy lists should be organised to ensure that GI bleed emergencies can be prioritised and all acute patients with GI bleeding have their endoscopy within 24 hours.	
10. Hospitals should improve access to colonoscopies for patients with a major GI bleed to avoid the unnecessary delays seen in this report.	
11. GI bleed specialists need to develop risk stratification methods relevant to all GI bleeding.	
12. All patients with a GI bleed must have a clearly documented re-bleed plan agreed at the time of each diagnostic or therapeutic intervention.	
13. Resuscitation and airway support during endoscopy and interventional radiology procedures should be equivalent to facilities during emergency surgery. Unstable patients should have anaesthetic and/or critical care support.	
14. Minimal monitoring during procedures for major GI bleeds should be blood pressure, pulse oximetry and ECG. Monitoring should be provided by suitably skilled individuals who are separate from the procedural team and available 24/7.	
15. Endoscopy equipment and nursing support should be comparable in all locations where endoscopy is performed.	
16. Core procedural data to be recorded at every OGD should be defined and audited.	

17. All patients with a possible lower GI bleed should have 24/7 access to proctoscopy/rigid sigmoidoscopy.	
18. All hospitals must have an integrated replacement plan for all high-cost equipment which plans 5 years ahead and is reviewed annually.	
19. Hospitals should have contingency plans for failure of endoscopy, interventional radiology or surgical equipment.	
20. All deaths from major GI bleeds within 30 days of admission should undergo combined multidisciplinary peer review to identify remediable factors in patient care.	
21. The NICE Clinical Guideline (CG141) and Quality Standard (QS38) for Acute Upper GI Bleeding should be adhered to.	
22. Guidelines need to be developed for the optimal management of lower GI bleeds.	Diagnosis and management of acute lower gastrointestinal bleeding: guidelines from the British Society of Gastroenterology. 2019. https://www.bsg.org.uk/wp-content/uploads/2019/02/gutjnl-2018-317807.pdf
23. Consideration needs to be given to developing a combined guideline for all GI bleeding (to include NICE CG 141, QS 38, SIGN guidelines and the recommendations from this NCEPOD report).	
24. All hospitals to which patients with a GI bleed are admitted should have their endoscopy units accredited by the Joint Advisory Group (JAG) on GI Endoscopy.	
25. The Joint Advisory Group (JAG) on GI Endoscopy should consider including access to and delivery of 24/7 endoscopy for GI bleeding in their Global Rating Scale.	
26. A consensus exercise should be undertaken by specialties with an interest in GI bleeds to define 'major/severe' GI bleeding.	
2014 - LOWER LIMB AMPUTATION: WORKING TOGETHER	**ADDITIONAL INFORMATION**
1. A 'best practice' clinical care pathway, supporting the aims of the Vascular Society's Quality	

Improvement Framework for Major Amputation Surgery, and covering all aspects of the management of patients requiring amputation should be developed. This should include protocols for transfer, the development of a dedicated multidisciplinary team (MDT) for care planning of amputees and access to other medical specialists and health professionals both pre- and postoperatively to reflect the standards of the Vascular Society of Great Britain and Ireland, the British Association of Chartered Physiotherapists in Amputee Rehabilitation and the British Society of Rehabilitation Medicine. It should promote greater use of dedicated vascular lists for surgery and the use of multidisciplinary records.	
2. All patients with diabetes undergoing lower limb amputation should be reviewed both pre- and postoperatively by the specialist diabetes team to optimise control of diabetes and management of co-morbidities. The pre-operative review should not delay the operation in patients requiring emergency surgery.	
3. As recommended in the Quality Improvement Framework for Major Amputation Surgery (VSGBI), all patients undergoing major lower limb amputation should have a named individual responsible for the co-ordination of their rehabilitation and discharge (amputation/discharge co-ordinator). Their role should include the provision of detailed written information for patients and their relatives covering the whole clinical pathway.	
4. The decision to undertake a major amputation should be made by a multidisciplinary team (MDT) including vascular surgery, physiotherapy, occupational therapy, diabetology, radiology, specialist nursing and an amputation/discharge co-ordinator. Where the urgency of surgery prevents this, as a minimum patients should be discussed with a consultant vascular surgeon and reviewed by a consultant anaesthetist before amputation.	
5. All Trusts should have formal access to a consultant service in rehabilitation medicine that includes the postoperative care of patients after major lower limb amputation.	
6. When patients are admitted to hospital as an emergency with limb-threatening ischaemia, including acute diabetic foot problems, they should be assessed by a relevant consultant within 12 hours of the decision to admit or a maximum of 14 hours from the time of arrival at the hospital, in line with current guidance. If this is not a consultant vascular surgeon,	

then one should be asked to review the patient within 24 hours of admission.	
7. A model for the medical care of amputees, should be introduced which includes regular review by a physician and a surgeon throughout the in-patient stay. The existing orthogeriatric model serves as a good example in current practice.	
8. NICE recommends that a nutritional assessment of all patients should be made within the first 48 hours of admission (CG32). This guidance should be implemented for all patients requiring lower limb amputation.	
9. All patients admitted electively for lower limb amputation should be seen in a pre-assessment clinic to optimise medical co-morbidities and to plan postoperative rehabilitation.	
10. For patients undergoing major limb amputation, planning for rehabilitation and subsequent discharge should commence as soon as the requirement for amputation is identified. All patients should have access to a suitably qualified amputation/discharge co-ordinator.	
11. Clear guidelines on obtaining consent from patients requiring amputation should be developed to address the deficiencies identified in this study.	GMC: Decision making and consent 9 November 2020 https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/decision-making-and-consent Consent: Supported Decision Making (2018) https://www.rcseng.ac.uk/standards-and-research/standards-and-guidance/good-practice-guides/consent/
12. A consultant vascular surgeon should be present in the operating theatre for all amputations performed by a non-CCT trainee.	A Best Practice Clinical Care Pathway for Major Amputation Surgery (2016) https://www.vascularsociety.org.uk/_userfiles/pages/files/Resources/Vasc_Soc_Amputation_Paper_V2.pdf The Vascular Society published best practice

	in clinical care of major amputation in 2016. This is audited in NVR Vascular Services Quality Improvement Programme www.vsqip.org.uk
13. A care bundle should be developed to ensure the structured management of amputation patients. Audit of this should form part of the National Vascular Registry.	
14. All patients undergoing lower limb amputation must be screened pre-operatively for MRSA, as recommended by the Department of Health.	A Best Practice Clinical Care Pathway for Major Amputation Surgery (2016) https://www.vascularsociety.org.uk/_userfiles/pages/files/Resources/Vasc_Soc_Amputation_Paper_V2.pdf
15. As recommended in the Quality Improvement Framework for Major Amputation Surgery (VSGBI), amputations should be done on a planned operating list during normal working hours and within 48 hours of the decision to operate. Any case waiting longer than this should be the subject of local case review to identify reasons for delay and improve subsequent organisation of care.	
16. Hospitals require a properly funded and staffed acute pain service with capacity to manage patients with critical limb ischaemia and both pre- and post-amputation pain.	
17. Insulin should be prescribed according to National Patient Safety Agency (NPSA) recommendations.	Type 2 diabetes in adults: management NICE guideline [NG28] Published: 02 December 2015 Last updated: 24 November 2021 https://www.nice.org.uk/guidance/ng28/chapter/Recommendations Type 1 diabetes in adults: diagnosis and management NICE guideline [NG17]

	Published: 26 August 2015 Last updated: 21 July 2021 https://www.nice.org.uk/guidance/ng17/chapter/Recommendations#insulin-therapy
18. Hospitals should have clear guidelines for the management of blood glucose levels when they are outside the acceptable range. These guidelines should be implemented for all patients undergoing lower limb amputation.	
19. A falls risk assessment should be undertaken in all patients undergoing lower limb amputation, and measures should be put in place to reduce the risk of a subsequent fall during the in-patient stay.	
20. As recommended by the British Association of Chartered Physiotherapists in Amputee Rehabilitation and British Society of Rehabilitation Medicine, when it is possible to choose the level of amputation, the physiotherapist should be consulted in the decision-making process regarding the most functional level of amputation for the individual. Postoperative physiotherapy should commence on the first day where possible and should include exercise, oedema management and use of early walking aids as appropriate.	
2014 - TRACHEOSTOMY CARE: ON THE RIGHT TRACH?	**ADDITIONAL INFORMATION**
1. Tracheostomy insertion should be recorded and coded as an operative procedure. Data collection in all locations should be as robust as that for a theatre environment. This will facilitate better care planning and allow for national and local review and audit.	
2. Critical care units need a rapidly available difficult airway trolley/fibre-optic laryngoscopy. This recommendation reinforces the Intensive Care Society and Royal College of Anaesthetists' recommendations.	
3. Training programmes in blocked/displaced tubes/ airways and difficult tube changes should be delivered in accordance with clinical consensus guidelines as stated by the National Tracheostomy Safety Project and the Intensive Care Society.	
4. Capnography must be available at each bed space in critical care and should be continuously	Guidance For Tracheostomy Care

used when patients are ventilator dependent. This reinforces the recommendation from NAP4 and others.	https://www.ics.ac.uk/Society/Guidance/PDFs/Tracheostomy_care_guidance
5. Core competences for the care of tracheostomy patients, including resuscitation, should be set out by all Trusts using existing national resources available.	
6. Consent and WHO type (surgical) checklists should be adopted and used prior to tracheostomy insertion, wherever it is performed.	Raising the Standards: RCoA quality improvement compendium (2020) The use of the WHO surgical checklist was mandated for use in the NHS in England and Wales in January 2009. It was strongly commended for use in all hospitals by the Department of Health, Social Services and Public Safety in Northern Ireland and is one of the Patient Safety Essentials in the Scottish Patient Safety Programme – to be used for every patient, every time https://www.rcoa.ac.uk/sites/default/files/documents/2020-08/21075%20RCoA%20Audit%20Recipe%20Book_Combined_Final_25.08.2020_0.pdf Cardiff Critical Care Standard Operating Procedure (2019): Insertion should proceed in a WHO safety checklist style as detailed on the ICU LocSSIP: Perc Tracheostomy https://cardiffcriticalcare.co.uk/wp-content/uploads/2020/08/Percutaneous-Tracheostomy-LocSSIP-SOP-019.pdf
7. The diameter and length of the tube used should be appropriate for the size and anatomy of	

the individual patient, therefore an adequate range of tracheostomy tubes needs to be stocked by units. Operators should be aware of the types of tube available and in particular recognize that adjustable flanged tubes are available with inner tubes. Professionals need to continue to work closely with manufacturers to optimise design and tube options for a non-standard population.	
8. Confirmation of tube placement must be obtained using capnography. This should be readily available, and the events documented.	Capnography is mandatory for invasively ventilated patients Guidance For: Tracheostomy Care https://www.ics.ac.uk/Society/Guidance/PDFs/Tracheostomy_care_guidance
9. Appropriate positioning of the tube should be made using airway endoscopy. This should be readily available, and the events documented.	
10. When changing a tracheostomy tube factors that increase the risk of obstruction or loss of airway should be considered. These include tube size/ configuration and length. This is particularly important in the obese/high BMI patient.	
11. Unplanned tube changes pose additional risks. All unplanned tube changes should be reported locally as critical incidents and investigated to ensure that lessons are learned and reduce the risk of future events.	
12. Particularly careful consideration should be made at discharge from the critical care unit as to whether a cuffed tube is still indicated, and reasons must be documented. If it is, then there must be equipment and competences available on the ward for cuff pressure measurement.	
13. All Trusts should have a protocol and mandatory training for tracheostomy care including guidance on humidification, cuff pressure, monitoring and cleaning of the inner cannula and resuscitation. The clinical practices around tracheostomy care should be the subject of local quality improvement initiatives. Tube data should be more clearly recorded and made available for review at the bedside and thereafter facilitated by a 'passport' for each patient, with all data included.	

14. All hospitals should adhere to recommendations already made by the National Tracheostomy Safety Project to maintain an essential box of equipment which is sufficiently portable to be moved around with the patient.	
15. In order to facilitate decannulation and discharge planning multidisciplinary care needs to be established as part of the routine pathway for ALL tracheostomy patients. Whilst on the critical care unit where there will be at least daily reviews, key additional team members should be involved at an early stage. The team composition should be flexible to properly reflect the patient's needs and provide excellent continuity of care. There are several key team members who one would expect should always participate, e.g., physiotherapy, speech and language therapy, outreach nurses and dietitians. Hospitals need to provide adequate staff to ensure this happens routinely and in a timely manner.	
16. Involvement of Speech and Language Therapy in critical care needs to be facilitated particularly for more complex patients and to assist clinicians with high quality communication strategies as well as day to day ward care and according to patient needs.	
17. Dysphagia reported in tracheostomy patients warrants ongoing and further study in terms of risk factors, identification and natural history.	
18. There needs to be improved recognition of the incidence of swallowing difficulty in tracheostomy patients at all points in the care pathway. Early referrals to Speech and Language Therapy with specific competences are recommended.	
19. Bedside staff who care for tracheostomy patients must be competent in recognizing and managing common airway complications including tube obstruction or displacements and as described by the National Tracheostomy Safety Project algorithms.	
20. Emergency action plans must clearly reflect the escalation policy in order to summon senior staff in the event of a difficult airway event. Equipment including capnography must be always available, checked and utilised in patient care and in training scenarios. This reinforces the recommendation in the NAP4 guidance.	
21. In patients undergoing a tracheostomy without a trial of extubation the reason should be clearly documented.	

22. Unplanned and night time critical care discharge is not recommended, particularly in patients with a newly formed tracheostomy and/or patients recently weaned from respiratory support. This reinforces the Intensive Care Society's general recommendation about night time discharges.	
23. Wards accepting tracheostomy patients should be in a state of readiness in terms of equipment and competences.	
24. Multidisciplinary agreement about minimum airway assessments prior to decannulation needs to be established including availability of equipment and competences.	
25. Quality of discharge documentation should be improved. A structured and detailed summary must be provided between wards and between hospitals and the community at the point of transfer.	
2013 - SUBARACHNOID HAEMORRHAGE: MANAGING THE FLOW	**ADDITIONAL INFORMATION**
1. Formal networks of care should be established, linking all secondary care hospitals receiving subarachnoid haemorrhage patients to a designated regional neurosurgical/neuroscience centre.	National Stroke Service Model - Integrated Stroke Delivery Networks (2021) https://www.england.nhs.uk/wp-content/uploads/2021/05/national-stroke-service-model-integrated-stroke-delivery-networks-may-2021.pdf Hyper Acute Stroke Units (HASUs) set up https://www.stroke.org.uk/sites/default/files/new_pdfs_2019/our_policy_position/psp_-_reorganising_acute_stroke_services.pdf
2. All hospitals should undertake regional audit or multi-disciplinary team meetings, in order to share learning that could improve the care provided to aneurysmal subarachnoid haemorrhage patients.	Mentions a neurovascular multidisciplinary team Subarachnoid haemorrhage caused by a ruptured aneurysm: diagnosis and management. Draft for consultation,

	February 2021 https://www.nice.org.uk/guidance/GID-NG10097/documents/draft-guideline
3. The availability of interventional neuroradiology services should be such that hospitals can comply with the 'National Clinical Guideline for Stroke' stating that patients should be treated within 48 hours of their aneurysmal subarachnoid haemorrhage.	National Clinical Guideline for Stroke (2016) https://www.rcplondon.ac.uk/guidelines-policy/stroke-guidelines Subarachnoid haemorrhage caused by a ruptured aneurysm: diagnosis and management. Draft for consultation, February 2021 https://www.nice.org.uk/guidance/GID-NG10097/documents/draft-guideline
4. The clinical presentation of aneurysmal subarachnoid haemorrhage should be highlighted in primary and secondary care education programmes for all relevant health care professionals, including the guidelines for the management of acute severe headache published by the College of Emergency Medicine.	
5. All patients presenting with acute severe headache in a secondary care hospital should have a thorough neurological examination performed and documented. A CT scan should be performed immediately in this group of patients as defined by the 'National Clinical Guideline for Stroke'.	
6. Standard protocols for the care of aneurysmal subarachnoid haemorrhage patients in secondary care should be developed and adopted across formal networks. These should cover, as a minimum, initial assessment and diagnosis, management, referral, transfer to a neurosurgical/neuroscience centre and subsequent repatriation to secondary care, including rehabilitation. These protocols should take into account existing guidelines where relevant.	
7. All patients diagnosed with a subarachnoid haemorrhage should be commenced on nimodipine immediately as recommended in the 'National Clinical Guideline for Stroke', unless there are contraindications to its use.	

8. Relevant professional bodies should develop a nationally agreed and audited protocol for the management of aneurysmal subarachnoid haemorrhage in tertiary care that addresses initial assessment, multi-disciplinary management and documentation, informed consent, timing of interventions, perioperative care, management of complications and rehabilitation.	
9. Mental capacity of aneurysmal subarachnoid haemorrhage patients to give their own consent should be reviewed and a consensus document developed (with consideration of the Mental Capacity Act 2005).	
10. The nationally agreed standard ('National Clinical Guideline for Stroke') of securing ruptured aneurysms within 48 hours should be met consistently and comprehensively by the health care professionals who treat this group of patients. This will require providers to assess the service they deliver and move towards a seven-day service.	This only applies to "good grade patients"- confirmed in 2016 RCP stroke guideline
11. Neurosurgical/neuroscience centres must ensure that trainees in neurosurgery and neuroradiology develop the appropriate competencies for future consultant practice.	The Society of British Neurological Surgeons After completing training and passing the examination the specialist advisory committee will consider whether a trainee is competent to complete training. https://www.sbns.org.uk/index.php/education-and-training/how-to-become-a-neurosurgeon/ The logbook supports appraisal, training and clinical governance. You can record operations, CPD activity and design your own audits. https://www.sbns.org.uk/index.php/education-and-training/elogbook/ Curriculum for Neurology Training Implementation August 2022

	https://www.jrcptb.org.uk/sites/default/files/DRAFT%20Neurology%20Curriculum%202021%20250221.pdf GMC Neurology curriculum https://www.gmc-uk.org/education/standards-guidance-and-curricula/curricula/neurology-curriculum
12. Appropriately funded rehabilitation for all patients following an aneurysmal subarachnoid haemorrhage should include, as a minimum, access to information for patients and relatives, specialist subarachnoid haemorrhage nurses and comprehensive in-patient and out-patient rehabilitation services including appropriate neuropsychological support.	Subarachnoid haemorrhage: Evidence review for patient information (2021) https://www.nice.org.uk/guidance/GID-NG10097/documents/evidence-review-8 Stroke rehabilitation in adults Expected publication date: 18 October 2023 https://www.nice.org.uk/guidance/indevelopment/gid-ng10175 https://www.sbns.org.uk/index.php/download_file/view/97/757/ Specialist neuro-rehabilitation services: providing for patients with complex rehabilitation needs https://www.bsrm.org.uk/downloads/specialised-neurorehabilitation-service-standards--7-30-4-2015-pcatv2-forweb-11-5-16-annexe2updatedmay2019.pdf https://www.england.nhs.uk/wp-content/uploads/2016/04/rehabilitation-comms-guid-16-17.pdf

13. Organ donation rates following fatal aneurysmal subarachnoid haemorrhage should be audited and policies adopted to increase the frequency with which this occurs.	https://www.organdonation.nhs.uk/
2013 - ALCOHOL RELATED LIVER DISEASE: MEASURING THE UNITS	**ADDITIONAL INFORMATION**
1. A system should be in place to ensure that all patients admitted to hospital and subsequently identified as being at risk from an alcohol-related disease, are promptly referred to an appropriate support service. This system should be subject to regular audit.	
2. A multidisciplinary Alcohol Care Team, led by a consultant with dedicated sessions, should be established in each acute hospital and integrated across primary and secondary care.	
3. Each hospital should have a 7-day Alcohol Specialist Nurse Service, with a skill mix of liver specialist and psychiatry liaison nurses to provide comprehensive physical and mental assessments, Brief Interventions and access to services within 24 hours of admission.	
4. Robust guidelines should be available to every unit admitting patients with alcohol-related liver disease. All physicians managing such patients should be familiar with those guidelines and trained in their use.	
5. Trusts should ensure that medical patients are reviewed by a consultant within a maximum of 12 hours of admission, as suggested in the Royal College of Physicians London acute care toolkit, Society of Acute Medicine quality standards and previously by NCEPOD. This standard should be the subject of regular audit.	Acute care toolkit 4: Delivering a 12-hour, 7-day consultant presence on the acute medical unit https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-4-delivering-12-hour-7-day-consultant-presence-acute-medical-unit Revised to 14 hours https://www.england.nhs.uk/publication/seven-day-services-clinical-standards/
6. All patients presenting with decompensated alcohol related liver disease should have blood cultures included in their initial investigations on admission to hospital.	
7. All patients admitted as an emergency, regardless of specialty, should have their	

electrolytes checked routinely on admission and appropriately thereafter. This will help prevent the insidious and unrecognised onset of acute kidney injury.	
8. If ascites is present in patients presenting with decompensated alcohol-related liver disease, a diagnostic ascitic tap should be performed as part of their initial assessment. Coagulopathy is not a contraindication to this procedure.	Guidelines on the management of ascites in cirrhosis (review published in 2020): https://www.bsg.org.uk/wp-content/uploads/2020/10/gutjnl-2020-321790.full_.pdf
9. Patients who present acutely with decompensated liver disease, and who drink alcohol at a potentially harmful level, should not be assumed to have alcohol-related liver disease. A full assessment to exclude all other potential causes of liver disease should be performed as soon as possible after admission to hospital.	
10. A toolkit for the acute management of patients admitted with decompensated alcohol-related liver disease should be developed and made widely available to all physicians / doctors involved in the care of patients admitted to acute hospitals.	Alcohol: A Toolkit for Improving Care (2015) The Royal College of Emergency Medicine https://rcem.ac.uk/wp-content/uploads/2021/10/Alcohol_Toolkit_June2015.pdf
11. All patients presenting to hospital services should be screened for alcohol misuse. An alcohol history indicating the number of units drunk weekly, drinking patterns, recent drinking behaviour, time of last drink, indicators of dependence and risk of withdrawal should be documented.	
12. As recommended by NICE, assessment tools such as the Alcohol Use Disorders Identification Test (AUDIT) and the Clinical Institute Withdrawal Assessment – Alcohol, revised (CIWA-Ar) should be readily available for use by all health care professionals who should be competent in their use.	
13. Alcohol withdrawal scales should be used, as suggested in NICE guidance, to guide treatment decisions to prevent the alcohol withdrawal syndrome.	
14. Treatment for alcohol withdrawal should be tailored to the individual patient. The presence of encephalopathy, or other features of liver disease, can make the administration of	

sedatives inappropriate and may indicate the need to consider transfer to a higher level of care.	
15. All patients admitted with decompensated alcohol related liver disease should be seen by a specialist gastroenterologist / hepatologist at the earliest opportunity after admission. This should be within 24 hours and no longer than 72 hours after admission to hospital.	
16. Trusts should ensure that all patients admitted with alcohol-related liver disease receive early specialist input from a gastroenterologist / hepatologist and a specialist practitioner in alcohol addiction.	
17. All patients with alcohol-related liver disease and a history of current alcohol intake, in excess of recommended limits, should have thiamine (oral or intravenous) administered on admission to hospital.	
18. In patients with decompensated alcohol-related liver disease and deteriorating renal function, diuretics should be stopped, and intravenous fluid administered to improve renal function, even if the patient has ascites and peripheral oedema.	
19. As for all patients, patients with alcohol-related liver disease should have accurate monitoring of fluid balance. Systems to ensure accurate monitoring of fluid balance should be in place in all Trusts.	
20. NICE recommends that a nutritional assessment of all patients should be made within the first 48 hours of admission (CG32). This should include patients with alcohol-related liver disease.	
21. If ascites is present in patients presenting with decompensated alcohol-related liver disease, a diagnostic ascitic tap should be performed as part of their initial assessment. Coagulopathy is not a contraindication to this procedure.	
22. The findings in this small group of patients suggest that a larger study is indicated to identify areas for improvement in the care of patients undergoing endoscopy for gastrointestinal bleeding.	NCEPOD report - Gastrointestinal Haemorrhage: Time to Get Control? (2015)
23. In line with NICE guidance, unless contraindicated, all patients with alcohol-related liver disease, who present with gastrointestinal bleeding, should be offered antibiotics and	

terlipressin until the outcome of their endoscopy is known.	
24. Deterioration in renal function in patients with liver disease should not be assumed to be due to the hepatorenal syndrome, as other potential causes are often present and should be actively excluded.	
25. Escalation of care should be actively pursued for patients with alcohol-related liver disease, who deteriorate acutely and whose background functional status is good. There should be close liaison between the medical and critical care teams when making escalation decisions.	
26. When a decision is made not to escalate, or to actively withdraw treatment for a patient with alcohol-related liver disease, this decision should be made by a consultant. The decision-making process should involve specialists with appropriate training to identify what interventions are likely to be of benefit to the patient. Such decisions should be discussed with the patient and the patient's representative (if appropriate) and documented clearly. Where there is doubt or disagreement about such decisions, the opinion of a second consultant should be sought, as outlined in guidance issued by the General Medical Council.	
27. All patients presenting to hospital services should be screened for alcohol misuse. An alcohol history indicating the number of units drunk weekly, drinking patterns, recent drinking behaviour, time of last drink, indicators of dependence and risk of withdrawal should be documented.	Alcohol: A Toolkit for Improving Care (2015) The Royal College of Emergency Medicine The PAT suggests that if a patient presents with one of the 7 of the 'top 10 conditions' then they should be screened, as these are deemed to be 'high risk' alcohol related conditions https://rcem.ac.uk/wp-content/uploads/2021/10/Alcohol_Toolkit_June2015.pdf Alcohol care team Provides screening and brief intervention, and training (pharmacological management of alcohol withdrawal, complications of this,

	& screening and brief intervention) to pre–registration nursing students, qualified nursing staff, medical teams and therapy services. https://healthinnovationnetwork.com/system/resources/resources/000/000/427/original/Tackling_Alcohol_Misuse_Resource_Pack_2017-FINAL.pdf
28. All patients presenting to acute services with a history of potentially harmful drinking, should be referred to alcohol support services for a comprehensive physical and mental assessment. The referral and outcomes should be documented in the notes and communicated to the patient's general practitioner.	
29. All deaths due to alcohol-related liver disease should be reviewed at a local morbidity and mortality, clinical governance meeting to ensure that lessons are learned and to give assurance that high quality care is being provided.	
30. Where the cause of death is unclear, or death was not anticipated, this should be discussed with the coroner.	
2012 - BARIATRIC SURGERY: TOO LEAN A SERVICE?	**ADDITIONAL INFORMATION**
1. It should be the duty of all bariatric surgery teams to follow-up patients by telephone or in person at regular intervals post-surgery. The first of these follow-up calls should be within seven days of surgery and frequently thereafter to complement outpatient follow-up.	
2. In common with other types of specialist surgery, bariatric surgery is not for the occasional operator. The Specialist Associations involved with bariatric surgery should provide guidance regarding the numbers of procedures which both independent operators and institutions should achieve in order to optimise outcomes.	
3. All hospitals that undertake weight loss surgery on morbidly obese patients or admit patients as an emergency must have appropriate, properly fitting anti-embolism stockings	

(or equivalent).	
4. There is a global need to provide imaging modalities that are suitable for morbidly obese patients, wherever they are admitted, and this may be best dealt with by an escalation process and by specification at the time of refurbishment.	
5. All patients considered for weight loss surgery should receive dietary assessment and education preferably prior to referral, but definitely prior to surgery.	
6. All patients must have access to the full range of specialist professionals appropriate for their needs in line with NICE guidelines.	
7. The value of MDTs, their optimal configuration, and their appropriateness for bariatric patients with different needs to be agreed by the healthcare professionals involved in their care.	
8. The outcome of all MDT discussions must be documented in the medical records. Where an MDT discussion has not taken place, this must also be documented with reasons.	
9. There should be a greater emphasis on psychological assessment and support, and this should occur at an earlier stage in the care pathway for obese patients. Psychological screening tools are available and may be of value in identifying those patients requiring formal psychological intervention.	
10. All bariatric patients should have an assessment of the predicted difficulty of intubation recorded.	
11. All bariatric patients should attend a pre-assessment clinic, during which they should have access to a full range of health professionals appropriate to their needs, including where required pre-admission assessment by an anaesthetist.	
12. As for all elective surgery, a deferred two-stage consent process with sufficient time lapse should be utilised, and details of benefits and risks should be clearly described and supported with written information. The consent process should not be undertaken in one stage on the day of operation for elective bariatric surgery.	Two-stage process https://www.rcseng.ac.uk/standards-and-research/gsp/domain-3/3-5-1-consent/
13. Given the potential for significant metabolic change (and its dietary dimension) after bariatric surgery, good quality care is supported if patients have clear post-operative dietary	

guidance and a timely and complete discharge summary, with full clinical detail and post discharge plan to ensure safe and seamless care. This must be provided to the GP as soon as possible following discharge, preferably within 24 hours.	
14. All patients nursed outside of critical care should be managed with a 'track and trigger' system.	NICE recommends that 'physiological track and trigger systems' should be used to monitor all adult patients in acute h ospitals National Early Warning Score systems that alert to deteriorating adult patients in hospital (2020): https://www.nice.org.uk/advice/mib205/chapter/The-technology
15. Surgery and follow-up data on all patients undergoing bariatric surgery, in the NHS and independent sector, should be entered into the NBSR.	
16. A clear, continuous long-term follow-up plan must be made for every patient undergoing bariatric surgery. This must include appropriate levels of informed surgical, dietitian, GP and nursing input. An assessment for the requirement of physician and psychology/psychiatric input must be made and provided should the patient require it.	
17. Professional associations and regulators should agree a code of conduct for advertisements for weight loss surgery in the UK which safeguard and appropriately advise patients seeking this increasingly popular method of weight control.	
2012 - CARDIAC ARREST PROCEDURES: TIME TO INTERVENE?	**ADDITIONAL INFORMATION**
1. Standards of clerking/examination and recording thereof should be improved. Each hospital should ensure that the detail required in clerking and examination is explicit and communicated to doctors-in-training as part of the induction process. A regular (6-monthly) audit of performance against these agreed standards should be performed and reported	

through the governance structure of the organisation.	
2. Hospitals must ensure appropriate supervision for doctors-in-training. Delays in escalation to more senior doctors due to lack of recognition of severity of illness by doctors in training are unacceptable and place patients at risk.	
3. Each Trust/hospital must provide sufficient critical care capacity or pathways of care to meet the needs of its population.	Superseded by COVID-19 guidance
4. Each entry in a patient's case notes must contain date, time, location of patient and name and grade of staff and their contact details. It must also contain information on the most senior team member present during that patient contact (name and grade).	
5. As previously recommended by NCEPOD and the RCP, all acute admissions must be reviewed at consultant level within 12 hours of admission. Earlier consultant review may be required, and arrangements should be in place to ensure that this is available. A regular (6-monthly) audit of performance against this standard should be performed and reported through the governance structure of the organisation.	Seven Day Services Clinical Standards Last updated: 10 February 2022 https://www.england.nhs.uk/publication/seven-day-services-clinical-standards/ These align with the examples of possible considerations in NICE guideline NG94, recommendation 1.2.5 https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-4-delivering-12-hour-7-day-consultant-presence-acute-medical-unit
6. CPR status must be considered and recorded for all acute admissions, ideally during the initial admission process and definitely at the initial consultant review when an explicit decision should be made, and clearly documented (for CPR or DNACPR). When, during the initial admission, CPR is considered as inappropriate, consultant involvement must occur at that time.	
7. NICE Clinical Guideline 50 (Acutely Ill patients in hospital: Recognition of and response to acute illness in adults in hospital) is not applied universally. Each hospital must ensure that they comply with this NICE guidance.	

8. For all patients requiring monitoring, there must be clear instructions as to the type and frequency of observations required. Where 'track and trigger' systems are used the initial frequency of observations should be stated clearly by the admitting doctor.	NEWS2 is the latest version of the National Early Warning Score (NEWS), first produced in 2012 and updated in December 2017, which advocates a system to standardise the assessment and response to acute illness Due for review in 2023 https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2
9. Where patients continue to deteriorate after non-consultant review there should be escalation of patient care to a more senior doctor. If this is not done, the reasons for non-escalation must be documented clearly in the case notes.	
10. Hospitals should undertake a detailed audit of the period prior to cardiac arrest to examine whether antecedent factors were present that warned of potential cardiac arrest and what the clinical response to those factors was.	
11. A national standard dataset should be developed to audit antecedent factors against.	National Cardiac Arrest Audit https://ncaa.icnarc.org/Home
12. An effective system for recording all decisions and discussions relating to CPR/DNACPR must be established, allowing all people who may care for the patient to be aware of this information.	
13. Health care professionals as a whole must understand that patients can remain for active treatment but that in the event of a cardiac arrest CPR attempts may be futile. Providing active treatment is not a reason not to consider and document what should happen in the event of a cardiac arrest.	
14. The use of 'ceilings of treatment' documentation would facilitate decision making and clarity of intent. There is need for a national project to lead this work.	NICE: New guidelines to improve care for people at the end of life (2015) https://www.nice.org.uk/news/article/new-guidelines-to-improve-care-for-people-at-

	the-end-of-life Talking about dying 2021: How to begin honest conversations about what lies ahead https://www.rcplondon.ac.uk/projects/outputs/talking-about-dying-2021-how-begin-honest-conversations-about-what-lies-ahead Resuscitation Council UK introduces version 3 of ReSPECT form https://www.resus.org.uk/about-us/news-and-events/resuscitation-council-uk-introduces-version-3-respect-form
15. Hospitals must arrange services and equipment to ensure that defibrillation is delivered within three minutes of cardiac arrest (for shockable rhythms).	
16. All CPR attempts should be reported through the Trust/Hospital critical incident reporting system. This information should be reported to the Trust/Hospital Board on a regular basis.	
17. Each Trust/Hospital should set a local goal for reduction in cardiac arrests leading to CPR attempts. Progress against this goal should be reported to the Trust/Hospital Board on a regular basis.	
18. Each hospital should ensure there is an agreed plan for airway management during cardiac arrest. This may involve bag and mask ventilation for cardiac arrests of short duration, tracheal intubation if this is within the competence of members of the team responding to the cardiac arrest or greater use of supraglottic airway devices as an alternative.	
19. Each hospital should audit all CPR attempts and assess what proportion of patients should have had a DNACPR decision in place prior to the arrest and should not have undergone CPR, rather than have the decision made after the first arrest. This will improve patient care by avoiding undignified and potentially harmful CPR attempts during the dying process.	
20. Consultant input is required in the immediate post arrest period to ensure that decision	

making is appropriate and that the correct interventions are undertaken.	
21. Coronary angiography and PCI should be considered in all cardiac arrest survivors where the cause of cardiac arrest is likely to be primary myocardial ischaemia.	This recommendation was superseded by Recommendation 5 in the 2021 report – 'Time Matters' on out of hospital cardiac arrests
22. Organ donation should be considered in every case where life sustaining therapies are being withdrawn.	Working with the principles and decision-making models - cont. - GMC (gmc-uk.org) https://www.organdonation.nhs.uk/
2011 - PERIOPERATIVE CARE: KNOWING THE RISK	**ADDITIONAL INFORMATION**
1. There is a need to introduce a UK wide system that allows rapid and easy identification of patients who are at high risk of postoperative mortality and morbidity.	Surgical Outcome Risk Tool (SORT) https://www.ncepod.org.uk/sort.html
2. The decision to operate on high-risk patients (particularly non-elective) should be made at consultant level, involving surgeons and those who will provide intra and postoperative care.	
3. An assessment of mortality risk should be made explicit to the patient and recorded clearly on the consent form and in the medical record.	
4. Once a decision to operate has been made there is a need to provide a package of full supportive care. This may include critical care admission or support, for the higher risk patients. If critical care admission is not possible then the decision to operate is being made without provision of an appropriate package of care: this should be communicated to the patient as part of the consent procedure.	
5. Better intra-operative monitoring for high-risk patients is required. The evidence base supports the use of peri-operative optimisation and this relies on extended haemodynamic monitoring. NICE Medical Technology Guidance 3 relating to cardiac output monitoring should be applied.	NICE Medical Technology Guidance 3 relating to cardiac output monitoring was superseded in 2020 by: https://www.nice.org.uk/guidance/ng180/evidence/j-noninvasive-cardiac-output-

	monitoring-pdf-317993437909[J] Evidence review for non-invasive cardiac output monitoring Perioperative care in adults - Evidence review for non-invasive cardiac output monitoring
6. The postoperative care of the high-risk surgical patient needs to be improved. Each Trust must make provision for sufficient critical care beds or pathways of care to provide appropriate support in the postoperative period.	Superseded by COVID-19 guidance
7. To aid planning for provision of facilities for high-risk patients, each Trust should analyse the volume of work considered to be high risk and quantify the critical care requirements of this cohort. This assessment and plan should be reported to the Trust Board on an annual basis.	
8. All elective high-risk patients should be seen and fully investigated in pre-assessment clinics. Arrangements should be in place to ensure more urgent surgical patients have the same robust work up.	
9. Greater assessment of nutritional status and its correction should be employed in high-risk patients.	
10. High risk patients should have fluid optimisation in a higher care level area pre-operatively, if it is to be adequate and contribute to better outcomes.	
11. The adoption of enhanced recovery pathways for high-risk elective patients should be promoted.	
12. Given the high incidence of postoperative complications demonstrated in the review of high-risk patients, and the impact this has on outcome there is an urgent need to address postoperative care; this supports the prospective data.	RCS: The High-Risk General Surgical Patient: Raising the Standard December 2018 https://www.rcseng.ac.uk/-/media/files/rcs/news-and-events/media-centre/2018-press-releases-documents/rcs-report-the-highrisk-general-surgical-patient-

	-raising-the-standard--december-2018.pdf
2011 - SURGERY IN CHILDREN: ARE WE THERE YET?	**ADDITIONAL INFORMATION**
1. All hospitals that undertake surgery in children must have the necessary information systems in place to determine the number of patients that are treated within their hospital for monitoring, clinical governance and financial purposes.	
2. There is a need for a national Department of Health review of children's surgical services in the UK to ensure that there is comprehensive and integrated delivery of care, which is effective, safe and provides a high quality patient experience.	Paediatric critical care and surgery in children review Summary report November 2019 https://www.england.nhs.uk/wp-content/uploads/2019/11/paediatric-critical-care-and-surgery-in-children-review-summary-report-nov-2019.pdf
3. National NHS commissioning organisations including the devolved administrations need to adopt existing recommendations for the creation of formal clinical networks for children's surgical services. These need to provide a high quality child focused experience which is safe and effective and meets the needs of the child.	Children's Networks Across The UK The Royal College of Surgeons of England https://www.rcseng.ac.uk/-/media/files/rcs/standards-and-research/standards-and-policy/service-standards/childrens-surgery/mapped-childrens-networks-across-the-uk.pdf
4. All hospitals that admit children should have a comprehensive transfer policy that is compliant with Department of Health and Paediatric Intensive Care Society guidance and should include elective and emergency transfers, staffing levels for the transfer, communication procedures, family support, equipment provision and transport arrangements.	
5. All hospitals that provide surgery for children should have clear operational policies regarding who can operate on and anaesthetise children for elective and emergency surgery, taking into account on-going clinical experience, the age of the child, the	

complexity of surgery and any co-morbidities. These policies may differ between surgical specialities.	
6. All hospitals that undertake surgery in children must hold regular multidisciplinary audit and morbidity and mortality meetings that include children and should collect information on clinical outcomes related to the surgical care of children.	
7. Hospitals in which surgery in children is undertaken should provide written information for children and parents about anaesthesia. Good examples are available from the Royal College of Anaesthetists website.	
8. Hospitals that have a large case load for children's surgery should consider using dedicated children's operating theatres.	
9. Hospitals in which a substantial number of emergency children's surgical cases are undertaken should consider creating a dedicated daytime emergency operating list for children or ensure they take priority on mixed aged emergency operating lists.	
10. Children admitted for surgery whether as an inpatient or an outpatient must have immediate access to paediatric medical support and be cared for on a ward staffed by appropriate numbers of children trained nurses.	
11. There is a need for those professional organisations representing peri-operative nursing and operating department practitioners to create specific standards and competencies for staff that care for children while in the operating theatre department.	
12. All hospitals that admit children as an inpatient must have a policy for the identification and management of the seriously ill child. This should include Track & Trigger and a process for escalating care to senior clinicians. The National Institute for Health and Clinical Excellence needs to develop guidance for the recognition of and response to the seriously ill child in hospital.	
13. All hospitals that admit children must have a resuscitation policy that includes children. This should include the presence of onsite paediatric resuscitation teams that includes health care professionals who have advanced training in paediatric resuscitation.	
14. Existing guidelines on the provision of acute pain management for children should be	

followed by all hospitals that undertake surgery in children.	
15. Medical notes for babies with necrotising enterocolitis require careful audit to ensure that the views and decisions of all members of the multi-disciplinary team are accurately recorded.	The Necrotising Enterocolitis (NEC) care bundle (2013) https://www.networks.nhs.uk/nhs-networks/staffordshire-shropshire-and-black-country-newborn/documents/documents/east-of-england-perinatal-network-nec-care-bundle Neonatal infection: antibiotics for prevention and treatment NICE guideline [NG195]Published: 20 April 2021 https://www.nice.org.uk/guidance/ng195 Assessing capacity GMC https://www.nhs.uk/conditions/consent-to-treatment/capacity/
16. All hospitals that provide surgery for children should have clear operational policies regarding who can operate on and anaesthetise children for elective and emergency surgery, taking into account on-going clinical experience, the age of the child, the complexity of surgery and any co-morbidities. These policies may differ between surgical specialities.	Standards for Children's Surgery - Children's Surgical Forum (2013) https://www.rcseng.ac.uk/-/media/files/rcs/library-and-publications/non-journal-publications/rcs_standards_for_childrens_surgery_2013.pdf
17. National standards, including documentation for the transfer of all surgical patients, irrespective of whether they require intensive care need to be developed by regional networks.	
18. Hospital teams working in both specialist and non-specialist centres should be in a state of	

readiness for transfer of babies and children requiring emergency surgery and be prepared to provide high level and timely support for these transfers. Surgical emergencies may require rapid triage, simultaneous with resuscitation and communication with tertiary care providers.	
19. When a decision to transfer a patient for (less urgent) surgical care has been made, this should be expedited. Transfer method and personnel should be agreed in advance.	
20. Expertise in paediatric radiology is an essential adjunct to the running of a service for children requiring surgery.	
21. Multidisciplinary team meetings for complex cases should be undertaken pre-operatively except when this is predicated by the urgency of the case. Documentation of inter-professional discussions is essential even if written in retrospect.	
22. Consent by a senior clinician, ideally the one performing the operation should be normal practice in paediatrics, as in other areas of medicine and surgery. Documentation of grade confirms that this process has occurred. This is already a national recommendation.	GMC: Decision making and consent 9 November 2020 https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/decision-making-and-consent https://www.nhs.uk/conditions/consent-to-treatment/capacity/
23. In surgery which is high risk due to co-morbidity and/or anticipated surgical or anaesthetic difficulty, there should be clear documentation of discussions with parents and carers in the medical notes. Risk of death must be formally noted, even if difficult to quantify exactly.	
24. National guidance should be developed for children that require end-of-life care after surgery.	
25. Clinicians must ensure that appropriate records are made in the medical notes of all discussions that take place with a child's parents or relatives after death. In addition, it is mandatory that the name and grade of clinicians involved at all stages of care are clearly recorded in the medical notes and on anaesthetic and operation records.	
26. Confirmation that a death has been discussed at a morbidity and mortality meeting is	

required. This should comprise a written record of the conclusions of that discussion in the medical notes.	
27. All hospitals that undertake surgery in children must hold regular multidisciplinary audit and morbidity and mortality meetings that include children and should collect information on clinical outcomes related to the surgical care of children.	Removed as either out of date, too vague or specific to the time in which it was made.
28. Advisors have highlighted the difficulties in decision-making during both medical management and the decision to operate in babies with NEC. A national database of all babies with NEC might facilitate this aspect of care and generate data upon which to base further research.	Removed as either out of date, too vague or specific to the time in which it was made.
29. Urgent completion of the "Safe and Sustainable Review of Children's Neurosurgical Services" is required with implementation of the appropriate pathways of care that this is likely to recommend. This should be followed by a further audit to ensure compliance with national standards and models of care for all children requiring neurosurgery.	Removed as either out of date, too vague or specific to the time in which it was made.
2010 - SURGERY IN THE ELDERLY: AN AGE OLD PROBLEM	**ADDITIONAL INFORMATION**
1. Routine daily input from Medicine for the Care of Older People should be available to elderly patients undergoing surgery and is integral to inpatient care pathways in this population.	
2. All hospitals should address the need for nutrition and mental capacity to be assessed and documented in the elderly on admission as a minimum standard.	GMC: Decision making and consent 9 November 2020 https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/decision-making-and-consent https://www.nhs.uk/conditions/consent-to-treatment/capacity/
3. Comorbidity, disability and frailty need to be clearly recognised and seen as independent markers of risk in the elderly. This requires skill and multidisciplinary input including early involvement of Medicine for the Care of Older People.	

4. Assessment of capacity and appropriate use of the consent process should be clearly understood and documented by all clinicians taking consent in the elderly.	Consent – assessing capacity Consent to treatment - Assessing capacity - NHS (www.nhs.uk) GMC: Decision making and consent 9 November 2020 https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/decision-making-and-consent https://www.nhs.uk/conditions/consent-to-treatment/capacity/
5. Medicine reviews need to be a regular daily occurrence in the peri-operative period. Input of both Medicine for the Care of Older People (MCOP) clinicians and an experienced ward pharmacist may greatly assist this process.	Peri-operative Care for Older Patients Undergoing Surgery Last updated: 04 February 2018 https://www.bgs.org.uk/resources/peri-operative-care-for-older-patients-undergoing-surgery Enhanced Recovery Programme (ERP) Enhanced recovery - NHS (www.nhs.uk)
6. Delays in surgery for the elderly are associated with poor outcome. They should be subject to regular and rigorous audit in all surgical specialities, and this should take place alongside identifiable agreed standards.	
7. Senior clinicians in surgery, anaesthesia and medicine need to be involved in the decision to operate on the elderly. Risk assessment must take into account all information strands, including risk factors for acute kidney injury.	Peri-operative Care for Older Patients Undergoing Surgery Last updated: 04 February 2018 https://www.bgs.org.uk/resources/peri-operative-care-for-older-patients-undergoing-surgery
8. An agreed means of assessing frailty in the perioperative period should be developed and	Identifying frailty

included in risk assessment.	https://www.england.nhs.uk/ourwork/clinical-policy/older-people/frailty/frailty-risk-identification/ Electronic Frailty Index https://www.england.nhs.uk/ourwork/clinical-policy/older-people/frailty/efi/ https://www.cgakit.com/fr-1-gait-speed-test https://www.cgakit.com/fr-1-prisma-7 Rockwood https://www.bgs.org.uk/sites/default/files/content/attachment/2018-07-05/rockwood_cfs.pdf https://www.england.nhs.uk/south/wp-content/uploads/sites/6/2022/02/rockwood-frailty-scale_.pdf
9. Pain must be assessed and managed as a priority before operation.	
10. All elderly surgical admissions should have a formal nutritional assessment as soon as practicable after their admission so that malnutrition can be identified and managed appropriately.	Perioperative care in adults [G] Evidence review for nutritional screening in preoperative assessment NICE guideline NG180 Evidence reviews underpinning recommendations 1.3.10 and 1.3.11 in the NICE guideline August 2020 https://www.nice.org.uk/guidance/ng180/evidence/g-nutritional-screening-in-preoperative-assessment-pdf-8833151060
11. Temperature monitoring and management of hypothermia should be recorded in a nationally standardised anaesthetic record. This is particularly important in elderly patients.	

12. There should be clear strategies for the management of intra-operative low blood pressure in the elderly to avoid cardiac and renal complications. Non-invasive measurement of cardiac output facilitates this during major surgery in the elderly.	
13. There is an ongoing need for provision of peri-operative level 2 and 3 care to support major surgery in the elderly, particularly for those with comorbidity. For less major surgery extended recovery and high observation facilities in existing wards should be considered.	
14. Postoperative Acute Kidney Injury (AKI) is avoidable in the elderly and should not occur. There is a need for continuous postgraduate education of physicians, surgeons and anaesthetists around the assessment of risk factors for the development of AKI in the elderly surgical patient.	
15. Fluid management must be clearly documented, and form part of the routine review and handover between theatres and wards. This should continue on at least a daily basis, thereafter, alongside monitoring of biochemical function.	
16. Pain is the 5th vital sign and requires the same status as heart rate and blood pressure in the assessment and management of all patients. Clear and specific guidance on the recognition and treatment of pain in the elderly should be incorporated into education programmes.	
17. A fully resourced acute pain service (APS) is essential within the context of modern secondary care services. This includes the Independent Sector.	
18. The British Orthopaedic Association and The British Geriatric Society should provide more specific guidance on the ideal levels of seniority and speciality input into the assessment and decision-making phase of the care pathway for patients with fractured neck of femur.	
19. The decision about when a patient's physical condition is optimised and when to operate in patients with fractured neck of femur is critical and requires multi-disciplinary input and expertise. There must be senior surgical, medical and anaesthetic input at this point in the care pathway.	
20. Greater vigilance is required when elderly patients with non-specific abdominal symptoms and signs (diarrhoea, vomiting, constipation, urinary tract infection) present to the Emergency Department. Such patients should be assessed by a doctor with sufficient	

experience and training to exclude significant surgical pathology.	
21. The elderly should receive no different level of care from other patients. As NCEPOD has previously recommended, when admitted to a medical ward consultant review should occur within 12 hours.	Acute care toolkit 4: Delivering a 12-hour, 7-day consultant presence on the acute medical unit https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-4-delivering-12-hour-7-day-consultant-presence-acute-medical-unit Revised to 14 hours Seven Day Services Clinical Standards (2017) https://www.england.nhs.uk/publication/seven-day-services-clinical-standards/
22. Clear protocols for the postoperative management of elderly patients undergoing abdominal surgery should be developed which include where appropriate routine review by a MCOP consultant and nutritional assessment.	
23. A robust method of risk assessment for elderly patients presenting with an acute intra-abdominal catastrophe should be developed.	
24. Trusts should audit delays in proceeding to surgery in patients requiring emergency or urgent abdominal surgery and implement appropriate mechanisms to reduce these.	National Emergency Laparotomy Audit: https://www.nela.org.uk/
2010 - Cosmetic Surgery: On the Face of it	
1.	
2. Regulatory bodies, such as the Care Quality Commission, should more closely monitor the adherence to national requirements for audit and scrutiny of sites under licence. The scope of regulation should include all sites including those only undertaking consultation.	National Perioperative Data Standard Programme Surgical devices and Implants Information system (SDIIS) https://digital.nhs.uk/data-and-information/data-collections-and-data-

	sets/data-sets/national-perioperative-data-standard-programme https://www.rcseng.ac.uk/standards-and-research/standards-and-guidance/service-standards/cosmetic-surgery/professional-standards-for-cosmetic-surgery/
3. National professional cosmetic surgery bodies should issue guidelines as to the training, level of knowledge and experience required for a cosmetic surgeon to achieve and maintain competence in the procedures which he or she undertakes.	
4. Those considering having cosmetic surgery should be advised to check Care Quality Commission registration of any site they attend.	
5. Guidelines for the equipping of theatres and the perioperative monitoring of patients must be followed.	
6. Good practice demands a two-stage consent process for those undergoing cosmetic surgery.	
7. A national cosmetic surgery outcome database should be considered.	https://www.rcseng.ac.uk/standards-and-research/standards-and-guidance/service-standards/cosmetic-surgery/ The dataset outlines the clinical outcome measures that should be routinely collected and reported on by all independent providers of cosmetic surgical procedures Dataset of Clinical Quality Indicators — Royal College of Surgeons (rcseng.ac.uk) We would like cosmetic surgery service providers to routinely collect and report on Q-PROMs for all patients receiving the following procedures… Patient Reported Outcome Measures —

	Royal College of Surgeons (rcseng.ac.uk)
8. More formal training programmes must become established, and like any other surgical training, these should be subject to rigorous assessment of competence, which should lead to a certificate attesting to the surgeon's level of competence in specified procedures. The present reliance on inclusion on the specialist register does not give any assurance that a surgeon has received adequate training in cosmetic surgery.	
9. Cosmetic surgical practice should be subject to the same level of regulation as any other branch of surgery.	
10. Independent health care providers should only allow practising privileges to those cosmetic surgeons who can demonstrate that they have achieved and are able to maintain competence in the procedures which they offer.	
11. Defence organisations might consider whether it is appropriate to indemnify practitioners who are unable to demonstrate the attainment and maintenance of appropriate levels of competence for the procedures which they perform.	Removed as either out of date, too vague or specific to the time in which it was made.
12. Psychological assessment is an important part of any patient's cosmetic surgery episode and should be routine. This part of a patient's care must be delivered by those adequately trained and reliable psychological assessment tools need to be developed.	
13. Regulation should be introduced to prevent the use of financial inducements to influence the process of informed consent.	
2010 - PARENTERAL NUTRITION: A MIXED BAG	**ADDITIONAL INFORMATION**
1. PN should only be given when enteral nutrition has been considered, and excluded, as either inappropriate and/or impracticable. However, situations may arise where both enteral and parenteral nutrition are necessary.	
2. Where the possibility exists that a patient may require PN this should be recognised early. Subsequently, should PN become a clinical necessity, this should be rapidly actioned and PN started at the earliest opportunity. However, there is rarely, if ever, an indication to start	

adult PN out of normal working hours.	
3. Patient assessment should be robust to ensure that PN is the appropriate nutritional intervention and that adequate PN is administered. The clinical purpose and goal of the PN should be documented.	
4. Regular documented clinical monitoring, of the patient and PN prescription, should be mandatory. Monitoring should include daily weights (where possible) and documentation of the success of the PN within the overall clinical picture.	
5. Regular documented biochemical monitoring should be mandatory to ensure avoidable metabolic complications never occur.	
6. Additional intravenous fluids should only be prescribed where there has been an active assessment of the volume of PN already being administered and there is clear indication that further fluids/electrolytes are required.	
7. There must be active under/post graduate education about the role of PN, its complications and side effects.	
8. All hospitals should have a PN proforma which includes: Indication for PN; Treatment goal; Risk of and precautions taken against re-feeding syndrome; PN prescription; Weight and Biochemical monitoring.	
9. Careful and early consideration should be given to the need for PN in neonates and once the decision to commence PN is made it should be started without undue delay.	
10. The first PN given must be appropriate to the neonate's requirements.	
11. Close monitoring of the patient must be achieved so that metabolic complications can be avoided.	
12. Neonatal Units should have an agreed policy for nutritional requirements and use a proforma that includes this information which is tailored for each infant and placed in the case notes.	
13. Hospitals in which neonates are cared for should develop a team approach to ensure safe and effective nutritional support, recognising that this should be a multidisciplinary exercise with sharing of expertise. Depending on the type of institution and availability of personnel,	

the composition of these teams may vary but could include neonatologists, paediatricians, paediatric surgeons, pharmacists, dietitians and experts in nutrition. This team could also provide support to other clinical areas caring for children and have a role in education and training for those involved in PN care.	
14. There is an urgent need for Neonatal Units across the UK to have a consensus on best PN practice based on current scientific evidence.	
15. Neonatal units should undertake regular audit of PN practice which should include the complications of PN.	
16. The National Institute for Health and Clinical Excellence should develop guidelines on nutritional support for neonates and children in a similar manner to their recommendations for adults.	https://www.nice.org.uk/guidance/population-groups/infants-and-neonates https://www.nice.org.uk/guidance/ng154
17. CVC insertion is an invasive procedure with well recognised risks. Insertion should be clearly documented in the case notes including: the designation of the operator, the type of CVC, a description of the insertion technique, the use of imaging, confirmation of the position of the catheter tip.	
18. All hospitals must have policies on the management of CVCs which should include insertion of CVC, care of indwelling CVC, detection and management of complications, monitoring and audit, including adherence to the policies.	
19. There must be improved education around CVC insertion and management, as well as the recognition and management of CVC complications.	
20. Nutrition teams have an important role in ensuring quality control around the initiation, supply and monitoring of PN. Whilst the data from this study did not show a clear correlation between overall care and the involvement of a nutrition team it was not designed to do so, and no adverse inference should be made from this. All hospitals involved with PN should have a multidisciplinary nutrition team involved in both enteral and parenteral nutrition.	
21. All hospitals should keep a central record of where and to whom PN has been supplied.	
22. All hospitals should have policies on initiating PN to avoid inappropriate use and safe	

prescribing.	
23. All hospitals should have a dedicated CVC/PICC service to ensure high-level expertise is practised within this interventional area.	
24. Surgical teams are high volume users of PN. As such they need to engage more in clinical nutrition issues and increase their profile within nutrition teams.	
2009 - DEATHS IN ACUTE HOSPITALS: CARING TO THE END?	**ADDITIONAL INFORMATION**
1. The seniority of clinical staff assessing a patient and making a diagnosis should be determined by the clinical needs of the patient, and not the time of day. Services should be organised to ensure that patients have access to consultants whenever they are required. The organisation of services will vary from specialty to specialty, but may require input from clinical directors, medical directors and the Strategic Health Authority.	Removed as either out of date, too vague or specific to the time in which it was made.
2. Better systems of handover must be established, and this must include high quality legible medical record keeping.	
3. The benefits and risks to patient safety of reduced working hours should be fully assessed, and clinical teams must be organised to ensure that there is continuity of care.	
4. Systems of communication between doctors and other health care professionals must improve. In particular trainees must seek consultant input at an early stage to assist in the management of emergency patients.	
5. The training of nurses and doctors must place emphasis on the basic skills of monitoring vital functions, recognising deterioration, and acting appropriately (which will often be to seek senior input).	
6. All trainees need to be exposed in an appropriate learning environment to the management of emergency patients. Clinical services must be organised to allow appropriately supervised trainee involvement. Organisation of services must address training needs, and this will vary from specialty to specialty.	
7. Anaesthesia Anaesthetic charts should routinely have a section that allows the recording of anaesthetic information (leaflets received, risks etc.) given to patients.	

8. Anaesthetic charts should record the named consultant and the grade of the anaesthetist anaesthetising the patient.	
9. All trainees and staff and associate specialist grades should record the name and location of a supervising consultant and whether they have discussed the case with that consultant.	
10. All admissions to hospital should have appropriate investigations and these should be performed without unnecessary delay.	
11. Hospitals which admit patients as an emergency must have access to plain radiology and CT scanning 24 hours per day, with immediate reporting (This recommendation was previously reported in 'Emergency Admissions: A Journey in the Right Direction?' in 2007).	
12. There should be robust mechanisms to ensure communication of critical, urgent or unexpected radiological findings in line with guidance issued by the Royal College of Radiologists.	
13. Diagnostic and interventional radiology services should be adequately resourced to support the 24 hour needs of their clinicians and patients.	
14. Any difference between the provisional and final radiology report should be clearly documented in the final report.	
2009 - ACUTE KIDNEY INJURY: ADDING INSULT TO INJURY?	**ADDITIONAL INFORMATION**
1. Initial clerking of all emergency patients should include a risk assessment for AKI.	
2. All patients admitted as an emergency, regardless of specialty, should have their electrolytes checked routinely on admission and appropriately thereafter. This will prevent the insidious and unrecognised onset of AKI.	
3. Predictable and avoidable AKI should never occur. For those in-patients who develop AKI there should be both a robust assessment of contributory risk factors and an awareness of the possible complications that may arise.	
4. Undergraduate medical training should include the recognition of the sick patient and the prevention, diagnosis and management of AKI.	Acute kidney injury: prevention, detection and management (2019) https://www.nice.org.uk/guidance/ng148

	NICE guideline [NG148]Published: 18 December 2019 https://www.guidelines.co.uk/renal-conditions/nice-acute-kidney-injury-guideline/455154.article
5. Postgraduate training for all specialties should include awareness, causes, recognition, management and complications of AKI.	
6. Reagent strip urinalysis should be performed on all emergency admissions.	
7. NCEPOD recommends that the guidance for recognising the acutely ill patient (NICE CG 50) is disseminated and implemented. In particular all acute patients should have admission physiological observations performed and a written physiological monitoring plan made, taking into account the degree of illness and risk of deterioration.	Acutely ill adults in hospital: recognising and responding to deterioration Clinical guideline [CG50]. Published: 25 July 2007 https://www.nice.org.uk/guidance/cg50 We checked this guideline in January 2020 and it will not be updated at this time: 2020 surveillance of acutely ill adults in hospital: recognising and responding to deterioration (NICE guideline CG50) Surveillance decision | Evidence | Acutely ill adults in hospital: recognising and responding to deterioration | Guidance | NICE NEWS2 is the latest version of the National Early Warning Score (NEWS), first produced in 2012 and updated in December 2017, which advocates a system to standardise the assessment and response to acute illness Due for review in 2023

	https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2
8. Trusts need to put in place a mechanism to ensure that NICE guidance (CG 50) has been implemented. An audit of patients who suffer serious adverse events (cardiac arrest or unplanned admission to critical care) to assess compliance with NICE CG 50 should be presented to the Trust Clinical Governance Committee on an annual basis.	Acute Kidney Injury Programme – Think Kidneys https://www.england.nhs.uk/akiprogramme/ Acute kidney injury: Audit criteria Last revised in August 2021 https://cks.nice.org.uk/topics/acute-kidney-injury/goals-outcome-measures/audit-criteria/
9. When referral is made for specialist advice from nephrologists prompt senior advice and a review where appropriate is required. All patients with AKI should be promptly discussed by the renal registrar with their consultants.	
10. Every hospital should have a written guideline detailing how the three clinical areas where patients with AKI are treated (critical care unit, the renal unit and the non specialist ward) interact to ensure delivery of high quality, clinically appropriate care for patients with AKI.	
11. Early recognition of at-risk patients should allow patient involvement in treatment limitation decisions before clinical condition deteriorates and the opportunity for this involvement is missed.	
12. Treatment limitation decisions should be made with reference to guidance produced by the GMC and within the legislative framework of the Mental Capacity Act.	GMC: Decision making and consent 9 November 2020 https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/decision-making-and-consent Treatment and care towards the end of life: good practice in decision making (updated on 15 March 2022)

	https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/treatment-and-care-towards-the-end-of-life
13. All acute admissions should receive adequate senior reviews (with a consultant review within 12 hours of admission as previously recommended by NCEPOD.	Emergency and acute medical care in over 16s Quality standard [QS174]Published: 07 September 2018 https://www.nice.org.uk/guidance/qs174/chapter/quality-statement-3-consultant-assessment-and-review Seven Day Services Clinical Standards Last updated: 10 February 2022 https://www.england.nhs.uk/publication/seven-day-services-clinical-standards/ These align with the examples of possible considerations in NICE guideline NG94, recommendation 1.2.5 https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-4-delivering-12-hour-7-day-consultant-presence-acute-medical-unit
14. There should be sufficient critical care and renal beds to allow rapid step up in care if appropriate.	
15. All acute admitting hospitals should have access to either onsite nephrologists or a dedicated nephrology service within reasonable distance of the admitting hospital.	
16. All acute admitting hospitals should have access to a renal ultrasound scanning service 24 hours a day including the weekends and the ability to provide emergency relief of renal	

obstruction.	
17. All level 3 units should have the ability to deliver renal replacement therapy; and where appropriate these patients should receive clinical input from a nephrologist.	
2008 - CORONARY ARTERY BYPASS GRAFTS: THE HEART OF THE MATTER	**ADDITIONAL INFORMATION**
1. Cardiothoracic units need to adhere to the requirement of the National Service Framework for Coronary Artery Disease and use protocols for referrals to their unit. These protocols should be standardised nationally for patients who require coronary artery bypass graft surgery. The degree of urgency of referral should be emphasised within these protocols.	
2. Cardiothoracic units need to ensure that monitoring systems are in place to record nationally agreed audit data on referrals and the decision to operate. These systems need to identify patients who are in danger of breaching national agreed waiting times so that surgery can be expedited.	CCAD National Institute for Cardiovascular Outcomes Research (NICOR) National Cardiac Audit Programme Annual Report for 2022 https://www.nicor.org.uk/2022/06/09/nicor-publishes-national-cardiac-audit-programme-ncap-annual-report-2022/
3. If cardiothoracic units use integrated care pathways (ICPs) for patients requiring CABG surgery these should be fit for purpose. A standard minimum data set of information that should be included in these ICPs needs to be developed.	
4. Pre-admission clinics have an important place in assessing and determining patient requirements for surgery. Cardiothoracic units need to review the function of these clinics to ensure that they meet nationally agreed requirements.	
5. Patients who have acute myocardial ischaemia and require CABG require special attention. Many of these patients are intra or inter-hospital transfers. This group of patients should have surgery performed as soon as their clinical condition permits based on appropriate investigation and pre-operative therapeutic optimisation.	
6. Each unit undertaking coronary artery bypass grafting should hold regular pre-operative	

MDT meetings to discuss appropriate cases. Core membership should be agreed, and a regular audit of attendance should be performed.	
7. Each unit should have a clear policy for which cases should be discussed at pre-operative MDT meetings.	
8. There should be a clear protocol for deciding on best treatment strategy (surgery v PCI) that involves both cardiologists and surgeons.	
9. A clear written plan should be made pre-operatively for all patients (with the exception of salvage cases).	
10. Trusts and consultants should identify time within the agreed job plan to allow participation in MDT meetings.	
11. There should be a written protocol available for the pre- operative investigation of all patients.	
12. Pre-operative investigations should be contemporaneous; where delay has occurred between assessment and surgery consideration should be given to repeating investigations.	
13. There must be a system in place to ensure that pre- operative investigations are reviewed by a senior clinician and acted upon.	
14. Further studies should be undertaken to establish the risks and benefits of continuing pre-operative medication. Guidelines should be produced based upon sound evidence.	
15. NCEPOD supports the guidance of the American College of Cardiology and the American Heart Association that clopidogrel should be stopped prior to surgery wherever practicable.	
16. There should be a protocol to ensure timely and appropriate review of unstable cases that involves both cardiologists and cardiac surgeons.	
17. The senior surgeon needs to be aware of any change in clinical status in the pre-operative period to ensure that surgery is still appropriate.	
18. Given the high mortality when operating soon after an acute infarct more use should be made of strategies to optimise clinical condition, provide symptom relief and allow surgery to be performed at a later date (IABP and PCI).	
19. A “track and trigger” system should be used to provide early recognition of clinical	Superseded by NEWS 2

deterioration and early involvement of consultant staff.	NEWS2 is the latest version of the National Early Warning Score (NEWS), first produced in 2012 and updated in December 2017, which advocates a system to standardise the assessment and response to acute illness Due for review in 2023 https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2
20. All patients should have height, weight and a BMI recorded on admission, unless their clinical condition precludes this.	
21. Where pre-operative comorbidity exists, there should be a clear written management plan which is followed in order to optimise the physical status of the patient prior to surgery and identify the need for specific postoperative support to be available.	
22. There should be clear guidance about how to estimate LV function, and at what point in the patient journey this should be ascertained and recorded. Units should audit discrepancies in recorded LV function from surgeons and anaesthetists and where there are significant differences ensure that systems are in place to address this.	
23. Patients who have a more complicated postoperative period are difficult to manage. Any interaction between different medical specialities about patient management should be at consultant-to-consultant level, in particular for patients with suspected intra-abdominal pathology.	
24. Cardiac recovery areas/critical care units are best suited to managing the majority of patients who recover uneventfully. Patients who are developing critical illness and additional organ failure should be managed in an environment with sufficient throughput of such patients to have the resources and experience to provide optimum outcomes.	
25. Cardiac critical care units should have the facility to provide renal replacement therapy.	
26. Senior clinicians should be readily available throughout the peri-operative period in order to	

ensure that complications (which occur commonly) are recognised without delay and managed appropriately.	
27. A clear written operative plan should be available. This should include contingency arrangements where the findings at surgery dictate an alternative approach (back planning).	
28. Where unexpected events occur during surgery, surgeons should have an adaptable approach, and modify the operation to suit the circumstances of the case.	
29. A clear description of the extent of the disease should be recorded.	
30. Where an operation performed deviates from the operation planned, the reason for this should be clearly documented.	
31. Protocols must exist for handover between clinical teams and patient locations to ensure effective communication and continuity of care.	
32. All patients should receive an information sheet describing the proposed operation.	Recording decisions - decision making and consent - GMC (gmc-uk.org)
33. A consultant should obtain consent for coronary artery bypass grafting.	
34. Potential complications must be recorded on the consent form. This should detail the likely complications and the incidence of these complications based on local data.	Recording decisions - decision making and consent - GMC (gmc-uk.org) The dialogue leading to a decision part 1 - GMC (gmc-uk.org)
35. An accurate risk of death must be quoted on the consent form. This should take into account the proposed procedure and clinical status of the patient.	Decision making and consent - GMC (gmc-uk.org)
36. Morbidity and mortality audit meetings should be held in all cardiothoracic units. The majority of units should hold meetings at least monthly. If the numbers of cases performed in a unit are small, alternative arrangements should be made to incorporate these cases in other surgical audit meetings.	
37. The personnel present at morbidity and mortality audit meetings should reflect the composition of the multidisciplinary cardiothoracic team.	
38. A clear record should be kept of morbidity and mortality audit meeting which should comply	Morbidity and mortality meetings tools and

with national guidelines.	templates — Royal College of Surgeons (rcseng.ac.uk)
39. A common system for grading of quality of care of patients should be employed for all patients discussed in morbidity and mortality audit meetings. The peer review scale used by NCEPOD provides such a system.	
40. There should be robust systems in place to learn from the findings of morbidity and mortality meetings. The cardiothoracic audit leads should be responsible for managing this process.	
41. The decline in the number of autopsies performed following deaths from first time coronary artery bypass grafting needs to be reversed. To achieve an increase in the autopsy rate will require a substantial change to both the coronial system and hospital autopsy service.	
2008 - SYSTEMIC ANTI-CANCER THERAPY: FOR BETTER, FOR WORSE?	**ADDITIONAL INFORMATION**
1. Cancer services managers and clinical directors must ensure that time is made available in consultants' job plans for clinical audit. They must also ensure that the time allocated is used for the defined purpose.	
2. Hospitals admitting patients with complications of SACT that do not have emergency general medical and surgical services on site should have a formal arrangement with a hospital that can provide these services.	
3. Hospitals that treat patients with SACT but do not have the facilities to manage patients who are acutely unwell should have a formal agreement with another hospital for the admission or transfer of such patients as appropriate.	
4. A palliative care service should be available for all patients with malignant disease.	
5. NCEPOD supports the Manual for Cancer Services standard that initial clinical management plans for all cancer patients should be formulated within a multidisciplinary team meeting. The MDT should be responsible for agreeing clinical care pathways, including appropriate chemotherapy regimens, doses and treatment durations.	
6. The decision whether or not to advise SACT should be undertaken by a consultant	

oncologist/haemato-oncologist after a comprehensive clinical review of the patient.	
7. The decision whether to accept treatment should be made by the patient after they have been fully informed of the potential benefits and toxicities and have had sufficient time to consider their decision and discuss it with their family and carers.	
8. There should be greater standardisation of the consent form. The name and grade of doctor taking consent should always be stated on the consent form.	
9. Consent must only be taken by a clinician sufficiently experienced to judge that the patient's decision has been made after consideration of the potential risks and benefits of the treatment, and that treatment is in the patient's best interest.	
10. Giving palliative SACT to poor performance status patients grade 3 or 4 should be done so with caution and having been discussed at an MDT meeting.	
11. Junior medical staff at FY1, FY2, ST1 and ST2 grade should not be authorised to initiate SACT.	
12. All independent and supplementary prescribers (specialist chemotherapy nurses and cancer pharmacists) and junior medical staff should be locally trained/accredited, following attendance at a supplementary prescribers' course, before being authorised to prescribe SACT.	
13. The results of a pre-treatment full blood count and renal and liver functions tests should be assessed before each cycle of chemotherapy.	
14. Toxicity check lists should be developed to assist record keeping and aid the process of care in prescribing SACT.	
15. Assessment of tumour response to treatment should be undertaken and recorded at appropriate intervals depending on the treatment intent and SACT regimen used.	
16. All SACT prescriptions should be checked by a pharmacist who has undergone specialist training, demonstrated their competence and are locally authorised/accredited for the task. This applies to oral as well as parenteral treatments.	
17. Pharmacists should sign the SACT prescription to indicate that it has been verified and validated for the intended patient and that all the safety checks have been undertaken.	
18. If the patient has suffered clinically significant grade 3/4 toxicity with the previous cycle of	

SACT, a dose reduction or the use of prophylactic GCSF should be considered depending on the treatment intent.	
19. Consultants should follow good clinical practice and consider:	
a. Reducing the dose of SACT in patients that have received a number of previous courses of treatment, have a poor performance status, have significant comorbidity;	
b. Reducing the dose of or omitting drugs excreted via the kidney, if the patient has impaired renal function.	
c. Reducing the dose of or omitting drugs excreted via the liver, if the patient has impaired liver function.	
1. A debate within the profession is needed to explore whether it is appropriate that patients treated with SACT should be admitted under general medicine if problems occur. Any substantial change would require expansion of the oncology workforce. An alternative would be a strengthening of links between oncology and general medicine to ensure protocols and training are in place for the management of complications of SACT.	Removed as either out of date, too vague or specific to the time in which it was made.
20. Emergency admissions services must have the resources to manage SACT toxicity. These should include: a. A clinical care pathway for suspected neutropenic sepsis b. A local policy for the management of neutropenic sepsis c. Appropriately trained staff familiar with the neutropenic sepsis policy d. The policy should be easily accessible in all emergency departments e. Availability of appropriate antibiotics within the emergency department.	
21. In planning the provision of oncology services outside of cancer centres, commissioners should take into account the need for specialist advice to be readily available when patients are admitted acutely.	
22. A pro-active rather than reactive approach should be adopted to ensure that palliative care treatments or referrals are initiated early and appropriately. Oncologists should enquire at an appropriate time; about any advance decisions the patient might wish to make should they lose the capacity to make their own decisions in the future.	

23. Regular clinical audit should be undertaken on the management of all cases of neutropenic sepsis following the administration of SACT. The process of care should be compared to standards agreed by the cancer network. Cancer centres and cancer units should collaborate in undertaking these audits.	
24. All deaths within 30 days of SACT should be considered at a morbidity and mortality or a clinical governance meeting.	
2008 - A SICKLE CRISIS?	**ADDITIONAL INFORMATION**
1. All doctors should have a basic understanding of the implications of thalassaemia and sickle cell trait.	See Standards for Clinical Care of Adults with Sickle Cell Disease in the UK https://www.sicklecellsociety.org/wp-content/uploads/2018/05/Standards-for-the-Clinical-Care-of-Adults-with-Sickle-Cell-in-the-UK-2018.pdf NICE https://cks.nice.org.uk/topics/sickle-cell-disease/
2. Sickle cell trait and thalassaemia trait should rarely be included on the death certificate; and if included this should only be after review by an individual who has experience in haemoglobinopathies.	
3. As a minimum, the Department of Health guidance regarding vaccination and prophylactic antibiotics should be followed in order to prevent sepsis from hyposplenism.	
4. All children with sickle cell disease should receive pneumococcal vaccination according to national guidance and regular penicillin prophylaxis from the age of three months. Regular review in a specialist centre is advised.	
5. Patients should be encouraged to understand the importance of regular review to optimise the management of their condition.	
6. There needs to be clear recording of vaccination status to prevent omission by default;	

liaison between primary and secondary care is needed.	
7. Healthcare professionals should work in partnership with patients with sickle cell disease to develop individualised pain management strategies which should include patient education.	
8. A multidisciplinary and multi-agency approach is needed in the ongoing pain management of patients with sickle cell disease – essentially this takes place outside hospitals for the majority of patients.	
9. Those patients with sickle cell disease and drug dependency need special attention because of the episodic nature of the pain and the consequent requirement for opioids which can exacerbate their dependency problems.	
10. Regular assessment of acute pain, sedation and respiratory rate should be undertaken and recorded for all patients admitted with sickle cell disease. The frequency of these observations should reflect the degree of pain and dose of opioids administered, to allow recognition of opioid overdose. The development of "track & trigger" systems would greatly enhance better pain control and patient safety.	
11. Expert assistance from senior doctors with experience in the management of sickle cell pain should be sought at an early stage for patients whose pain is not controlled using standard methods.	
12. Training for medical and nursing staff that care for patients with sickle cell disease in the management of both ongoing and acute pain needs to improve. This should include in-service training and specific tailor made courses for sickle cell pain management with regular updates.	
13. Acute chest syndrome is a major cause of morbidity and mortality in patients with sickle cell disease. Management of patients with this complication should be according to local protocols and early advice from specialists is essential.	
14. Chronic sickle chest disease is an expanding, complicated area and requires more careful correlation of pre-mortem clinical, physiological and imaging data with autopsy pathology.	
15. Patients with transfusion-dependent beta thalassaemia major need regular review at a specialist centre to ensure adequate assessment and management of iron overload.	

16. New national standards for the management of sickle cell disease are soon to be issued and it is to be hoped that these will include regular review of renal function.	
17. In all haemoglobinopathy patients who are acutely ill there should be a check to ensure that the kidneys are functioning properly. Acute illnesses may bring to light other problems such as renal tubular acidosis and all physicians caring for this group of patients must be aware of this.	
18. All staff should be aware that people with sickle cell disease are subject to the diseases that other patients suffer from as well. If there is uncertainty as to whether the problem is sickle cell related, advice should be sought from an experienced clinician.	
19. Patients with sickle cell disease are often very skilled in knowing exactly how their crises develop and if they say that this problem '"is different" then the clinician should pay heed and seek further advice if appropriate.	
20. Guidelines and education about vaccination and antibiotic prophylaxis for children should be followed.	
21. Early intervention is essential in children with sickle cell disease who become acutely unwell to reduce morbidity and mortality. Expert advice should be sought.	
22. All sickle cell disease patients should have a carefully maintained fluid balance chart for the duration of their admission.	
23. There is a need to ensure that any deterioration in vital signs is acted upon promptly. NCEPOD would urge those responsible for the continued development and education of staff to take note of these problems.	
24. Patients with sickle cell disease or beta thalassaemia major should be cared for by, or have access to, clinicians with experience of haemoglobinopathy management.	
25. All patients with sickle cell disease or beta thalassaemia major should be reviewed at least annually at a specialist centre.	
26. All haemoglobinopathy patients should have a named specialist, ideally a haematologist, responsible for their care. The haematologist must have an appropriate level of expertise to care for the patient or should make links with appropriate experts.	

27. Healthcare centres responsible for the care of patients with haemoglobinopathies should have access to protocols/guidelines from their regional specialist centre.	
28. Cause of death in sickle cell disease patients must be better evaluated, whether by clinicians reviewing the records and writing a death certificate or by pathologists performing an autopsy. Clinico-pathological correlation is critical in this complex disease.	
29. A national database of patients with haemoglobinopathies should be developed and maintained, to include standardised information on death, for regular audit purposes.	
2007 - TRAUMA: WHO CARES?	**ADDITIONAL INFORMATION**
1. There is a need for designated Level 1 trauma centres and a verification process needs to be developed to quality assure the delivery of trauma care (as has been developed in USA by the American College of Surgeons	Major Trauma Networks https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(18)30007-5/fulltext Trauma Audit and Research Network https://www.tarn.ac.uk/
2. All agencies involved in trauma management, including emergency medical services, should be integrated into the clinical governance programmes of a regional trauma service.	
3. Airway management in trauma patients is often challenging. The prehospital response for these patients should include someone with the skill to secure the airway, (including the use of rapid sequence intubation), and maintain adequate ventilation.	
4. Trusts should ensure that a trauma team is available 24 hours a day, seven days a week. This is an essential part of an organised trauma response system.	
5. A consultant must be the team leader for the management of the severely injured patient. There should be no reason for this not to happen during the normal working week. Trusts and consultants should work together to provide job plans that will lead to better consultant presence in the emergency department at all times to provide more uniform consultant leadership for all severely injured patients.	
6. The current structure of prehospital management is insufficient to meet the needs of the	

severely injured patient. There is a high incidence of failed intubation and a high incidence of patients arriving at hospital with a partially or completely obstructed airway. Change is urgently required to provide a system that reliably provides a clear airway with good oxygenation and control of ventilation. This may be through the provision of personnel with the ability to provide anaesthesia and intubation in the prehospital phase or the use of alternative airway devices.	
7. Trauma laparotomy is potentially extremely challenging and requires consultant presence within the operating theatre.	
8. If CT scanning is to be performed, all necessary images should be obtained at the same time. Routine use of 'top to toe' scanning is recommended in the adult trauma patient if no indication for immediate intervention exists.	
9. Patients with severe head injury should have a CT head scan of the head performed as soon as possible after admission and within one hour of arrival at hospital.	
10. All patients with severe head injury should be transferred to a neurosurgical/critical care centre irrespective of the requirement for surgical intervention.	
11. Each receiving unit should have up to date guidelines for children which recognise the paediatric skills available on site and their limitations and include agreed guidelines for communication and transfer with specialised paediatric services within the local clinical network.	
12. There should be standardised transfer documentation of the patient's details, injuries, results of investigations and management with records kept at the dispatching and receiving hospitals.	
13. Published guidelines must be adhered to and audits performed of the transfers and protocols.	
14. Given the relatively low incidence of severe trauma in the UK, it is unlikely that each individual hospital can deliver optimum care to this challenging group of patients. Regional planning for the effective delivery of trauma services is therefore essential.	

2007 - EMERGENCY ADMISSIONS: A JOURNEY IN THE RIGHT DIRECTION?	ADDITIONAL INFORMATION
1. The initial assessment of patients admitted as an emergency should include a doctor of sufficient experience and authority to implement a management plan. This should include triage of patients as well as formal clerking. The involvement of a more senior doctor should be clearly and recognisably documented within the notes.	
2. Patients admitted as an emergency should be seen by a consultant at the earliest opportunity. Ideally this should be within 12 hours and should not be longer than 24 hours. Compliance with this standard will inevitably vary with case complexity.	Acute care toolkit 4: Delivering a 12-hour, 7-day consultant presence on the acute medical unit https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-4-delivering-12-hour-7-day-consultant-presence-acute-medical-unit Revised to 14 hours Seven Day Services Clinical Standards (2017) https://www.england.nhs.uk/publication/seven-day-services-clinical-standards/
3. Documentation of the first consultant review should be clearly indicated in the case notes and should be subject to local audit.	
4. Trainees need to have adequate training and experience to recognise critically ill patients and make clinical decisions. This is an issue not only of medical education but also of ensuring an appropriate balance between a training and service role, exposing trainees to real acute clinical problems with appropriate mid-level and senior support for their decision making.	
5. Consultants' job plans need to be arranged so that, when on-take, they are available to deal with emergency admissions without undue delay. Limiting the number of duties that consultants undertake when on-take should be a priority for acute trusts. Appropriate mechanisms, both in terms of community medicine and palliative care, should be in place so	

that unnecessary admissions can be avoided.	
6. Hospitals which admit patients as an emergency must have access to both conventional radiology and CT scanning 24 hours a day, with immediate reporting.	Removed as either out of date, too vague or specific to the time in which it was made.
7. There should be no systems delay in returning the results of investigations.	Removed as either out of date, too vague or specific to the time in which it was made.
8. There should be a clear rationale for the ordering of investigations. Omission of appropriate investigations can have a deleterious effect on patient care.	Removed as either out of date, too vague or specific to the time in which it was made.
9. All investigation results should be recorded with a date and time in the patient notes.	Removed as either out of date, too vague or specific to the time in which it was made.
10. Following the initial assessment and treatment of patients admitted as an emergency, subsequent inpatient transfer should be to a ward which is appropriate for their clinical condition; both in terms of required specialty and presenting complaint.	
11. Excessive transfers should be avoided as these may be detrimental to patient care.	
12. Robust systems need to be put in place for handover of patients between clinical teams with readily identifiable agreed protocol-based handover procedures. Clinicians should be made aware of these protocols and handover mechanisms.	Removed as either out of date, too vague or specific to the time in which it was made.
13. All emergency admissions should receive adequate review in line with current national guidance.	Removed as either out of date, too vague or specific to the time in which it was made.
14. A clear physiological monitoring plan should be made for each patient commensurate with their clinical condition. This should detail what is to be monitored, the desirable parameters and the frequency of observations. This should be regardless of the type of ward to which the patients are transferred.	Removed as either out of date, too vague or specific to the time in which it was made.
15. Part of the treatment plan should be an explicit statement of parameters that should prompt a request for review by medical staff or expert multidisciplinary team (An Acute Problem?).	Removed as either out of date, too vague or specific to the time in which it was made.
16. Further work is required by the NPSA to educate and inform clinical staff about the definitions surrounding adverse events. There must be standardisation of reporting and audit of that reporting to ensure that accurate data is obtained.	

2006 - THE CORONER'S AUTOPSY: DO WE DESERVE BETTER?	ADDITIONAL INFORMATION
1. Government should consider and agree the fundamental purposes of the coronial autopsy. An ideal opportunity exists to do this during the passage through Parliament of the Bill for reform of the coroner's system as recently announced.	Coroners and Justice Act 2009 https://www.legislation.gov.uk/ukpga/2009/25/contents National Medical Examiner system https://www.england.nhs.uk/establishing-medical-examiner-system-nhs/
2. There should be nationally uniform criteria and standards for investigation of reported deaths. This includes the diagnostic level of investigation at autopsy and the definition of what a post-mortem examination comprises.	
3. There should be regular (independent) peer review of coronial autopsy reports and processes to maintain consistency of agreed standards and accountability, and all pathologists and coroners – in training and as continuing professional development – should review the autopsy reports and related documents of their peers.	
4. Specific written requests for investigations, made by a coroner, should be followed, or an account rendered in the autopsy report as to why this was not addressed.	
5. The information provided by coroners' offices to pathologists should be in a standardised format that includes an agreed minimum clinical and scene of death dataset, including date of birth and occupation of deceased. Such information should be communicated in writing.	
6. A clinical and case history should be included in an autopsy report and should state the provenance of the information.	
7. The height and weight should both be measured, the BMI calculated, and the data given in the report.	
8. In all deaths, the report must clearly document external injuries or the absence of such injuries.	
9. Before evisceration of a body, the pathologist must inspect the body first. This is to confirm identity, to observe any external features that might modify the process of examination and	

to consider the possible need for a forensic examination.	
10. Normally a complete autopsy should be performed, with all organs including the brain examined. Limited autopsies – upon request – should be carefully considered on a case-by-case basis and when complete examination is essential to determine the cause of death the pathologist must insist upon that. If an organ system is not examined, consideration and account should be made of the potential information lost, in the context of the deceased's clinical pathology.	
11. Decomposed bodies should be thoroughly examined (i.e., external and internal examinations) to identify significant injuries, primary pathologies and co-morbidities, and toxicology should be performed as appropriate.	
12. Autopsy reports must clearly indicate whether or not tissues were retained, and what they comprise, if retained.	
13. There should be national criteria and standards on organ and tissue retention for histopathology in coronial autopsies, in order to provide convincing evidence of the cause of death.	
14. Deaths in persons known or suspected to abuse alcohol and/or cases associated with drug toxicity should be properly investigated.	
15. Sudden unexpected deaths suspected to be related to cardiomyopathy and arrhythmias (i.e., SADS) should be investigated according to best practice autopsy guidelines.	
16. Deaths suspected to be related to epilepsy should be investigated properly, according to the Department of Health National Service Framework for Mental Health action plan: "Improving services for people with epilepsy".	
17. Deaths following medical interventions and complications require detailed investigation and consideration and should not be summarised merely as (e.g.) 'ischaemic heart disease' or another underlying comorbidity. If the procedure contributed to the death, then this should be indicated in the cause of death sequence.	
18. There should be a clinicopathological correlation in each report that reviews the case and robustness of the conclusions based on the available evidence.	

19. Pathologists should wear protective clothing over appropriate scrub suits, not over their day clothes.	
20. All mortuaries should be quality accredited.	
21. The approach to infectious disease management in mortuaries should be reviewed and standardised.	
2005 - AN ACUTE PROBLEM	**ADDITIONAL INFORMATION**
1. Trusts should ensure that consultant job plans reflect the pattern of demand of emergency medical admissions and provision should be made for planned consultant presence in the evenings (and perhaps at night in busier units).	
2. A consultant physician should review all acute medical admissions within 24 hours of hospital admission 2. Regular audit should be performed against this standard.	Acute care toolkit 4: Delivering a 12-hour, 7-day consultant presence on the acute medical unit https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-4-delivering-12-hour-7-day-consultant-presence-acute-medical-unit Revised to 14 hours Seven Day Services Clinical Standards (2017) https://www.england.nhs.uk/publication/seven-day-services-clinical-standards/
3. Trusts should ensure that consultant physicians have no other clinical commitments when on take. This may be through the development of acute physicians. This will allow for greater involvement in the assessment and treatment planning of new admissions and the review of deteriorating inpatients.	
4. More attention should be paid to patients exhibiting physiological abnormalities. This is a marker of increased mortality risk.	

5. Robust track and trigger systems should be in place to cover all inpatients. These should be linked to a response team that is appropriately skilled to assess and manage the clinical problems.	NEWS2 is the latest version of the National Early Warning Score (NEWS), first produced in 2012 and updated in December 2017, which advocates a system to standardise the assessment and response to acute illness Due for review in 2023 https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2
6. A clear physiological monitoring plan should be made for each patient. This should detail the parameters to be monitored and the frequency of observations.	
7. Part of the treatment plan should be an explicit statement of parameters that should prompt a request for review by medical staff or expert multidisciplinary team.	
8. The importance of respiratory rate monitoring should be highlighted. This parameter should be recorded at any point that other observations are being made.	
9. Education and training should be provided for staff that use pulse oximeters to allow proper interpretation and understanding of the limitations of this monitor. It should be emphasised that pulse oximetry does not replace respiratory rate monitoring.	Removed as either out of date, too vague or specific to the time in which it was made.
10. Consultant physicians should be more involved in the referral of patients under their care to ICU. The referral of an acutely unwell medical patient to ICU without involvement or knowledge of a consultant physician should rarely happen.	
11. It is inappropriate for referral and acceptance to ICU to happen at junior doctor (SHO) level.	Removed as either out of date, too vague or specific to the time in which it was made.
12. Any delay in admission to critical care should be recorded as a critical incident through the appropriate hospital incident monitoring and clinical governance system.	Removed as either out of date, too vague or specific to the time in which it was made.
13. All inpatient referrals to ICU should be assessed prior to ICU admission. Only in exceptional circumstances should a patient be accepted for ICU care without prior review.	
14. Patients should rarely be admitted to ICU without the prior knowledge or involvement of a	Intensive Care National Audit & Research

consultant intensivist.	Centre? https://www.icnarc.org/
15. A consultant intensivist should review all patients admitted to ICU within 12 hours of admission. Regular audit should be performed against this standard.	
16. Training must be provided for junior doctors in the recognition of critical illness and the immediate management of fluid and oxygen therapy in these patients.	
17. Consultants must supervise junior doctors more closely and should actively support juniors in the management of patients rather than only reacting to requests for help.	
18. Junior doctors must seek advice more readily. This may be from specialised teams e.g., outreach services or from the supervising consultant.	
19. Each hospital should have a track and trigger system that allows rapid detection of the signs of early clinical deterioration and an early and appropriate response.	NEWS2 is the latest version of the National Early Warning Score (NEWS), first produced in 2012 and updated in December 2017, which advocates a system to standardise the assessment and response to acute illness Due for review in 2023 https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2
20. Although this recommendation does not emerge from the findings in this report, NCEPOD echoes other bodies and recommends that trusts should ensure each hospital provides a formal outreach service that is available 24 hours per day, seven days per week. The composition of this service will vary from hospital to hospital, but it should comprise of individuals with the skills and ability to recognise and manage the problems of critical illness.	Removed as either out of date, too vague or specific to the time in which it was made.
21. Outreach services and track and trigger systems should not replace the role of traditional medical teams in the care of inpatients but should be seen as complementary.	

22. All entries in the notes should be dated and timed and should end with a legible name, status and contact number (bleep or telephone).	
23. Each entry should clearly identify the name and grade of the most senior doctor involved in the patient episode.	
24. Resuscitation status should be documented in patients who are at risk of deterioration. Each trust should audit compliance with this recommendation by regular review of patients who suffered a cardiac arrest and assessment of whether a 'do not attempt resuscitation' order should have been made prior to this event.	NCEPOD report - 'Time to Intervene?' (2012) https://www.ncepod.org.uk/2012cap.html
25. More care should be given to the formulation of the cause of death for presentation to the coroner and transfer into the medical certificate of cause of death.	
26. On this group of patients, consented autopsies should be sought more often to evaluate complex clinical pathology.	
27. In coronial autopsies on ICU patients, increased histopathological sampling should be undertaken to improve disease identification, with the consent of relatives, once the coroner's requirement is satisfied.	
28. Pathologists should become more involved in the mortality meetings on ICU patients.	
2005 - ABDOMINAL AORTIC ANEURYSM: A SERVICE IN NEED OF SURGERY	**ADDITIONAL INFORMATION**
1. Trusts should ensure the availability outside normal working hours of radiology services including CT scanners.	
2. Clinicians, purchasers, Trusts and Strategic Health Authorities should review whether elective aortic aneurysm surgery should be concentrated in fewer hospitals.	Removed as either out of date, too vague or specific to the time in which it was made.
3. Major elective surgery should not take place unless all essential elements of the care package are available.	
4. Patients with an aortic aneurysm requiring surgery must have equal priority with all other patients with serious clinical conditions for diagnosis, investigation and treatment.	
5. Trusts should take action to improve access to Level 2 beds for patients undergoing elective aortic aneurysm repair so as to reduce the number of operations cancelled and	NCEPOD report - 'Knowing the Risk' (2011) https://www.ncepod.org.uk/2011poc.html

inappropriate use of Level 3 beds.	
6. Trusts should ensure that clinicians of the appropriate grade are available to staff preoperative assessment clinics for aortic surgery patients.	
7. Strategic Health Authorities and Trusts should co-operate to ensure that only surgeons with vascular expertise operate on emergency aortic aneurysm patients, apart from exceptional geographical circumstances.	Removed as either out of date, too vague or specific to the time in which it was made.
8. Trusts should ensure that anaesthetists can identify the major cases that they have managed in order to support audit and appraisal.	
9. Anaesthetic departments should review the allocation of vascular cases so as to reduce the number of anaesthetists caring for very small volumes of elective and emergency aortic surgery cases.	Removed as either out of date, too vague or specific to the time in which it was made.
10. Trusts should ensure they that they have robust systems for the postoperative care of epidural catheters with accompanying appropriate documentation.	
11. Anaesthetic departments and critical care units should review together whether vascular surgery patients who routinely receive postoperative mechanical ventilation could be managed in a Level 2 High Dependency Unit breathing spontaneously.	
2004 - SCOPING OUR PRACTICE	**ADDITIONAL INFORMATION**
1. Hospitals should ensure that the appropriate monitoring equipment and resuscitation equipment is available in each of their endoscopy rooms and recovery areas.	
2. In order to produce optimal care for what is a large group of severely ill patients, hospitals should consider establishing formal on-call arrangements.	
3. Patients must be assessed by the referring clinician and the endoscopist to justify that the procedure is in the patient's interest.	
4. The risks and benefits of therapeutic endoscopy should be explained to the patient, and this should be documented on the consent forms as laid down in the Department of Health guidelines.	
5. The ability of those with dementia or acute confusion to provide consent should be tested	

and clearly documented.	
6. There should be national guidelines for assuring continuing competency in endoscopy.	JAG accreditation is awarded to high-quality gastrointestinal endoscopy services Joint Advisory Group on GI Endoscopy https://www.thejag.org.uk/
7. All endoscopy units should perform regular audit and all deaths during, or within 30 days of, therapeutic endoscopy should be reviewed.	
8. All those responsible for the administration of sedation should have received formal training and assessment.	
9. Sedation and monitoring practices within endoscopy units should be audited and reviewed.	Endoscopy guidance British Society of Gastroenterology https://www.bsg.org.uk/clinical-resources/endoscopy/endoscopy-guidance/
10. There should be national guidelines on the frequency and method of the recording of vital signs during the endoscopy. (NPSA; Professional specialist associations)	
11. Clear protocols for the administration of sedation should be available and implemented.	
12. The decision to use a PEG feeding tube requires an in-depth assessment of the potential benefits for the individual. All patients in whom PEG feeding is proposed should be reviewed by a multidisciplinary team.	The provision of a percutaneously placed enteral tube feeding service (2010) British Society of Gastroenterology https://www.bsg.org.uk/clinical-resource/bsg-guideline-on-the-provision-of-a-percutaneously-placed-enteral-tube-feeding-service/
13. There is a need for more comprehensive national guidelines for the use of PEG feeding, including issues of patient selection.	
14. Patients should be reviewed by the consultant endoscopist before therapeutic ERCP to ensure that the procedure is appropriate, and that the patient's condition has been optimised.	

15. Only experienced endoscopists should treat patients with upper GI haemorrhage. Experience will vary by grade, but competence should be assessed by the supervising consultant.	NCEPOD report - 'Time to Get Control?' 2015 https://www.ncepod.org.uk/2015gih.html
16. Optimising the patient's pre-endoscopy condition will reduce both morbidity and mortality. Early involvement of an anaesthetist/intensivist if necessary, will assist this.	Removed as either out of date, too vague or specific to the time in which it was made.
17. A national audit across all specialities of specific techniques and equipment that is used for upper GI dilation and tubal prosthesis insertion is indicated.	
18. The operative procedure should be included in the cause of death statement.	
19. Post-procedure deaths (i.e., those occurring during or within 24 hours of anaesthesia or sedation or those where it is known that the procedure is implicated in the death) should be reported to the coroner.	
20. Pathologists should think more carefully about all the clinical circumstances of a death, to produce an autopsy report more useful for clinical governance and audit.	
21. NCEPOD supports the reforms of the 'coronial system' and death certification, which will result in better scrutiny of deaths.	
2003 - WHO OPERATES WHEN II?	**ADDITIONAL INFORMATION**
1. Revise NCEPOD classification to include more specific definitions and guidelines, which are relevant across surgical specialities (NCEPOD responsibility).	https://www.ncepod.org.uk/classification.htm
2. Provide adequate information systems to record and review anaesthetic and surgical activity.	Removed as either out of date, too vague or specific to the time in which it was made.
3. Ensure the correct ASA status is collected as it is an essential part of the patient assessment and record keeping.	
4. Ensure that the information about hospital facilities is accurate in order to ensure that acute services are efficiently and safely managed.	
5. Ensure that Strategic Health Authorities, together with NHS Trusts, collaborate to guarantee that all emergency patients have prompt access to theatres, critical care facilities, and appropriately trained staff, 24 hours per day every day of the year.	

6. Ensure that all operating theatres have sufficient numbers of trained recovery staff available whenever those theatres are in use.	
7. Provide regular resuscitation training for all clinical staff, which is in line with Resuscitation Council guidelines.	Quality Standards: Acute Care Resuscitation Council UK November 2013; last updated May 2020. https://www.resus.org.uk/library/quality-standards-cpr/quality-standards-acute-care
8. Ensure that all recovery bays have both a pulse oximeter and ECG monitor available. This applies whether patients are having local or general anaesthetic or sedation. The equipment used in recovery areas should be universally interchangeable and able to provide a printable record.	
9. Nominate an arbitrator, who would decide the relative priority of theatre cases in order to avoid queuing for theatre spaces.	
10. Ensure that systematic clinical audit includes the pattern of work in operating theatres.	
11. Assess the competency of staff grade and Trust doctors and take this into account when allocating anaesthetic and surgical sessions.	
12. Review guidance on which staff should anaesthetise and operate on day case patients.	
13. Review the level of supervision of trainee anaesthetists working on their own in dedicated day case units.	
14. Debate whether, in the light of changes to the pattern of junior doctors' working, non-essential surgery can take place during extended hours.	
15. Ensure that all essential services (including emergency operating rooms, recovery rooms, high dependency units and intensive care units) are provided on a single site wherever emergency/acute surgical care is delivered.	
2002 - FUNCTIONING AS A TEAM?	**ADDITIONAL INFORMATION**
1. Management should ensure that an appropriate number of funded sessions for consultants	NCEPOD report - 'Knowing the Risk' (2011)

trained in critical care are allocated to the ICU to allow appropriately qualified medical staff to be available to the ICU at all times.	
2. There are national agreed standards for anaesthetic monitoring. The absence of an essential anaesthetic monitor constitutes an unacceptable clinical risk that must be the subject of audit.	Recommendations for standards of monitoring during anaesthesia and recovery (2021) Guideline from the Association of Anaesthetists https://associationofanaesthetists-publications.onlinelibrary.wiley.com/doi/full/10.1111/anae.15501
3. There need to be national guidelines for clinical prescribing in hospitals in order to reduce the risk of drug error.	https://www.nice.org.uk/about/nice-communities/medicines-and-prescribing
4. Failure to diagnose acute appendicitis can still cause death in fit young adults. It is essential that experienced clinicians are available to ensure that cases are not missed.	Removed as either out of date, too vague or specific to the time in which it was made.
5. If a medical team is involved in a patient's perioperative care it should also be involved in any morbidity/mortality review of the case and receive a copy of the discharge summary and, where available, the autopsy report.	
6. Complications may arise following endoscopic surgery. Protocols should be available to deal with these and remedial actions should be rehearsed and involve senior experienced clinicians.	
7. Autopsies should be the subject of a formal external audit process. Clinicians should be involved in evaluating the quality of reports and the basis of conclusions drawn, including the cause of death.	
8. It is the responsibility of management to ensure that all deaths are reported to NCEPOD in a timely manner.	
9. There should be a record of the name of the supervising consultant anaesthetist.	
10. Standard information on hospital facilities should be available and should be accurate.	
11. The adequacy of recovery beds should be reviewed.	

12. Management should ensure that an appropriate number of funded sessions for consultants trained in critical care are allocated to the ICU to allow appropriately qualified medical staff to be available to the ICU at all times.	
13. There are national agreed standards for anaesthetic monitoring. The absence of an essential anaesthetic monitor constitutes an unacceptable clinical risk that must be the subject of audit.	
14. It is inappropriate for an SHO to anaesthetise an ASA 5 patient.	
15. When operations are performed by the surgeon without the presence of an anaesthetist, the existing guidelines on patient monitoring, observation and record keeping should be followed.	
16. Postoperative deaths should be the subject of anaesthetic and surgical review.	
17. The anaesthetist, or the anaesthetic department, should be notified of elective patients who have significant operative risks, preferably in advance of their admission.	
18. National protocols should be formulated to identify which inpatients would benefit from a more detailed preoperative cardiovascular assessment, including echocardiography.	
19. When a formal preoperative medical assessment is indicated, an experienced physician, preferably a consultant, must make it. It is the responsibility of that physician to fully understand the operative risks of the patient's medical condition.	
20. There need to be national guidelines for clinical prescribing in hospitals in order to reduce the risk of drug error.	
21. The decision to operate in complex cases can benefit from the formal involvement of others apart from the surgeon.	
22. Critical care specialists should be more directly involved.	
23. Failure to diagnose acute appendicitis can still cause death in fit young adults. It is essential that experienced clinicians are available to ensure that cases are not missed.	
24. Non availability of a patient's previous notes at the time of an acute admission is a major administrative failure and should be exposed as such.	
25. Postoperative problems are common. It is essential that doctors who care for surgical	

patients should be trained in the management of these problems.	
26. If a medical team is involved in a patient's perioperative care it should also be involved in any morbidity/mortality review of the case and receive a copy of the discharge summary and, where applicable, the autopsy report.	
27. The maintenance of accurate fluid balance charts by nursing staff is vital; medical staff should review these daily.	
28. Where perioperative complications contribute to the cause of death, these should be recorded on the death certificate.	
29. Complications may arise following endoscopic surgery. Protocols should be available to deal with these and remedial actions should be rehearsed and involve senior experienced clinicians.	
30. Autopsies should be the subject of a formal external audit process.	
31. Clinicians should be involved in evaluating the quality of reports and the basis of conclusions drawn, including the cause of death.	
2001 - CHANGING THE WAY WE OPERATE	**ADDITIONAL INFORMATION**
1. Surgeons and anaesthetists should partake in multidisciplinary audit, specialists meeting together to discuss improvements in care. These meetings should concentrate less on asking 'Who is to blame?' and more on changing systems of practice to safeguard patients wherever possible.	Removed as either out of date, too vague or specific to the time in which it was made.
2. All Trusts in the NHS should use information systems with a nationally agreed specification. This should apply to case notes, patient information systems etc. Such uniform systems would facilitate the retrieval of standardised information and ease the introduction of the Electronic Patient Record.	
3. There is a gap in the levels of medical and nursing expertise between ICU/HDU services and ward-based care. In particular, there is a need to increase the skills of nurses and doctors on the wards in central venous pressure (CVP) management and interpretation. This deficiency should be addressed. There ought to be sufficient ward equipment with transducer pressure	

monitoring facilities to allow accurate and continuous CVP monitoring. More national and local training programmes are required to provide education in the appropriate skills required to apply these techniques in ward areas.	
4. The service provision for cancer patients, presenting either as an emergency or urgently, requires review. The current system is failing patients, despite the best efforts of clinical staff. Most patients with cancer who die within 30 days of an operation are admitted as an emergency or urgently and many are not referred either to a surgeon with a sub-specialised oncology interest, a multidisciplinary team, medical oncologist or specialist cancer nurse when it is indicated. Clinical networks and local guidelines should be constructed in order to ensure that all patients with cancer receive an early and appropriate referral to specialists.	
5. Clinicians, pathologists and coroners should review their working relations and means of communication. The aim must be to improve the quality and timeliness of information provided, in order to inform the understanding of events surrounding a perioperative death.	
6. There needs to be an education programme to re-establish public confidence in pathology services and the post-mortem examination as a vital tool with which to investigate a postoperative death.	
7. There should be a uniform case note system in the NHS.	
8. Hospitals should review the procedures for the storage and retrieval of deceased patients' notes.	
9. A larger audit of data quality is needed. There should be a standard way of collecting data on deaths occurring within 30 days of surgery but happening outside hospital.	
10. Trusts should ensure that all deaths (falling within the NCEPOD protocol) should be reported in a timely manner. Local Reporters should be given the necessary resources to ensure that this is possible.	
11. Trusts should review the discrepancies between HES data and NCEPOD data and ensure accurate data returns for both purposes.	
12. The names of anaesthetic personnel should be clearly recorded in the patient's case notes.	
13. Medical Directors should ensure that all questionnaires are returned.	

14. Immediately after their operation all patients not returning to a special care area (e.g., an ICU or HDU) need to be nursed by those who are trained and practised in postoperative recovery care. If there are separate arrangements for staffing the operating theatres out of hours, these must include the provision of specialised recovery staff.	
15. All hospitals where major acute surgery is undertaken should have a critical care facility that is appropriate for level 237 patients. Patients should be made aware when this facility is not available.	
16. It is the responsibility of each anaesthetic department to ensure that the anaesthetists running emergency lists are of sufficient experience, and to provide appropriate consultant supervision.	
17. Delays to operation due to the availability of emergency operating time or critical care facilities require close monitoring locally.	
18. Where there is a definite risk of death and patients are in a poor physiological condition, junior doctors in training (SHO or pre-registration house officers) should not obtain consent for surgery.	
19. Medical Directors should review the responsibilities of those consultant and NCCG surgeons who do not hold a higher surgical diploma.	
20. There needs to be a much higher level of involvement of anaesthetic consultants in the care of those patients who are in a poor physical state and at risk of death.	
21. Hospitals should identify and quantify inadequacies in their critical care facilities. If inadequacy exists discussions between intensive care consultants, surgeons, physicians, senior nursing staff and senior hospital management can agree organisational changes across the hospital that may improve its use.	
22. Medical Directors should ensure that morbidity/mortality meetings are held in all specialities.	
23. Anaesthetists should be cautious about the dose of local anaesthetic used for a regional technique in those patients who are predisposed to hypotension.	
24. Operative hypotension demands an appropriate and timely response, especially for those	

patients who have a coexisting disease such that hypotension is potentially harmful.	
25. Whenever possible the anaesthetist of a patient with aortic stenosis should obtain a preoperative echocardiogram of the aortic valve.	
26. The availability of the echocardiography service for patients preoperatively should be accorded an appropriate priority in the funding and development plans of hospitals.	
27. Preoperative resuscitation of patients and the success of its coordination should form part of multidisciplinary case review involving surgical, anaesthetic and nursing staff.	
28. Guidelines to determine which patients should be referred to a critical care team should be developed locally and subsequently validated.	
29. It is the consultant's responsibility to ensure that there are open lines of communication between them and the doctors that are under their supervision, and to ensure that those doctors are acting appropriately.	
30. There should be more training programmes to increase the skills of nurses and doctors on the wards in CVP management and interpretation.	
31. Early consideration of diagnostic or therapeutic radiological procedures might avoid surgery in some high-risk patients.	
32. Acute hospitals should continually review their radiological provision to ensure the availability of appropriate and modern methods for the investigation and treatment of emergency cases.	
33. Fluid balance and urinary incontinence should be proactively managed especially in orthopaedic patients.	
34. There needs to be sufficient ICU/HDU beds so that major elective arterial operations are not cancelled, and emergency admissions can be cared for without the need to transfer the patient to another hospital or discharge another patient from the unit too early.	
35. Those hospitals admitting vascular emergencies should now take steps to ensure that there are sufficient surgeons of appropriate ability to provide an acceptable emergency vascular surgical rota.	
36. The concept of consultant invincibility is outmoded; surgical units should be organised to	

provide support for newly appointed surgeons, who are likely to be less experienced in the future.	
37. There is a need for a scoring system to assess the likelihood of survival of a patient with a ruptured abdominal aortic aneurysm.	
38. At the end of an aortic operation, it is essential to assess the adequacy of the circulation in both legs and, if deficient, to correct it before the patient leaves the operating theatre.	
39. Blood banks should have platelets readily available for the correction of coagulopathy for ruptured AAA cases.	
40. Hospitals should review the availability of sub-specialists for those patients who present as an emergency.	
41. Every effort should be made for all patients with a cancer to be considered by a multidisciplinary oncology team. This applies especially to those patients admitted for urgent or emergency surgery.	
42. All clinicians should use a recognised staging system in the management of patients.	
43. All histology reports relating to oncology cases should match the Calman Minimum Datasets for the standardised reporting of common cancers.	
44. Recently published national recommendations for obtaining informed consent to retain tissues and organs should be applied.	
45. Defects in the quality of post-mortem reports should be remedied by consultation between clinician and pathologist before the post-mortem examination and before issuing the cause of death.	
46. The Royal College of Pathologists' guidelines to the post-mortem examination should be updated into a minimum dataset format, with inclusion of guidance on ONS (formerly OPCS) formatting for cause of death.	
47. The ONS guidelines should be modified with the adoption of a restricted list of acceptable conditions similar to national clinical disease coding lists.	
48. Clinicians need to be informed of the time and place of the post mortem examination in order that they may attend and inform the process.	

49. Completed reports on hospital (consented) and coroners' post-mortems should be available for review in multidisciplinary mortality audit meetings.	After three successful years, the National Mortality Case Record Review Programme (NMCRR) ended on 30 June 2019 https://www.rcplondon.ac.uk/projects/national-mortality-case-record-review-programme The National Mortality Case Record Review (NMCRR) toolkit has been developed to support trusts in implementing a standardised way of reviewing the case records of adults who have died in acute hospitals across England and Scotland. https://www.rcplondon.ac.uk/guidelines-policy/mortality-toolkit-implementing-structured-judgement-reviews-improvement
50. Full information should be available to the families about the results of post mortem examinations.	If you want a written copy of the full report you need to ask the coroner's officer or to write to the Coroner concerned and they may charge a fee. Some Coroners prefer to send the report to a doctor to explain and discuss the findings with you. https://www.bereavementadvice.org/topics/death-certificate-and-coroners-inquest/obtaining-post-mortem-results/ A report on the hospital post mortem examination will be sent to the Consultant who looked after your relative.

	https://www.nth.nhs.uk/content/uploads/2022/04/PIL1343-v1-A-simple-guide-to-Post-Mortem-Examination-Procedure-FINAL.pdf
2000 - THEN AND NOW	**ADDITIONAL INFORMATION**
1. Trusts and hospitals must establish systems to ensure that all patients' medical records are always available to clinicians. The inability to trace the notes, or parts thereof, of patients who have died, thus preventing surgeons and anaesthetists from completing returns to NCEPOD, is unacceptable.	Removed as either out of date, too vague or specific to the time in which it was made. See NCEPOD report 'Knowing the Risk' (2011) https://www.ncepod.org.uk/2011poc.html
2. In two of every five hospitals in which patients die following surgery there is no high dependency unit (HDU). Although the provision of essential critical care facilities has increased greatly since 1990, the absence of an HDU in an acute surgical hospital is detrimental to patient care. It places unreasonable pressure on surgeons and anaesthetists in their decision making and impedes a flexible and graduated use of expensive critical care resources.	
3. The urgent and emergency workload in anaesthesia being undertaken by non-consultant career grade (NCCG) doctors is of considerable concern. These NCCGs are mainly staff grade anaesthetists, many of whom do not possess the Fellowship in Anaesthesia, and who are not receiving adequate consultant support. There are indications that the problem of unsupervised SHO anaesthetists, identified in previous NCEPOD reports, is being replaced by one of inadequately qualified, unsupervised NCCGs.	
4. Despite the resources that have flowed into audit activities over recent years, anaesthetists reviewed less than a third of perioperative deaths at local meetings; this percentage has remained unchanged since 1990. Surgeons overall now review three-quarters of deaths at local audit meetings, but there are wide variations between the surgical specialties, from a minimum of 13% to a maximum of 82%. It is sometimes stated that studying expected perioperative deaths, most often in old and very ill patients, contributes little. The	

experience of NCEPOD in examining these deaths nationally does not support this contention; there is much that can be learnt from their careful examination. It is a professional responsibility to examine one's practice and seek ways to improve surgical and anaesthetic management. Clinicians must strive to achieve an audit record for all deaths if professional education, credibility and public support are to be maintained.	
2000 - PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY	**ADDITIONAL INFORMATION**
1. Interventional cardiology centres should have a sufficient number of appropriately experienced clinicians and other staff to run an emergency PTCA service.	Removed as either out of date, too vague or specific to the time in which it was made. See also NCEPOD report 'The Heart of the Matter' (2008) https://www.ncepod.org.uk/2008cabg.html
2. It is essential that there is an efficient system for transferring patients from the district general hospital to the interventional centre; ambulance services should be able to respond rapidly to calls for urgent transfer of patients requiring PTCA in the setting of acute myocardial infarction.	
3. There is a need for consistency in the definition of cardiogenic shock, in order to give an accurate prognosis and compare outcomes of treatment.	
4. All catheter laboratory staff should have regular resuscitation training.	
5. Intra-aortic balloon pumps should be available for appropriate patients; staff should be familiar with their use.	
6. Catheter laboratories should have a designated person responsible for checking that all necessary equipment is both present and functional.	
7. All catheter laboratories should have appropriately equipped recovery areas.	
8. Monitoring with pulse oximetry should be available for all cases and performed whenever sedation or opiates are used, or oxygen therapy is required; this should be performed by an appropriately trained nurse or technician.	
9. Glycoprotein IIb/IIIa receptor blockers should be used more widely for patients undergoing	

high risk PTCA. Heparin doses should be adjusted accordingly and monitored using activated clotting time (ACT) or equivalent, in order to minimise the risk of bleeding.	
10. Clinicians should be informed of the date and time that post-mortem examinations are being performed and should do their best to attend; a copy of the post-mortem report should always be sent to the appropriate clinician.	
11. Regular audit meetings should be held in all interventional cardiology centres.	
12. For the practice of angioplasty and the assessment of its risk to be improved, and for patient consent to be better informed, comprehensive systems for recording patient and procedural data need to be in place. Data should be regularly audited and submitted to allow comparison with national averages.	
13. Hospitals should provide access to case records for audit purposes.	
2000 - INTERVENTIONAL VASCULAR RADIOLOGY	**ADDITIONAL INFORMATION**
1. It is essential that vascular radiologists and surgeons work together as a team both in the decision as to what procedures to undertake and in the management of any complications.	See NCEPOD reports: 'Caring to the End?' (2009) https://www.ncepod.org.uk/2009dah.html 'Time to Get Control?' (2015) https://www.ncepod.org.uk/2015gih.html For neuroradiology see also 'Managing the Flow' (2013) https://www.ncepod.org.uk/2013sah.html National Stroke Service Model - Integrated Stroke Delivery Networks (2021) https://www.england.nhs.uk/wp-content/uploads/2021/05/national-stroke-service-model-integrated-stroke-delivery-networks-may-2021.pdf
2. The interventional radiologist needs to have sufficient experience, facilities and equipment	

to perform the procedure safely and to deal with any complications which may arise.	
3. Monitoring of pulse oximetry, blood pressure and ECG should be performed during all interventional radiology procedures; this should be done by someone other than the radiologist performing the procedure.	
4. Cannulation of the femoral artery should always be below the inguinal ligament to avoid the danger of retroperitoneal haematoma. Medical and nursing staff must be aware of the risks of this serious complication in order to act early when necessary.	
5. Thrombolytic therapy should be used with caution, especially in the elderly (over 75 years) who are more prone to cerebral haemorrhage. Patients with thrombolysis continuing after they have left the radiology department should be nursed in a high dependency unit so that complications may be diagnosed and treated without delay.	
6. The number of neuroradiologists and support staff needs to increase to ensure a satisfactory on-call rota, including weekends.	
7. There is a need for recognised training programmes in neuroradiology to meet the demand for more consultants.	
8. Monitoring of the patient should be performed in all cases and should be the responsibility of someone other than the neuroradiologist performing the procedure.	
9. It is important that there are sufficient facilities for a prompt emergency service, and ICU/HDU beds for subsequent care.	
1999 - EXTREMES OF AGE	**ADDITIONAL INFORMATION**
1. There is a need for a system to assess the severity of surgical illness in children in order to gather meaningful information about outcomes. The ASA grading system is widely used by anaesthetists but, as a comparatively simple system, does have limitations for use in children.	Removed as covered in later NCEPOD reports see: 'An Age Old Problem' (2010) https://www.ncepod.org.uk/2010eese.html 'Are We There Yet?' (2011) https://www.ncepod.org.uk/2011sic.html 'Knowing the Risk' (2011)

	https://www.ncepod.org.uk/2011poc.html
2. Anaesthetic and surgical trainees need to know the circumstances in which they should inform their consultants before undertaking an operation on a child. To encourage uniformity during rotational training programmes, national guidelines are required.	
3. The death of any child, occurring within 30 days of an anaesthetic or surgical procedure, should be subject to peer review, irrespective of the place of death.	
4. The events surrounding the perioperative death of any child should be reviewed in the context of multidisciplinary clinical audit.	
5. Fluid management in the elderly is often poor; it should be accorded the same status as drug prescription. Multidisciplinary reviews to develop good local working practices are required.	
6. A team of senior surgeons, anaesthetists and physicians needs to be closely involved in the care of elderly patients who have poor physical status and high operative risk.	
7. The experience of the surgeon and anaesthetist need to be matched to the physical status of the elderly patient, as well as to the technical demands of the procedure.	
8. Elderly patients need their pain management to be provided by those with appropriate specialised experience in order that they receive safe and effective pain relief.	
9. Surgeons need to be more aware that, in the elderly, clinically unsuspected gastrointestinal complications are commonly found at post-mortem to be the cause, or contribute to the cause, of death following surgery.	
10. The concentration of children's surgical services (whether at a local or regional level) would increase expertise and further reduce occasional practice.	
11. A review of manpower planning is required to enable anaesthetists and surgeons in various specialties to train in the management of small children.	
12. In the management of acute children's surgical cases a regional organisational perspective is required. This particularly applies to the organisation of patient transfer between units. Paediatric units have a responsibility to lead this process.	
13. All Trusts should address the requirements of the framework document on paediatric	

intensive care. Most children's hospitals have a good provision, but many district general hospitals are deficient.	
14. There is a need for central guidance to ensure the uniformity of data collection on surgery in children.	
15. If a decision is made to operate on an elderly patient, then that must include a decision to provide appropriate postoperative care, which may include high dependency or intensive care support.	
16. There should be sufficient, fully staffed, daytime theatre and recovery facilities to ensure that no elderly patient requiring an urgent operation waits for more than 24 hours once fit for surgery. This includes weekends.	
17. Clinicians are still unable to return data to NCEPOD as a result of missing patient records. Action is required to improve hospital record systems; this is within the remit of clinical governance.	
18. NHS Trusts must take responsibility for ensuring that all relevant deaths are reported, and questionnaires returned to NCEPOD as part of their clinical governance duties.	
1996-1997	**ADDITIONAL INFORMATION**
General Comment:	
It is a surgical skill to recognise when surgery will be too adventurous, ill-advised or futile, given the condition of the patient. It is difficult to resist pressure to operate, whether this comes from the patient, relatives or medical colleagues but it must be recognised that surgery cannot solve every problem.	
1. A fibreoptic intubating laryngoscope should be readily available for use in all surgical hospitals. Several anaesthetists working in a department should be trained for, and competent at awake fibreoptic intubations.	Removed as either out of date, too vague or specific for the time in which it was made.
2. The maintenance of an adequate blood pressure through the operative and postoperative period is an essential part of anaesthesia for patients undergoing carotid endarterectomy surgery. This required invasive blood pressure monitoring and particular care in patients	

with poor cardiovascular reserve.	
3. Laparoscopic abdominal surgery may take place through a small incision, but it still requires anaesthesia and the physiological onslaught of a pneumoperitoneum. High risk patients may not be able to tolerate this stress.	
4. Morbidity/mortality meetings should take place in all anaesthetic departments. Regular review of mortality following operations is an essential part of anaesthetic practice.	
5. There are many aspects around the care of patients undergoing anaesthesia and surgery for oesophageal disease, which are of major concern. A fundamental re-examination of the arrangements for the care of these patients is urgently required.	Removed as either out of date, too vague or specific to the time in which it was made.
6. The technique of tracheostomy should be taught to trainee surgeons. The indications for performing this procedure under local or general anaesthesia should also be taught.	NCEPOD report - 'On the Right Trach?' (2014) https://www.ncepod.org.uk/2014tc.html
7. Pharyngeal pouch is a benign condition but appears to have a significant mortality. Surgical subspecialisation for this condition within otolaryngology departments is required.	
8. More detailed perioperative investigation and assessment may prevent radical spinal surgery, which is unhelpful for individual patients with advanced malignant disease.	
9. Surgeons need to be clear about the aims of the treatment and benefits for the patient when planning surgery for advanced malignancy.	
10. Patients and their relatives need to recognise the limits of surgery in advanced malignant disease. A decision to operate may not be in the best interests of the patient.	
11. The hospital post mortem rate of 8% was unacceptably low. The reasons for this low rate need to be examined.	NCEPOD report - The Coroner's Autopsy: Do we deserve better? (2006) https://www.ncepod.org.uk/2006ca.html
1995-1996 - WHO OPERATES WHEN?	**ADDITIONAL INFORMATION**
1. All hospitals admitting emergency surgical patients must be of sufficient size to provide 24-hour operating rooms and other critical care services. There should also be sufficient medical staff to perform these functions.	

2. These provisions should be continuous throughout the year: trauma and acute surgical emergencies do not recognise weekends or public holidays.	This report was superseded by Who Operates When II in 2003
3. Patients now expect to be treated and managed by trained and competent staff. Patients assume trainees to be taught appropriately and supervised as necessary. Consultants should acknowledge these facts and react accordingly.	
4. All hospitals which admit patients for emergency procedures should have an emergency surgery list, staffed and in a fully equipped theatre suite. Anaesthetists and surgeons rostered for emergency work should be free from other commitments: this should be a fixed part of the consultant contract.	
5. Consultant anaesthetists, surgeons and hospital managers should together plan the administration and management of emergency admissions and procedures.	
6. In order to avoid queuing for theatre space it may be necessary to nominate an arbitrator in theatres who would decide the relative priority of theatre cases. This practice already successfully operates in some hospitals and should be used more widely.	
7. All hospitals should record the grades of anaesthetists and surgeons present in the anaesthetic room and the operating theatre and their responsibilities.	
8. Systematic clinical audit should include the pattern of work in the operating theatres.	
9. An attempt to harmonise the definitions used by the NHS Executive, and the clinical definitions commonly used by surgeons and anaesthetists, would be welcome.	
10. The condition of patients should be optimised prior to anaesthesia and surgery. This may involve the use of local protocols addressing issues such as: the required duration of preoperative starvation, the use of emergency admission units/wards, the preoperative use of critical care services (ICU/HDU etc.), the management of comorbidities by other consultant medical specialists as appropriate, fluid management, analgesia and appropriate use of facilities for the elderly.	
1994-1995	**ADDITIONAL INFORMATION**
1. Essential services (high dependency and intensive care beds) are still inadequate, and	Intensive Care National Audit & Research

resources need to be increased to correct deficiencies.	Centre https://www.icnarc.org/ NCEPOD report: 'Knowing the Risk' (2011) https://www.ncepod.org.uk/2011poc.html
2. Communication between specialists and between grades needs to be more frequent and more effective.	
3. There are special circumstances of patients (those over 90 years of age, those with aortic stenosis, those who need radical pelvic surgery, those who need transfer to neurosurgical units and those for emergency vascular operations) which require special individual attention by consultant anaesthetists and consultant surgeons.	
4. Organisation for effective clinical audit still needs to be improved in all disciplines but particularly in gynaecology and ophthalmology.	The RCOG Centre for Quality Improvement and Clinical Audit https://www.rcog.org.uk/about-us/groups-and-societies/the-rcog-centre-for-quality-improvement-and-clinical-audit/ Clinical Audit and Clinical Effectiveness in Ophthalmology (2016) https://www.rcophth.ac.uk/wp-content/uploads/2020/09/Clinical-Audit-and-Clinical-Effectiveness-in-Ophthalmology.pdf
5. Clinical records and data collection still need to be improved.	Generic medical record keeping standards https://www.rcplondon.ac.uk/projects/outputs/generic-medical-record-keeping-standards
6. The abilities of locums should be ascertained before appointments are made.	Supporting locums and doctors in short term placements: You should only be placed in roles where

	you are able to work within your limitations https://www.england.nhs.uk/wp-content/uploads/2018/10/supporting_locums_doctors.pdf Guidance on the engagement of long-term locums in maternity care in collaboration with NHS England, Scotland and Wales https://www.rcog.org.uk/media/uuzcbzg2/rcog-guidance-on-the-engagement-of-long-term-locums-in-mate.pdf Locum GP handbook – British Medical Association (2021) https://www.bma.org.uk/media/4312/bma-locum-gp-handbook-2021.pdf
1993-1994	**ADDITIONAL INFORMATION**
1. Consultation, collaboration and teamwork between anaesthetists, surgeons and physicians should be encouraged and should be the usual practice.	
2. Surgical management should be planned and should include all those provisions that are required for good outcomes.	
3. The availability of staffed (medical, nursing and ancillary) emergency operating theatres on a 24-hour basis is essential; Trusts admitting urgent and emergency cases must ensure that they are provided.	
4. The elderly and unfit constitute a large proportion of the workload; improved perioperative management is required to ensure that their care is appropriate.	NCEPOD report: Elective & Emergency Surgery in the Elderly: An Age Old Problem (2010) https://www.ncepod.org.uk/reports.html

5. Protocols for the treatment of common conditions should be applied more widely to both elective and emergency admissions and should be subject to audit.	https://www.uptodate.com/contents/evaluation-and-management-of-suspected-sepsis-and-septic-shock-in-adults/print List of quality statements: https://www.nice.org.uk/guidance/qs49/chapter/List-of-quality-statements NICE guidance Sore Throat https://cks.nice.org.uk/topics/sore-throat-acute/ Scenario: Management (January 2021) https://cks.nice.org.uk/topics/sore-throat-acute/management/management/ North York General Paediatric Tonsillectomy Clinical Guidelines https://www.nygh.on.ca/data/2/rec_docs/1954_Paediatric_Tonsillectomy_Guidelines_Final_2015February.pdf
6. Continuity of care after operations is essential; local arrangements must ensure that it occurs.	
7. The roles and responsibilities of all doctors need to be more clearly defined nationally and implemented locally.	
8. Clinicians and Coroners should make strenuous efforts to improve their local working relationships.	
9. Systems should be implemented by Trusts to improve the retention and availability of all notes and records of clinical activity.	Electronic Patient Record (EPR)
10. Trusts need to encourage more participation in clinical audit.	Clinical audit departments now

	commonplace
11. More research is required on thromboembolism prophylaxis.	NCEPOD report - Pulmonary Embolism: Know the Score (2019) https://www.ncepod.org.uk/2019pe.html
1992-1993	**ADDITIONAL INFORMATION**
1. NCEPOD has again identified a substantial shortfall in critical care services. Any hospital admitting emergency patients, and hospitals admitting complex elective patients, must have adequate intensive care and/or high dependency unit facilities at all times.	Intensive Care National Audit & Research Centre https://www.icnarc.org/ NCEPOD report – 'Knowing the Risk' (2011) https://www.ncepod.org.uk/2011poc.html National Audit Programme for Adult Critical Care Guidelines For The Provision Of Intensive Care Services (2019) – The Faculty of ICM; ICS https://www.rcslt.org/wp-content/uploads/media/docs/clinical-guidance/critical-care-gpics-v2.pdf
2. Trainees with less than three years' training in the speciality should not anaesthetise or operate without appropriate supervision.	Every trainee must, at all times, be responsible to a nominated consultant, whether undertaking routine lists without direct consultant supervision, or emergency duties. The consultant must be available to advise and assist the trainee as appropriate. Sometimes this will require the consultant's immediate presence but on many occasions less direct involvement will be needed.

	Supervision is a professional function of consultants and they must be able to decide what is appropriate for each circumstance in consultation with the trainee. Every patient requiring anaesthesia, pain management, or perioperative medical or intensive care must be cared for under the direction of an appropriate named consultant. When appropriate, trainees or Specialty Doctors may, provided they have the appropriate competencies provide direct care, without direct consultant supervision. To ensure the safety of patients, a trainee must be responsible to, and subject to clinical supervision by a designated consultant at all times. This includes those occasions when the trainee, as part of their training, is deemed competent to make decisions without immediate reference to a more senior clinician. https://www.rcoa.ac.uk/sites/default/files/documents/2019-08/TRG-CU-CCT-ANAES2010.pdf
3. Practitioners must recognise their own limitations and not hesitate to consult a more appropriate colleague when managing conditions outside their immediate expertise.	
4. The skills of the surgeon and anaesthetist should always be appropriate for the physiological and pathological status of the patient.	

5. Surgeons operating laparoscopically should not hesitate to convert to an open approach when necessary.	In a small number of patients the laparoscopic method is not feasible because of the inability to see or handle the organs effectively. Factors that may increase the possibility of converting to the 'open' surgical procedure may include obesity, previous abdominal surgery causing dense scar tissue, or bleeding problems during the operation. The decision to perform the open procedure is a judgment made by your surgeon either before or during the actual operation. When the surgeon feels that it is safest to convert the laparoscopic procedure to an open one, this is not a complication, but rather sound surgical judgment. The decision to convert to an open procedure is strictly based on patient safety https://www.dbth.nhs.uk/wp-content/uploads/2017/07/WPR31120-laparoscopic-anti-reflux-surgery.pdf
6. Appropriately trained staff must accompany all patients with life-threatening conditions during transfer between and within hospitals.	
7. The medical profession needs to develop and enforce standards of practice for the management of many common acute conditions (e.g., head injuries, aortic aneurysm, colorectal cancer, gastrointestinal bleeding).	NCEPOD report: GI Bleed (2015) https://www.ncepod.org.uk/2015gih.html NCEPOD report: Subarachnoid Haemorrhage (2013) https://www.ncepod.org.uk/2013sah.html

	NCEPOD report: Trauma (2007) https://www.ncepod.org.uk/2007t.html NCEPOD report: Emergency Admissions (2007) https://www.ncepod.org.uk/2007ea.html
8. There is an urgent need to improve the quality of medical notes. There was found to be considerable variation in quality among those operation notes included with surgical questionnaires, particularly between specialties. Overall, there is a clear need for an improvement in keeping operation records and The Royal College of Surgeons' guidelines and recommendations need to be re-emphasised.	Commented on during peer review process in NCEPOD reports.
9. Managers need to improve the services provided by medical records departments so that notes are available when required.	Most hospital have moved to electronic records - having case notes available electronically across the organisation when and where they are needed.
10. The number of post-mortems performed remains too low and poor communications persist in some cases between surgeons and pathologists. Whilst the overall quality of post-mortems performed is generally satisfactory it would be improved by wider observance of the Royal College.	NCEPOD report - The Coroner's Autopsy: Do we deserve better? (2006) https://www.ncepod.org.uk/2006ca.html
1991-1992	**ADDITIONAL INFORMATION**
1. The medical Royal Colleges and the Specialist Societies in Surgery, Gynaecology and Anaesthesia must encourage all consultants to participate in the National Confidential Enquiry into Perioperative Deaths. Full co-operation would enable the profession to defend itself against charges of falling standards and lack of public accountability. The failure of some consultants to return questionnaires is unacceptable and a cause for concern.	Good Surgical Practice – A Guide to Good Practice www.rcseng.ac.uk/standardsandguidance Take part in national enquiries, for example the National Confidential Enquiry into Patient Outcome and Death. You should submit your patient outcome data to relevant national databases.

	See *Good medical practice* (2013), paragraph 22. Formerly known as national confidential inquiries, clinical outcome review programmes are systematic reviews that are carried out with the aim of supporting changes that can help improve the quality and safety of healthcare delivery. https://www.gmc-uk.org/-/media/documents/gmc-guidance-for-doctors---confidentiality-good-practice-in-handling-patient-information----70080105.pdf 23 To help keep patients safe you must: a contribute to confidential inquiries b contribute to adverse event recognition c report adverse incidents involving medical devices that put or have the potential to put the safety of a patient, or another person, at risk d report suspected adverse drug reactions e respond to requests from organisations monitoring public health. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/good-medical-practice
2. Surgeons, gynaecologists and anaesthetists need to address the continuing problem of thromboembolism which causes death after surgery. We have emphasised this matter	NCEPOD report - Pulmonary Embolism: Know the Score (2019)

before and we regret that we must again bring the profession's attention to it. Hospitals and clinical directorates should be required to address the issue and develop an agreed local protocol: every consultant should then follow this protocol. The research bodies and the Department of Health need to continue actively to encourage and support research in this field.	The report stresses the importance of undertaking and documenting a PE probability score for all patients with a suspected PE, and ensuring that a standardised protocol is followed, to ensure the consistent delivery of an appropriate package of care in an appropriate setting. https://www.ncepod.org.uk/2019pe.html
3. All grades of surgeon, gynaecologist and anaesthetist must realise the critical importance of fluid balance in elderly patients.	NCEPOD report - Elective and Emergency Surgery in the Elderly: An Age Old Problem (2010) Optimisation of fluid balance https://www.ncepod.org.uk/2010eese.html
4. There needs to be a collaborative approach to the matching of surgical and anaesthetic skills to the condition of the patient.	
5. Surgeons, gynaecologists and anaesthetists must have immediate access to essential services (recovery rooms, high dependency and intensive care units) if their patients are to survive. The previous Reports have emphasised the need to have emergency operating and recovery rooms available 24 hours a day.	NCEPOD report – 'Knowing the Risk' (2011) 6.7% of patients went to HDU/ICU (97.9% location suitable for patient) Daytime, staffed and available operating theatres (CEPOD theatres) had increased in availability over the years: Who Operates When 1997 (51%) Who Operates When II 2003 (63%) Caring to the End 2009 (87%) and it is particularly disappointing to see that 'CEPOD' theatre availability has

	dropped to 72.5% in this study (p15 Table 2.1). (CEPOD theatre - a dedicated, staffed emergency operating theatre available 24 hours/day, 7 days/week) Ventilatory support was delivered in 159 hospitals in post anaesthetic recovery areas staffed 24/7 https://www.ncepod.org.uk/2011poc.html
6. It is no longer acceptable for basic specialist trainees (senior house officers) in some specialities to work alone without suitable supervision and direction by their consultant. Managers and consultants must locally achieve these arrangements.	Every trainee must, at all times, be responsible to a nominated consultant, whether undertaking routine lists without direct consultant supervision, or emergency duties. The consultant must be available to advise and assist the trainee as appropriate. https://rcoa.ac.uk/documents/5-clinical-supervision
7. The post mortem rate is too low. At least 49% of post mortems demonstrate, despite clinicians' scepticism, significant, new and unexpected findings that are relevant. Post mortems are an important form of quality control.	NCEPOD report - The Coroner's Autopsy: Do we deserve better? (2006) https://www.ncepod.org.uk/2006ca.html
8. The necessary information available within the NHS under the present system is inadequate. Despite our repeated comment about this, we are still unable to obtain basic and timely data about the numbers of patients who have operations and the number of perioperative deaths. There is a need for an improved method for collection and validation of information on perioperative deaths locally and nationally.	Electronic Patient Record ONS and HES data (deaths) Hospital-level data via IT department Surgery and the NHS in numbers https://www.rcseng.ac.uk/news-and-events/media-centre/media-background-briefings-and-statistics/surgery-and-the-nhs-in-numbers/

	Additional information includes cancelled elective operations https://www.england.nhs.uk/statistics/statistical-work-areas/
1990	**ADDITIONAL INFORMATION**
1. The provision of clinical and management information about patients, including post mortem records, needs to be improved significantly.	NICE has accredited the process used by The Royal College of Pathologists to produce its autopsy guidelines. Accreditation is valid for five years from 25 July 2017. Autopsy guidelines series (rcpath.org) NCEPOD report - The Coroner's Autopsy: Do we deserve better? (2006) https://www.ncepod.org.uk/2006ca.html
2. Essential services (including staffed emergency operating rooms, recovery rooms, high dependency units and intensive care units) must be provided on a single site wherever emergency/acute surgical care is delivered.	
3. Decisions for or against operations should be made jointly by surgeons and anaesthetists; this is a consultant responsibility.	
4. The supervision of locum appointments at all grades in anaesthesia and surgery needs an urgent review.	Locum Surgeons: Principles and standards — Royal College of Surgeons (rcseng.ac.uk)
5. All grades of surgeon and anaesthetist should be involved in medical audit and continuing medical education.	Domain 1: Knowledge skills and performance - GMC (gmc-uk.org)
6. Efforts should be made to increase the number of post mortem examinations.	NCEPOD report - 'The Coroner's Autopsy: Do we deserve better?' (2006) https://www.ncepod.org.uk/2006ca.html
1989	**ADDITIONAL INFORMATION**
1. The information systems, particularly clinical information systems, in the NHS should be	

considerably improved to provide accurate and timely information for audit and clinical quality assurance. All consultants should assist in achieving this improvement.	
2. Local audit meetings are essential to good clinical practice and all consultants should participate.	
3. Surgeons and anaesthetists should not undertake occasional paediatric practice. The outcome of surgery and anaesthesia in children is related to the experience of the clinicians involved.	
4. Consultants who take the responsibility for the care of children (particularly in District General Hospitals and in single surgical speciality hospitals) must keep up to date and competent in the management of children.	Revalidation process Revalidation | RCPCH Trainees - Royal College of Paediatrics and Child Health – RCPCH ePortfolio. An online system that allows you to log your progress against the curriculum. RCPCH ePortfolio (Kaizen) guidance for trainees | RCPCH NCEPOD reports: Mental Healthcare in Young People and Young Adults (2019) https://www.ncepod.org.uk/2019ypmh.html Cancer in Children, Teens and Young Adults: On the Right Course? (2018) https://www.ncepod.org.uk/2018cictya.html Surgery in Children: Are We There Yet? (2011) https://www.ncepod.org.uk/2011sic.html
5. Consultant supervision of trainees needs to be kept under scrutiny. No trainee should undertake any anaesthetic or surgical operation on a child of any age without consultation	Surgical Trainee — Royal College of Surgeons (rcseng.ac.uk)

with their consultant.	
1987	**ADDITIONAL INFORMATION**
1. There is a need for an assessment of clinical practice on a national basis. Our experience suggests that our colleagues would welcome this.	Several annual audits are now in place https://www.hqip.org.uk/a-z-of-nca/#.YbNsl73P3IU
2. Consultants in every District should ensure that their own coding and input to information systems (including the Körner systems) is accurate and up-to-date; without this, any audit is flawed.	
3. Every District should urgently review the storage, movement and retrieval of patients' notes, particularly those of deceased patients.	Retention of health records (bma.org.uk) Protecting patient data - NHS Digital
4. Clinicians need to assess themselves regularly. Effective self-assessment needs time; time to attend autopsies, mortality/morbidity meetings and clinical review with other disciplines.	Annual and mid-year reviews are part of all clinicians' personal development and assessment. Attendance at MDT meetings. Competencies are checked and assessed.
5. All departments of anaesthetics and surgery should review their arrangements for consultant supervision of trainees. Locally agreed guidelines are important to ensure appropriate care of all patients, but particularly when responsibility is transferred from one clinical team, or shift, to another. No senior house officer or registrar should undertake any anaesthetic or surgical operation as an emergency or urgent matter without consultation with their consultant (or senior registrar).	Every trainee must, at all times, be responsible to a nominated consultant, whether undertaking routine lists without direct consultant supervision, or emergency duties. The consultant must be available to advise and assist the trainee as appropriate. https://rcoa.ac.uk/documents/5-clinical-supervision
6. Resuscitation, assessment and management of medical disease takes time and may determine the outcome; their importance needs to be re-stated. Arrangements which permit this in every case are important.	There are now time-based targets for assessment and management of medical disease including when in A&E. Resuscitation Council UK Guidelines 2021 accredited by NICE 2021 Resuscitation

	Guidelines | Resuscitation Council UK NCEPOD report - In Hospital Care of Out-of-Hospital Cardiac Arrests: Time Matters (2021) https://www.ncepod.org.uk/2021ohca.html
7. The decision to operate on the elderly and the very sick is important and should be taken at consultant (or senior registrar) level. For the most seriously ill patients, consultant anaesthetists and surgeons should consult together before the operation.	NCEPOD report - Elective & Emergency Surgery in the Elderly: An Age Old Problem (2010) https://www.ncepod.org.uk/2010eese.html NCEPOD report including high-risk patients - Peri-operative Care: Knowing the Risk (2011) https://www.ncepod.org.uk/2011poc.html MDT meetings are now commonplace
8. The decision not to operate is difficult. Humanity suggests that patients who are terminally ill or moribund should not have unnecessary operations (i.e., non-life saving), but should be allowed to die in peace with dignity.	Principles of Treatment and care towards the end of life - GMC (gmc-uk.org)
9. Districts should review their facilities for out-of-hours work and concentrate anaesthetic, surgical and nursing resources at a single location. A fully staffed and fully equipped anaesthetic room, resuscitation room, operating room and recovery area and high dependency or intensive therapy unit should be available at all times.	
10. The implementation of the CEPOD classification of operations (emergency, urgent, scheduled and elective) would concentrate the attention of all staff on the fact that very few operations need to be performed at night.	This classification has been updated https://www.ncepod.org.uk/classification.html)
11. Operations should only be performed by consultants or junior surgeons (accountable to consultants) who have had adequate training in the specialty relevant to the operation. Health Authorities should therefore balance surgical specialties so that appropriate urological and vascular trained surgeons are provided in each District. In the case of small	

Districts this may necessitate sub-Regional units to ensure adequate sub-specialty care. Neurological and neonatal surgery should be carried out at special Regional units.	

Key references	
Consent	GMC: Decision making and consent 9 November 2020 https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/decision-making-and-consent https://www.nhs.uk/conditions/consent-to-treatment/capacity/ Consent: Supported Decision Making (2018) https://www.rcseng.ac.uk/standards-and-research/standards-and-guidance/good-practice-guides/consent/ Two-stage process https://www.rcseng.ac.uk/standards-and-research/gsp/domain-3/3-5-1-consent/ Consent – assessing capacity Consent to treatment - Assessing capacity - NHS (www.nhs.uk)
Enhanced recovery programme (ERP)	Enhanced recovery - NHS (www.nhs.uk)