

Day Surgery for Children and Young People

RCN Guidance

CLINICAL PROFESSIONAL RESOURCE



Acknowledgements

This publication was first published in June 2013 by the Royal College of Nursing in partnership with the Royal College of Anaesthetists, with support from the Department of Health.

The Royal College of Nursing would like to thank members of the RCN Children & Young Peoples Acute Care Forum and, particularly, Erica Thomas, Surgical Nurse Practitioner, Cardiff & Vale University Health Board and Eirlys Thomas, RCN Children & Young People's Acute Care Forum Steering Committee Member, Head of Nursing Children Services Swansea Bay HB for their assistance in revising this publication.

This document has been designed in collaboration with our members to ensure it meets most accessibility standards. However, if this does not fit your requirements, please contact corporate.communications@rcn.org.uk

RCN Legal Disclaimer

This publication contains information, advice and guidance to help members of the RCN. It is intended for use within the UK but readers are advised that practices may vary in each country and outside the UK. The information in this booklet has been compiled from professional sources, but its accuracy is not guaranteed. Whilst every effort has been made to ensure the RCN provides accurate and expert information and guidance, it is impossible to predict all the circumstances in which it may be used. Accordingly, the RCN shall not be liable to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by what is contained in or left out of this website information and guidance.

Published by the Royal College of Nursing, 20 Cavendish Square, London, W1G 0RN

© 2020 Royal College of Nursing. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without prior permission of the Publishers. This publication may not be lent, resold, hired out or otherwise disposed of by ways of trade in any form of binding or cover other than that in which it is published, without the prior consent of the Publishers.

Contents

Introduction	4
1. Developing a quality service	6
2. Peri-operative preparation	14
3. Child friendly patient information	19
4. Supporting parents and carers in the hospital environment	20
5. Policies and guidelines	21
6. Post-operative care	23
7. Discharge criteria	24
8. References	28

Introduction

Hospitalisation is a major stressor for children. Fear of separation from their parents, unfamiliar routines of anaesthesia, surgical intervention and unrealistic expectations of co-operation by healthcare professionals which lead to experiences governed by pain and the fear of needles are all sources of children's negative reactions. The European Charter for Children's Rights (1996) states that "children should only be admitted to hospital if the care they require cannot be equally well provided at home or on a day case basis".

Children make ideal candidates for day case pathways as they are usually healthy and predominantly require minor or intermediate surgery of short duration (Brennan and Prabhu, 2003). Thus, this patient group offers the opportunity for the development of a comprehensive day care service which includes a child and family friendly environment, approachable staff where the families are left feeling well cared for and parents leave the department having the skills and confidence to manage their child's recovery in their own home environment.

The momentum for increasing day surgery provision is supported through advances in surgical and anaesthetic techniques, increases in patient and public expectations and the cost-efficient benefits (Bowen and Thomas, 2016). The cost effectiveness of day surgery has put this mode of care delivery at the top of political agenda's in many industrialised countries.

With the UK government setting targets in The NHS Plan 2000 for 75% of planned surgical events to be day cases, the money spent within the health service has to demonstrate considerable monetary saving but also deliver a far more efficient service (King's Fund, 2015).

The foundations of modern day-case services are based upon the original ideas put forward by Glaswegian Paediatric Surgeon James Nicoll in 1909. His work was motivated by financial benefits, concerns around hospital acquired infection rates and lack of hospital beds. Through his work he highlighted the importance of infants and young children being cared for by their mothers after surgery and provided hospital accommodation in a small house to facilitate this practice.

Today, day surgery represents the opportunity for high-quality patient care with excellent patient satisfaction because of shorter hospital stays, early mobilisation, reduced infection rates and preference of their own surroundings in which to convalesce (Quemby and Stocker, 2013).

Day surgery should be patient-centred and can be protocol driven but should not be impersonal or generate a production-line culture (Upadhyaya and Lander, 2013). When asked about their experiences of day surgery, families continue to report a reduction in the psychological consequences of hospitalisation, such as sleep disturbances and emotional regression when hospital admissions are kept to the minimum (BADS, 2018).

The needs of children and young people undergoing day surgery are very different to those of adults, and the clinical safety margins of care are very small. Children are a vulnerable client group as they differ emotionally, psychologically, and physiologically from adults (RCN, 2013a). Successful day surgery outcomes require good preparation and planning within dedicated departments with a clinical collaboration between surgeons, anaesthetics, children's nurses and theatre teams. The preparation includes optimisation, medicines rationalisation, giving of essential information with shared decision making

and the child and family being engaged in choosing their pathway of care (RCS, 2013; RCoA, 2019a).

All nurses involved in the care of children undergoing surgery should be familiar with the recommendations in government and professional documents listed in the reference section.

All hospitals operating on children and young people should have clear operational policies and procedures in place, specific to the needs of children (RCN, 2013a).

In order to provide an effective efficient service, the following points should be adapted into local policy to ensure that care is optimised, and the psychological impact of a hospital stay is kept to a minimum.

- Developing a quality service
- Staff education and training
- Environment and equipment
- Patient selection criteria
- Peri-operative assessment
- Peri-operative preparation
- Post-operative care and monitoring
- Discharge criteria

1. Developing a quality service

A genuine partnership between service users and providers must exist to design and deliver true patient-centred care. A starting point should always be what is the best for the person being cared for.

Patients are not outsiders to the health care system but the ones that experience health care most personally and are therefore able to offer factual insight to the service providers when asked. The opinions of children and young people, the real service users with their views and active involvement, is crucial in the commissioning, designing and developing responsive services (Reddy, 2017).

For many children and young people, day surgery may be their first experience of a hospital environment. The experience will often be remembered and may colour the way that children react to subsequent hospital admissions and even other life experiences into adulthood (RCSENG, 2015).

Providing children with the best possible patient experience and outcomes in health care is vital and in support of this, care should be delivered locally, where safe, and centrally managed in an appropriate environment that is close to home as possible, by staff with the right skills at centres with the right facilities (RCS, 2013).

The Institute of Medicine includes patient-centred care as one of the six domains which constitute quality in health care (National Research Council, 2001):

- person-centred care that is respectful of and responsive to individual patient preferences, needs and values, and ensuring that patient values guide all clinical decisions
- safety – avoid harm to staff and patients from that care that is intended to help them
- effective – care based on scientific knowledge to all who could benefit and refrain from actions to those not likely to benefit
- timely – reducing waits and harmful delays for both those who receive and those who give care
- efficient – avoiding waste, of equipment, supplies, ideas and energy
- equitable – care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location or socio-economic status.

Evidence shows that person-centred care leads to improved quality, reduced waste, a better experience of care and better use of resources. Picker's Eight principles of patient care (2015) defines patient-centred care as the practice of caring for patients (and their families) in ways that are meaningful and valuable to the individual patient. It includes listening to, informing and involving patients in their care with particular reference to involving patients and their families in decision making about their care. Fear and anxiety associated with hospital admission can be as debilitating as the illness itself.

Staff education and training

The ability of the NHS to safely staff services by having the right people, with the right skills in the right place at the right time, is a nationwide problem.

Wales became the first country in Europe to enshrine safe staffing in law. This means

that Health Boards and NHS trusts in Wales now have a legal duty to ensure appropriate levels of nurse staffing. Children's nursing will be the next specialty to be included in the act.

In Scotland, the Health and care (Staffing Scotland) Bill completed its second stage in July 2019.

England has no law related to nurse staffing. There is no law currently progressing through the commons and no plan to introduce legislation, although the RCN is campaigning on the issue.

Children needs champions, strong leaders who will advance their interests and Health Boards need to create the environment in which leaders can flourish, realise their vision and progress with those that will inherent that vision (Kennedy, 2010).

It is essential that every organisation recruits staff with the right knowledge, skills and attitude to care for children and young people. Having the right number of appropriately qualified, competent and experienced nurses protects both the public and the nursing profession. The right number of registered nurses leads to improved patient outcomes, reduced mortality rates and increased productivity (RCN, 2017).

All clinicians caring for children and young people in the surgical or anaesthetic context should undergo an appropriate level of paediatric clinical activity that is sufficient to maintain minimum competencies as defined by their respective medical and nursing royal collages (RCS, 2013).

An appropriate level of staffing is essential to deliver a good quality service with additional support from pharmacists, physiotherapists, occupational therapists to ensure patient flow can be well co-ordinated to minimise length of stay in hospital.

Registered children's nurses should be available to care for children within day case surgery units. Government, statutory and professional bodies have issued guidance and standards for clinical staff caring for children and young people (RCN, 2013). Legislation alone will not improve patient safety, but it will give clear accountability for workforce strategy, policy and planning (RCN, 2017). Guidance and standards dictate that that a minimum of two registered children's nurse should be on duty throughout the time in which children are cared for (RCN, 2011).

Individual children's nurses, managers and health care providers must take responsibility to ensure safe staffing levels. Monitoring of service provision must include up-to-date records, reporting adverse events, incidents, errors and near misses, and staff knowing the pathway for reporting where services fall below the standard for quality and safety (CQC, 2011), where this work highlights deficiencies or variations within the service a full risk assessment should be undertaken, and concerns escalated to senior managerial staff.

Effective audit is an essential component of good care in all aspects of day surgery (BADS, 2011). Regular audits of patient flow looking at activity, overnight admission and complications can be used to improve the service and support the introduction of a new procedure or more complex patients through the department. Careful initial patient selection ensures better outcomes for families (Upadhyaya and Lander, 2013).

The Francis Inquiry (2013) highlighted the need for staffing levels to be appropriate and for all staff to be properly educated, trained and regulated to meet the needs of patients and to take seriously the impact of potential changes to service provision which will affect nurse staffing or the delivery of facilities which will ultimately impact on the quality of patient care.

Skill mix of staff should reflect the staffing model implemented (for example, whether the service is nurse-led, or physician led). Staffing levels and skill mix will depend upon case mix, acuity and workload and whether other children's services are provided through the organisation (RCN, 2013). Shorter lengths of stay, increasing throughput of patients and bed occupancy place greater pressure on nursing resources rather than a reduction.

In order to maintain a credible workforce strategy, staff development must be supported by the implementation of education and training models that provide and maintain appropriately educated, skilled, competent children's nurses to provide the necessary skill mix. Access to a dedicated nurse bank also ensures that units can offer appropriate care to children but allows redeployment on a more ad-hoc basis. Nurses caring for children should receive training to keep up-to date with consent issues, calculation of children's drug dosages and resuscitation skills (RCN, 2013; RCN, 2017). Movement of staff into day care services without such development will lead to a dilution of such skills and will affect the team's ability to deliver high quality care.

All staff deployed to care for children must possess the required skills in order to recognise a sick child and quickly commence emergency treatment, which includes basic life support. If the individual that is relocated in times of staffing crisis feels that they are neither safe nor competent to carry out the appropriate assessments +/- interventions for children post-anaesthesia they should raise their concerns immediately with the person in charge if they are being asked to practice beyond their usual role, experience and training (NMC, 2015).

The delegation of the task to less experienced staff should reflect the NMC (2015) statement that individuals are accountable for the decision to delegate tasks and duties to other people:

11.1 only delegate tasks and duties that are within the other person's scope of competence, making sure that they fully understand your instructions. Immediate access to paediatric medical support should be available (NCEPOD, 2013).

All clinical staff with direct access to children and young people must have a Disclosure and Barring for adults and children check, pre-employment checks and receive training in child protection and should have up to date knowledge, skills and competence as outlined in the Intercollegiate Safeguarding children and young people (RCN, 2019).

Staff skills

By the very nature of day case surgery, there is minimum time to build and develop a trusting relationship with either the child or their parents before surgery. The information delivered must be pitched at the correct level for the parent and the child or young person to ensure they feel able to make an informed choice about an intervention and feel in control of their situation.

Families with a lot of experience in receiving health care for long term health conditions can be approached to offer insight into the training needs of staff and be involved in the induction and training of new staff (Reddy, 2017). Both verbal and non-verbal communication skills must be used to ensure a successful outcome to the day surgery process. The verbal skills used to give information to the parents and the child and must be pitched at the right level to ensure understanding. All staff in contact with children and young people and should be trained in the developmental, psychological and communication aspects of care.

A play therapist should be involved in the preparation of the child and be able to provide support and distraction within an environment that provides suitable equipment and toys away from the clinical area in a designated play area. Children undergoing anaesthesia and their families should be offered input from play specialists to help in their preparation for anaesthesia (RCoA, 2019c).

Parents, carers and children should be provided with good-quality pre-operative information, including information on fasting and what to do if the child becomes unwell on the day of surgery. Discharge advice for parents should be detailed and carefully worded to facilitate on-going care by parents. Post-operative analgesia requirements should be anticipated and discussed at the pre-operative assessment (RCoA, 2019c).

Staff should have access to evidence-based guidelines that are appropriate for children on the management of pain, intravenous fluids, nausea and vomiting (RCoA, 2019c).

Environment and equipment

Children should be nursed in a specifically designed, child friendly and safe children's day care unit, which reflects the emotional, developmental and physical needs of the child or young person.

If children and young people must be cared for within an adult day unit, there must be separate facilities for them and their parents or carers, and either separate sessions or they are placed at the start of mixed lists, with separate recovery facilities (RCoA, 2019b). Within these mixed units there should be separate appropriate facilities for children with facilities for play, with suitable equipment, toys and games that reflect the range of age groups being cared for. Waiting areas should be bright and welcoming, reflecting a family's need to be together i.e. comfortable chairs for waiting parents (RCoA, 2019a).

Where children are admitted to an inpatient unit for day case surgery, there should be separate policies and operational rules established to ensure that smooth patient flow continues.

Young adults between the age range of 16-18 years should have the option of being cared for on a children's ward, adult ward or when available an adolescent unit. Consideration should be given to the age of the individual as well as their emotional needs, service provision and the procedure being undertaken to determine the most appropriate placement of the young person. Young people should be encouraged to participate in decisions about their own care (RCoA, 2019c). The environment for all children and young people must be safe and secure with CCTV and controlled access through appropriately monitored system (DH, 2003).

Patient selection criteria

The advantages of day surgery outweigh the disadvantages for most children and their families. Health care providers see avoiding overnight admission as efficient, cost-effective, it reduces the number of hospital beds required and reduces waiting times (RCS, 2013). Parents prefer this model of care as it has a reduction in financial impact requiring less time off work, minimal cost of alternative sibling/child care arrangements and minimises the disruption to family routine.

In order to achieve a successful outcome for the child, or young person and their family, parents and carers should be involved in the decision making about treatment options and consulted on the expected pathway of care and be encouraged to be active participants. Children's interests are often best served by being in hospital for the briefest time possible in order to provide safe and effective care (RCN, 2011; RCS, 2013).

The British Association of Day Surgery has produced a directory of procedures that provides targets for day and shorter stay surgeries (BADS, 5th Edition, 2016) its recommendation state that 50% of surgical procedures should be on a day case basis. Ultimately the decision for the length of stay in hospital will be made on the day of surgery by the attending anaesthetists and surgeon according to the specific needs and safety of the child (RCoA, 2019c). Parents should be informed of that unexpected events may influence length of stay and recovery time after surgery and advised to come equipped for a night in hospital.

Who should select?

It is recommended that a multidisciplinary approach, with agreed protocols for patient assessment including inclusion and exclusion criteria for day surgery should be agreed locally with the anaesthetic department. The lower age limit for day surgery will depend upon the facilities and experience of the staff and the medical condition of the infant (RCoA, 2019a).

The approach to patient counselling for surgical intervention has begun to change with the emphasis moving away from a paternalistic approach with an increasing importance being given to autonomy and self-determination in medical decision making. It is important that when families have the options for care outlined all the implications for their decision making are outlined as public expectation of doctors supporting their decision-making by providing information tailored to their needs is now increasingly reflected in law (Orr and Baruah, 2018). Engaging age appropriate young people in this conversation will ensure that they remain at the centre of decision making about their health care.

BADS (2018) guidelines outlines that there are few absolute exclusions to day case surgery, but children with the following problems may not be suitable for surgery in a DGH or may require overnight admission in a tertiary centre:

- ex-premature babies < 60 weeks post conceptual age
- difficult airway
- extreme obesity

- previous anaesthetic problems leading to delayed recovery
- metabolic disorder that cannot tolerate starvation
- haemoglobinopathy
- obstructive sleep apnoea
- poorly controlled chronic disease
- complex heart disease.

Each hospital should define the extent of elective and emergency surgical provision for children at their centre. Children's services should be co-ordinated through regional networks for surgery and anaesthesia incorporating agreed care pathways based on age, co-morbidity and complexity of procedure, as well as clinical urgency (RCS, 2013; RCSENG, 2015; RCoA, 2019c).

The majority of patients referred for day surgery will come from outpatient's clinics. It may be appropriate when the needs arise as many childhood surgical emergencies presenting acutely through accident and emergency departments or primary care requiring urgent surgery can be efficiently and effectively treated as day cases (RCoA, 2019c).

The consequence of altering the previously followed admission policies will release many inpatient bed days each year, generating financial savings for the NHS. It is important however to acknowledge that these families will have had less time to prepare and receive appropriate education through the pre-assessment process and this should be a deciding factor when offering this early discharge. The provision of analgesia to take home should be offered to ensure that the child remains comfortable in their recovery at home and parents receive the appropriate education (RCoA, 2019c).

Patient care pathways should include the threshold for transfer to other centres when unexpected events occur. Acknowledgement of what the limits for clinical care for each centre should be incorporated into patient selection and staffing levels and on-going education should reflect these requirements.

The appropriate patient selection for day case procedure should cover three categories:

- social
- medical
- surgical.

Social

Pre-operative preparation has these essential components:

- Education, in opting for day case admission families must have the appropriate understanding of the planned procedure and what to expect when the child returns home and consent to day surgery (RCN, 2013).
- To impart information such as any restrictions to normal activities (shower or bath) or contact sports or swimming. The communication skills of the nurses providing this information and co-ordinating the process are of utmost importance (BADs, 2016).

- Important information should be provided in writing or via hospital web pages.
- The identification of any medical risk factors, promotion of health and the optimisation of the child's condition. One-stop clinics which are based near or within the day-case unit offers families the opportunity to meet staff and get a feel for what to expect during their stay, (BADs, 2011). No person expects surgery to be enjoyable, but what is most appreciated is information delivered by a respected, highly trained professional, who is empathetic and regards the patient as a patient rather than a statistic (AAGBI, 2010).
- Distance from the hospital may govern the practical aspects of a family's decision but access to a phone and transportation are essential should an unexpected event or concern arise once at home. Families should have clear lines of communication with the operating hospital, so they do not feel isolated after discharge, with access to 24 hour operated telephone numbers that will be able to direct the most appropriate course of action.
- Families should be informed of their responsibilities to inform the hospital team should their contact details (address or mobile phone number changes) or the child's medical status changes whilst on the waiting list.
- A letter followed by a phone call confirming availability two weeks prior to the date of admission should remind them of admission criteria, checking the current health status of child, contact with childhood infectious diseases and starvation instructions for the day of admission.
- Completion of any peri-operative investigations (x-rays, blood tests or urinalysis) which may affect the surgeons wish to complete surgical intervention.

These investigations should be highlighted in the patient-care pathways that require development alongside patient assessment criteria.

Medical considerations

Successful day surgery outcomes require an efficient patient pathway which starts with the discussion in outpatients with the surgeon who offers families the choice of same day surgery. The surgeon should outline to the family the proposed surgical intervention, estimated length of surgery and any potential red flags, for example, known medical concerns. After this discussion some families may request an overnight stay, and this should be respected.

Providing an efficient patient journey depends on effective collaboration between many clinical, managerial and administrative services, with potential barrier to a smooth process at every step (BADs, 2018).

Families are often then directed to a preassessment unit where a health questionnaire is completed to facilitate the early identification of any potential risk factors and allows the optimizing of medical conditions before their admission.

Many hospitals are now moving towards electronic data collection with a traffic light system that identifies when the patient has completed safety checklist and is ready to come into hospital. The process should be governed by agreed protocols and guidelines

with structured input from anaesthetic departments where the more complex patient can be in addition assessed by a consultant anaesthetist (RCoA, 2019b; RCoA, 2019c).

Previously the assessment of patients was determined by data collection relating to their ASA grade, BMI or prematurity. With ongoing advances in surgical and anaesthetic techniques, as well as the publication of successful outcomes in patients with multiple comorbidities, the selection process has changed the emphasis in day surgery patient selection. Fitness for a procedure should be related to a patient's health as determined by their pre-operative preparation/assessment and not limited by arbitrary limits of ASA (American Society of Anaesthetists) grade, age or body-mass index (BADS, 2011; RCoA, 2019a).

Surgical considerations

The main criteria for day case procedures are that they are relatively short, be associated with minimal physiological disturbance, tissue trauma or bleeding and produce only mild or moderate post-operative pain which can be alleviated with oral medication at home (BADS, 2018).

The British Association of Day Surgery has provided a list of successful procedures carried out on children covering the specialties of general, urological, dental, ENT, endoscopy and medical procedures such as bone marrow aspiration or CT, MRI scans. (BADS directory of procedures, 5th edition, 2016). The introduction of new procedures requires careful patient selection to ensure best outcomes at the beginning with more challenging patients being introduced as experience is gained. Day surgery units should not perform surgery on children unless they have suitable staff and facilities (BADS, 2011).

When assessing the suitability of a surgical procedure account should be made that any postoperative symptoms should be controllable by the use of a combination of oral medication and the child can be returned to their usual routes of eating and tolerating fluids as soon as possible after they wake up.

Effective management of post-operative vomiting is essential with the likelihood increasing significantly if the operative procedure under GA is greater than 30 minutes or the child has a history of motion sickness. Certain procedures are more likely to induce vomiting such as tonsillectomy, strabismus surgery and otoplasty (APA, 2016).

2. Peri-operative preparation

Day case surgery is suitable for most healthy children and increasingly so for a large number of children with stable chronic health concerns (RCoA, 2019c).

Appropriate patient selection is based on effective peri-operative assessment and appropriate lines of communication with the child's named paediatrician and/or GP in order to maximise their health before the intervention. Therefore, pre-operative preparation is the responsibility of a multidisciplinary team of professionals engaged in the child's care both before, during and after their discharge home. It is important that those involved in the care of children with complex health care needs are notified and available for consultation during the child's admission to ensure that all eventualities or unexpected events are able to be managed. It is imperative that this available support is documented in the child's medical records for use by the doctor and nursing staff on the day unit.

Day surgery encompasses a spectrum of surgical procedures that allows the patient to go home on the same day as surgery, usually after a few hours. Improvements in the provision of anaesthesia and analgesia and the introduction of minimal-access surgical techniques allows a range of procedure to be undertaken previously requiring in-patient admission (RCoA, 2019c).

Peri-operative assessment is an essential component of the surgical pathway and should be afforded suitable time and resource (RCoA, 2019a). Consulting rooms should have appropriate equipment such as an examination couch, scales for measuring height and weight, blood pressure, pulse oximetry and a computer for reviewing test results.

Information gained from the patient's peri-operative assessment should be readily available ideally as an electronic patient record so that information is easily transferred between locations and to enable data collection for later analysis (RCoA, 2019a).

Organisation of peri-operative preparation is essential for enhancing the quality of care in a number of ways:

- if a patient is fully informed, they will be less stressed and may recover more quickly
- a health check is an opportunity to optimise medical health before anaesthesia and surgery
- co-ordination of care increases the child and families understanding of what to expect, facilitating earlier post-operative care at home
- cancellations due to patient ill health or non-attendance are reduced effective admission on the day of surgery and early discharge are more likely (RCoA, 2019a).

Pre-operative preparation of the child and family both physically and psychologically plays a crucial role with good quality pre-operative information including starvation times, what to expect on the day, what to do if the child is unwell on the day and the education of parents/carers in their role in the recovery phase of their child to include post-operative analgesia requirements (RCoA, 2019c). By engaging parents and utilising their involvement in the child's care a reduction in the incidence of behavioural disturbances on returning home from hospital is reported by parents (Upadhyaya and Lander, 2013).

Children, with special needs, which covers a huge spectrum of individuals and diagnoses, require additional preparation and support in the preoperative assessment process. Additional time will be required for assessment and greater care in the co-ordination of their hospital admission with staff being made aware in advance of their additional needs. Parents of these children and young people are frustrated by the lack of understanding of their child's needs. Completion of a hospital passport will allow families to come prepared with the necessary information for staff and also ensure that they don't have to repeat the information with every new contact that they make in the hospital.

Cardiff & Vale University Hospital – Children's Hospital Boarding Pass.

www.cardiffandvaleuhb.wales.nhs.uk/sitesplus/documents/1143/Noah%27s%20Ark%20Boarding%20Pass.pdf

My hospital passport www.autism.org.uk/about/health/hospitalpassport.aspx

While many parents/carers will have sought advice and prepared well, others will be extremely anxious. Adult fears may be transferred to the child or young person.

Nurses need to have the skill to quickly assess the family and adapt their practice to their individual needs. Addressing the families physical, psychological and social needs early in their preparation enables the process of care to be carried through until discharge, thereby providing an episode of care that is smooth, timely and appropriate (RCN, 2013).

Involvement of play or child life specialists allows the child to work through their understanding of their expected admission to hospital through the medium of play. Children and young people can be directed to age appropriate web-based learning tools to increase their understanding of anaesthetics and being in hospital (BADCS, 2018).

Opportunity should be provided for the child and family to meet the team that will be caring for them prior to their admission date. Many units offer a pre-admission programme that incorporates many elements of the day surgery process. This contact allows the child and parents or carer a chance to express any fears and learn how to prepare for admission and what to do on the day.

Pre-operative assessment and preparation should be undertaken as early as possible in the patients care pathway so that all essential resources and obstacles can be anticipated before the day of the operation to avoid un-necessary on the day cancellation or overnight admission after surgery.

Assessment should be standardised and consist of establishing a rapport with the family, followed by information gathering to establish the child's medical, nursing and social needs for an effective hospital admission. The preparation of the child includes optimisation, medication rationalisation, giving of essential information about their procedure and admission with shared decision-making and patients choice (RCoA, 2019c).

Careful pre-operative investigation is essential to minimise the risk of anaesthesia and surgical intervention. It is important to strike a balance between wasteful over investigation and omitting essential tests. Guidelines, with input from all professional groups involved in patient care will help standardise and streamline the process and should optimise the resources and outcomes.

NICE (2016) acknowledges that there continues to be unnecessary pre-operative tests carried out in the period leading up to the admission which cause significant anxiety, delays in treatment and are unnecessary and costly.

Upper respiratory tract infections continue to be the most frequent medical problem within children and young people undergoing surgery that results in the decision to defer surgery. Respiratory syncytial virus, parainfluenza and adeno virus are the common causes of upper respiratory symptoms in the infant and preschool child. Usually the infection is self-limiting however it sometimes produces hyper-reactive airway that can persist for six weeks. A blanket approach to cancel all children with symptoms has begun to change with current clinical evidence suggesting that with peri-operative assessment and optimisation of the child's chest before anaesthesia and the development of local policy governing the management of such children those with mild to moderate URTIs may be safe to undergo surgery with the early recognition of complications (Lema et al., 2018).

Timing of vaccination with respect to anaesthesia and surgery

The Association of Paediatric Anaesthetists of Great Britain and Ireland have issued guidance that families should continue with normal vaccination schedules as there is no evidence if the child is well at the time of surgery following immunization with live attenuated vaccines the procedure should be delayed. Immunization with inactivated vaccines should be delayed for 48 hours post-vaccination to avoid post-vaccination symptoms causing diagnostic concern perioperatively. There are no contraindications to vaccination after surgery once the child is well and recovered from the procedure.

www.apagbi.org.uk/sites/default/files/inlinefiles/Final%20Immunisation%20apa.pdf

Pregnancy screening

Anaesthesia and surgery during pregnancy are associated with an increased risk of miscarriage, premature birth, IUGR and infant death. A NPSA Rapid response Alert 'Checking Pregnancy before Surgery' was released in April 2010 stating that the possibility of pregnancy should be considered in all female patients (aged 12 and over) before surgery and exposure to radiation which could pose a risk to mother or foetus. Pre-admission patient information, written appropriately for females under the age of 16 years and their carers will aid greatly in reducing elements of embarrassment and sensitivity during subsequent questioning about pregnancy on admission.

Pregnancy status should be determined within hours of the intended procedure and therefore notification of the intended test should be highlighted at the pre-assessment visit with opportunity for discussion as part of the consent process for surgery (RCoA, 2019b).

Determining the pregnancy status depends on the risk presented by the anaesthetic, administration of teratogenic medication, investigation and/or procedure on the foetus, but needs to be undertaken in a consistent, sensitive and confidential manner (NHS East Midlands Clinical Networks, 2017).

Evidence from the USA is that females under the age of 16 are not always able to respond accurately to questioning about their sexual activity or possible pregnancy status for a range of reasons:

- hesitancy to disclose sexual activity when parents are present
- fear of authority if engaged in under-age sexual activity
- unaware that they may be pregnant
- menstrual cycle may be erratic in adolescence and recall of dates may be inaccurate.

All organisations that perform procedures that require determination of pregnancy status should have clear, locally agreed and audited procedures for ensuring documented compliance with statutory and professional guidance which includes the involvement of the named safeguarding nurse and/or doctor to ensure that accurate safeguarding advice is available to staff when seeking consent and conducting the tests (RCPCH, 2012).

Clear documentation of any discussion and disclosure of the test results should be known prior to the start of any procedure and form an essential part of pre-operative documentation. Clear documentation avoids the unnecessary sensitive discussion at each patient check point.

In cases where consent for pregnancy testing is denied, the surgeon and clinical team must discuss whether they are willing to proceed with the proposed surgery with unconfirmed pregnancy status, or whether the procedure should be postponed (RCPCH, 2012). www.rcpch.ac.uk/sites/default/files/Guidance.pdf

Prevention of peri-operative venous thromboembolism in children

The prevalence of venous thromboembolism (VTE) has increased within the adult population, however the differences in the physiology of the coagulation system before puberty are reflected in the lower prevalence of VTE in children. The peak incidences are seen in infants less than two years old and in adolescence (Morgan et al., 2018).

The Association of Paediatric Anaesthetists of Great Britain and Ireland (2017) have reviewed the literature and drawn the following conclusions:

- most children undergoing surgery do not require thromboprophylaxis
- the risk of developing VTE should be assessed prior to any operative procedure with the greatest focus should be on adolescents (>13yrs) with particularly those with reduced mobility following their procedure.
- early mobilisation and good hydration should be encouraged in all immobilised patients with the focus on prevention.
- anti-embolism stockings (AES) are only useful in children or adolescents who weigh more than 40kgs. Their use is only effective when the appropriate size is worn.
- post-pubertal girls undergoing surgery who are taking the contraceptive pill require close assessment with consideration as to withholding the medication for up to four weeks before the procedure against the risk of unwanted pregnancy.

www.apagbi.org.uk/sites/default/files/inlinefiles/APA%20Thromboprophylaxis%20guidelines%20final.pdf

Children who are assessed as requiring antiembolism stockings should have their legs measured and be provided with the correct size. Anti-embolism stockings should be fitted and the patient trained on how to use them only by staff trained in their use – NICE guidelines NG89 (2018).

For those children identified as having additional needs or risk factors, the provision of good quality care is reliant on pre-operative communication and planning to ensure the information about the child is up to date and relevant to their post-operative management and recovery. When units are operating on children with additional health needs there must be a robust assessment process in place and transfer to another facility should complications arise (RCS, 2013). Providing day surgery in units that do not have on-site paediatricians requires a working agreement with local health facilities to provide support and safe patient transfer should then need arise (Bowen and Thomas, 2016). Children with complex medical problems should be managed at tertiary centres to ensure the required support and expertise is available should the need arise (RCS, 2013; RCoA, 2019c).

3. Child friendly patient information

A well-informed family is essential for achieving good day surgery outcomes, with the reporting of anxiety being reduced and overall increase in satisfaction for the whole process being reported, when time is taken to reinforce the important aspects of their care (Quemby and Stocker, 2104). Information can be delivered verbally during direct patient contact or in the provision of written information sheets or web-based resources. There are now many age appropriate web sites that can be used by parents to prepare their child coming into hospital, for example:

Get well soon hospital. cbeebies. www.bbc.co.uk/cbeebies/shows/get-well-soon

Royal College of Anaesthetists – information for children and parents/carers. www.rcoa.ac.uk/childrensinfo

You and your anaesthetic – a young person’s guide. www.rcoa.ac.uk/system/files/YAYAYoungPersonsGuideweb.pdf

BAPS parent information sheet. www.baps.org.uk/patients/leaflets

The provision of pre-operative information or education is essential to the child and parent with the goal being to prepare them about their surgery but also outlining what to expect after the operation.

Pre-operative preparation allows families to engage more on the level of a partner rather than a subordinate in the process of preparation and recovery which offers a greater sense of being in control. This results in lowered post-operative anxiety and pain being experienced, leading to smoother discharges and quicker recovery times (RCN, 2013; RCoS, 2103; RCoA, 2019a).

Written information given in advance helps parent/carers to plan ahead. It allows them to consider how going into hospital will impact on work and social schedules for the family as a whole (RCN, 2013; RCoA, 2019c).

The provision of information for families should be incorporated into their preferred method of communication which may include social media rather than the traditional method of paper information sheets.

Written information must be in a language that is familiar to the reader and at a level they understand.

Good patient information is it is important as it can:

- give patients confidence so their overall experience is improved
- remind patients what their doctor or nurse told them if, due to stress or unfamiliar language, they forget what they were told
- allow people to make informed decisions – it gives people time to go away, read the information and think about the issues involved
- help to make sure patients arrive on time and are properly prepared for procedures and operations
- involve patients and their carers in their treatment and condition and reduces their anxiety (DH, 2003).

Guidance with regard to the development and production of information leaflets can be found through the NHS Identity web page. www.england.nhs.uk/nhsidentity

4. Supporting parents and carers in the hospital environment

To achieve a successful outcome for the child or young person and their family, the parents or carer should be informed and consulted on the expected plan of care and be encouraged to be active participants. They should wherever possible be involved in all aspects of care and have appropriate facilities provided for them. Their role as partners in care during their child's admission should be highlighted during their peri-operative assessment visit and ongoing support available from the staff within the day care unit to facilitate this practice after surgery. This will help to reduce the overall stress of the experience of coming into hospital.

The nurse caring for the child should determine the parent's willingness and capability to participate as much as possible in the child's care. Nurses should ensure that the physical and psychological needs of the parents are met if they are to give optimum support to the child throughout the day (RCN, 2013a).

Parents are often expected to have more responsibility for the child's care during day care than inpatient care and as a result, likely experience more anxiety during the experience. Parents need information about their expected role and level of involvement in order to support their child during the hospital admission.

Nurses should ensure that the physical and psychological needs of parents are met if they are to give optimum support to their child during their admission, by engaging with parents or carers staff can be flexible in the help and support they offer families to ensure that they are able to participate as much as possible in their child's care (RCN, 2013a).

Parents, like staff, need breaks away from the clinical environment to have a drink or something to eat. Many have often not eaten to avoid the child becoming distressed before the surgery which can lead to increased stress after the procedure related to headaches and low blood sugars. Nursing staff should offer the opportunity to parents to take a break with day case units having access to tea and coffee facilities.

By involving parents and carers at all stages of decision making, expectations will be managed and fewer problems and surprises will come to light during their episodes of care. Concerns raised in discussion with a child or young person about their intended procedure/anaesthetic such as fear of needles or facemasks can be address before their intended admission date through their engagement with play therapists or paediatric psychologists (RCoA, 2019c).

5. Policies and guidelines

On the day of admission, the child or young person and family should be welcomed to the unit and introduced to the members of staff involved in their care. Ideally, if they have attended the pre-admission visit the same staff will be available in their preparation for surgery. The provision and organisation of play and organised activities helps to reduce anxiety and reduce boredom while they wait.

A World Health Organization checklist should be completed before and during all procedures and investigation which are undertaken either under anaesthesia or sedation. This ensures that effective lines of communication with particular reference to patient safety and their care needs before, during and after surgery are identified and completed.

WHO guidelines for Safe Surgery (2009) https://apps.who.int/iris/bitstream/handle/10665/44185/9789241598552_eng.pdf;jsessionid=365B0CC0131AF2AF765E88A987828D5F?sequence=1

Starvation guidelines

In 2018 the Royal College of Anaesthetists revised their guidelines for pre-operative fasting for elective procedures in children. A number of studies they reviewed demonstrated that those allowed to drink close to their surgery experienced less nausea, vomiting, thirst and anxiety.

Consensus statement on clear fluids for elective paediatric general anaesthetic

Age 0-16yrs

Solid food, formula milk 6 hours

Breast milk, 4 hours

Clear fluid, (must be able to read a newspaper through it) 1 hour

Clear fluid is defined as water, squash/cordial diluted with water or non-fizzy sports drinks. The recommendation is 3mls/kg maximum volume.

Regular medication

Regular medication taken orally should be continued pre-operatively unless there is advice to the contrary.

www.rcoa.ac.uk/news-and-bulletin/rcoanews-and-statements/fluid-fasting-generalanaesthesia-young-children

If the child is on a morning list it is imperative that parents/carers understand the importance and benefits of waking a child to give them a drink before coming into the hospital.

Day surgery theatre lists have a rapid turnover of patients, children who are adequately hydrated are generally more co-operative and comfortable. Nursing staff should alert anaesthetists about prolonged starvation times and have “drink stations” where the child can be offered an interim drink away from those unable to drink (Bowen and Thomas, 2016).

Preparing the child for surgery

Elective surgery should wherever possible be scheduled on designated children’s lists or children placed at the beginning of mixed adult/paediatric lists or specific allocated slots. The lower age limit for day surgery will depend on the facilities and experience of staff and the medical condition of the infant (RCoA, 2019c).

Getting undressed and wearing a theatre gown can be very distressing for some children and young people. Children’s “dignity gowns” are now available commercially which incorporate trousers into the outfit (covering of the legs is culturally more acceptable). Many units now offer the child the choice of wearing their own clothes to theatre, parents should be advised during the pre-operative assessment of what clothing is deemed appropriate (loose fitting or nightwear).

Transferring the child to theatre

A study carried out by the RCN Surgical Nursing Forum (2011) found that there was no formal agreed standard for the transfer of children to and from theatre. Whilst there is general acknowledgement that family involvement reduces anxiety and family members are actively encouraged to accompany the child to theatre, the safety of the child during the transfer must be the main priority of the multidisciplinary team.

- Except when the child has been premedicated, the family should choose the method of transport to the anaesthetic room. This could mean walking, being carried or special car. For children that become overly anxious in unfamiliar environments, the use of their own pushchair or wheelchair should be considered.
- The child should be offered the choice of what they wear to theatre, with having been advised in the pre-operative consultation the appropriate clothing to wear in hospital or being offered hospital theatre dignity gown.
- A parent or carer should be encouraged to accompany the child or young person into the anaesthetic room and remain with them until the child is asleep. It is important that the parent is aware of what will happen during the induction of anaesthesia and a member of the theatre team is allocated to provide support only to the parent, keeping them informed of progress. Once the child is asleep they should be escorted to theatre suite doors and shown where the recovery area is.
- It should be acknowledged that some parents or carers will not feel comfortable with this role and should be supported in their decision not to be present. In such situations the admitting nurse or play specialist should stay with the child or young person until they are asleep.

6. Post-operative care

Parents and carers must be reunited with their child as soon as it is safe, and the child is able to maintain their own airway. In ideal circumstances children should be recovered from anaesthesia and surgery in a dedicated childfriendly environment separate from facilities provided for adults (BADS, 2018). Recovery areas should be child and family friendly with the provision of seats to allow the parents/carers to remain at the side of their child until it is safe to transfer them back to the ward (RCN, 2013). In the immediate period after anaesthesia, the child should be managed in a recovery area, staffed on a one-to-one basis at least until the child can manage their own airway. Staff within this unit should have paediatric experience and current paediatric competencies including resuscitation (RCoA, 2019b).

Parents and carers need to be supported in their role whilst the child is in the recovery phase. They should be encouraged and supported to help observe the child's condition, offering comfort and reassurance, this is especially relevant when the child has only non-verbal cues as their means of communication. Frequency of baseline observations should therefore reflect the child's level of sickness or instability rather than the monitoring of vital signs that may just be routine and regulated and should be built into the child's individual surgical care pathway (RCN, 2017). A child running around the department, playing with toys does not really require routine baseline observations.

Analgesia guidelines appropriate for children should be readily available, including protocols for pain scoring using age appropriate validation tools (RCoA, 2019c). Access to the British National Formulary for Children is mandatory. Post-operative nausea and vomiting (PONV) is the leading cause of unexpected hospital admission following day case surgery and it is twice as likely to occur in children than the adult post anaesthetic (Bowen and Thomas, 2016). It is also one of the leading causes of parental dissatisfaction after surgery.

The Association of Anaesthetists of Great Britain and Ireland (2016) produced clinical guidelines for the management of PONV in children. Recommendations include early identification of these patients and prophylactic antiemetic therapy with Ondansetron can improve the experiences of these children.

www.apagbi.org.uk/sites/default/files/inlinefiles/2016%20APA%20POV%20Guideline-2.pdf

7. Discharge criteria

Nurse-led discharge from day surgery is now a common occurrence but requires experience and an understanding what the criteria for each intervention is. This requires the implementation of protocols that provide staff with the necessary guidance to ensure timely discharge of children and young people which is fundamental to achieving high-levels of satisfaction and the delivery of an efficient service.

Discharge planning must embrace the physical, psychological and social aspects of the individual child and their family. In order to develop and maintain a high-quality service, discharge planning in day surgery should begin before the child is admitted to the unit.

The following framework can be used to develop guidelines for discharge following day surgery (RCN, 2013).

Physical criteria

- The child's consciousness level should be consistent with pre-operative state.
- Stable vital signs should be consistent with pre-operative baseline records.
- The phenomenon known as emergence delirium defined as "a disturbance in a child's awareness of attention to his or her environment with disorientation and perceptual alterations including hyperactive motor behaviour" has been noted to occur in up to 40% of pre-school children who receive sevoflurane anaesthesia. The experience lasts for 10-15 minutes and can be frightening to family and staff unfamiliar with the situation. The child must be safely contained during the episode and parents supported during this point in recovery (BADs, 2018).
- Pain, nausea and vomiting should be well controlled and manageable by the oral route.
- Oral fluids should not be forced on the child but encouraged once the child requests them. The administration of inter-operative fluids reduces PONV, thirst, dizziness and drowsiness which allows for earlier discharge (BADs, 2016). Parents are often unaware that fluids are administered during the operation and are concerned that the child is dehydrated.
- The need for oral intake should be assessed on an individual case-by case basis with particular care for children with comorbidities such as diabetes.
- The passage of urine is only a requirement if the child has undergone a urological or penile procedure or received a caudal block. Parents should be informed that if the child has not passed urine within 6-8 hours they should contact the hospital.
- Wound site should be clean with no bleeding with no requirement for their dressing to be changed.
- Mobility – the child should have returned to their pre-operative status unless surgery has impacted this. Lower limb weakness due to motor blockade from a caudal or ilioinguinal block need not delay discharge providing they are carried or have access to a pushchair. Older children may have their discharge delayed until they can safely walk (BADs, 2018).

Psychological criteria

- All children undergoing day case surgery should have a responsible adult to escort the child home and care for them in the first 48 hours following an anaesthetic.
- Families should not be expected to use public transport and the provision of hospital transportation will be required when families have no access to their own transportation. This is particularly prevalent in large cities as the use of public transport is their normal means of travel.
- Parents should be made aware of the expected route of recovery at home in relation to the procedure their child has undergone. All potential hurdles for discharge being identified and dealt with, ie transportation home and mobility for access around the home being addressed by the relevant allied health professional during the pre-operative assessment period.
- Written procedural information with specific instructions should be available for each child and delivered in such a way that the discharge is as smooth and unrushed as possible. The communication skills of the nurses in co-ordinating this process are therefore of utmost importance to quality patient care (BADs, 2016).
- Discharge advice should be detailed and carefully worded to facilitate ongoing care by parents. This should include the importance of analgesia in the recovery period. Parents should be guided before admission to purchase suitable simple analgesia which can be supplemented by prescription analgesia should the surgical procedure dictate it. Parents and carers should be given written instruction on the administration of analgesia and know who to contact if problems arise (RCoA, 2019c).
- After discharge one-third of children continue to experience moderate to severe pain. The pain is often worse on the second day as the child starts to mobilise more. Advice should include how to manage break-through pain (Tharakan and Faber, 2015).
- Contact telephone numbers should be given to the family for both emergency and continuing care (RCN, 2013). Follow up phone calls to families can help the potential burden placed on primary health care when unforeseen complications arise and the family looks for support. The on-going contact with the hospital that carried out the operation will also improve parental satisfaction and provide valuable audit data for the continued development of a service (Bowen and Thomas, 2016).
- Communication with primary health care is important and can be achieved through prompt discharge letter to the GP explaining the surgical procedure and their role in possible post-operative management, this is increasingly being achieved by electronic patient discharge systems which provide information in real time.
- Some families will require additional support after discharge and community children's nursing teams having been notified of their needs in the peri-operative assessment period will be ideally placed to offer this support either through home visits or telephone contact. They are ideally placed to help with dressing changes and as such the child should be discharged with the required wound care products and equipment.

- With the possible exception of a surgical finding or new diagnosis, none of the information given during the discharge process should be new. The continuous delivery of information during the families contact with the pre-assessment team and the day surgery staff will ensure that they remain fully informed and feel able to take on their child care after discharge. Written and verbal information should be given and the level of understanding of it should be checked and when necessary reinforced by the nursing staff caring for the family (RCN, 2013).

Social criteria

- All families discharged following day surgery should have access to a telephone and a member of the family that can communicate their concerns in English should unforeseen circumstances arise and help is required. If neither of these are in place this is not a safe discharge.
- Families should have in place suitable transportation home prior to admission. This should not include public transport (BADS, 2016; RCN, 2013).
- Assessment of the home environment including access to bathroom and toilet facilities should have been made during the per-operative assessment period. Many siblings share their bedrooms and alternative arrangements may have to be thought through to ensure that disturbances to others routine are kept to the minimum.
- Parents are sometimes conflicted between taking time off work and caring for their child. This is especially difficult for single parent households where there is only one breadwinner and days off to care for their child will affect the household income. Where this is the case support should be sought from local Social Services. Poverty is one of the main causes of social exclusion which impact on the quality of life by reducing the choices families are able to make which in turn leads to discrimination (DH, 2004; WAG, 2006).
- Criteria for returning to school and participating in sporting activities should be included in the discharge information. Some schools require confirmation in writing of the child's attendance for surgery and the criteria for their return to school.

Nurse-led discharge – assessment of competence

Units which advocate nurse-led discharge should have in place written protocols that outline the standard which must be obtained and the processes which nursing staff must adhere to.

Nurse led discharge should only be undertaken by appropriately trained members of the day surgery team who have been deemed competent. The British Association of Day Surgery (2016) has provided clinical competencies which through education and support of staff can be attained and maintained to ensure a smooth and comprehensive service.

Quality control in day case surgery

Effective audit is an essential component of assessing, monitoring and maintaining the efficiency and quality of patient care in day surgery units. Audit of day surgery relates primarily to quality of care and efficiency and can include the following criteria:

- cancellation on day of surgery
- unanticipated admission and hospital reattendance
- post-operative morbidity (pain and PONV)
- episodes of contact with primary health care providers.

Quality assurance and improvement programmes are essential components in all aspects of day surgery (Bailey et al., 2019).

Summary

Health services are struggling to meet the demands of service users, who wish to spend as little time in hospital as possible. Day-case surgery for children therefore requires comprehensive patient pathways to cover all aspects of needs of patients including selection, assessment, preparation and discharge criteria.

Appropriate patient selection must include the acknowledgement of the role of parents and /or carer in the aftercare and recovery of the child following discharge from hospital. Parents should be provided with their need for information and participation through engagement in order that they can support their child in the best possible way during the surgical process.

Dedicated day-surgery units for children should be at the forefront of service development with appropriate champions in terms of leadership and service development.

References

- Alderwick A, Robertson R, Appleby J, Dunn P and Maguire D (2015) *Better Value in the NHS. The role of change in clinical practice*. London: The Kings Fund.
- Bailey et al. (2019) Guidelines for day-case surgery 2019, *Anaesthesia*, 74, pp.778-792. Available at: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/anae.14639> (accessed: 30 July 2020).
- British Association of Day Surgery (2011) *Day case and Short Stay Surgery*. London: BADS.
- British Association of Day Surgery (2016) *Nurse Led Discharge 2nd Ed*. London: BADS.
- British Association of Day Surgery (2018) *Issues in Paediatric Day Surgery*. London: BADS.
- Bowen L and Thomas M (2016) Paediatric Day case surgery. *Anaesthesia and Intensive care medicine*, 17(6), pp.274-279.
- Brennan LJ and Prabhu AJ (2003) Paediatric Day case anaesthesia, *British Journal of Anaesthesia*, 3(5), pp.134-138. Available at: [https://bjaed.org/article/S1472-2615\(17\)30021-3/pdf](https://bjaed.org/article/S1472-2615(17)30021-3/pdf) (accessed 28 July 2020).
- Department of Health (2003) *Toolkit for producing patient information*. London: DH. Available at: www.england.nhs.uk/nhsidentity/examples/nhs-patientinformation-leaflets (accessed 30 July 2020).
- Department of Health (2004) *National Service Framework for Children and Young People and Maternity Services – Disabled children and young people and those with complex health needs*. London: DH. Available at: <https://assets.publishing.service.gov.uk> (accessed 30 July 2020).
- East Midlands General Paediatric Surgery Network (2017) *Guide for Pregnancy testing before surgery in children*. Available at: www.england.nhs.uk/midlands/wp-content/uploads/sites/46/2019/05/pregnancy-testingguidelines.pdf (accessed 30 July 2020).
- Kennedy I (2010) *Getting it Right for Children and Young People. Overcoming cultural barriers in the NHS so as to meet their needs*. London: DH.
- Lema FL, Berhe YW and Gebrezgi AH (2018) Evidence-based perioperative management of a child with upper respiratory tract infections (URTI's) undergoing elective surgery; A systematic review, *International Journal of Surgery Open*, 12, pp.17-24. Available at: <https://reader.elsevier.com> (accessed 30 July 2020).
- Morgan J et al. (2018) Prevention of perioperative venous thromboembolism in paediatric patients: Guidelines from the association of Paediatric Anaesthetists of Great Britain and Ireland (APAGBI), *Paediatric Anaesthesia*, 28, pp.382-391. Available at: www.apagbi.org.uk/sites/default/files/inline-files/APA%20Thromboprophylaxis%20guidelines%20final.pdf (accessed 20 July 2020).
- Quemby DJ and Stocker M (2013) Day surgery development and practice: key factors for a successful pathway, *Continuing Education in Anaesthesia, Critical Care and Pain*, 14(6), pp.256-261.

Nicoll JM (1909) The surgery of Infancy. *British Medical Journal*, 2, pp.753-754. Available at: https://drcesarramirez.com/files/te_interesa/Nicoll_THE_SURGERY_OF_INFANCY.pdf (accessed 30 July 2020).

National Institute for Health and Care Excellence (2016) *Routine pre-operative tests for elective surgery*. NICE guideline, London: NICE. Available at: www.nice.org.uk/guidance/ng45/resources/routine-preoperative-tests-forelective-surgery-1837454508997 (accessed 30 July 2020).

National Institute for Health and Care Excellence (2018) *Venous thromboembolism in over 16s. Reducing the risk of hospital acquired deep vein thrombosis or pulmonary embolism*. London: NICE. Available at: www.nice.org.uk/guidance/ng89 (Accessed 30 July 2020).

Nursing Midwifery Council (2015) *The Code. Professional Standards of practice and behaviour for Nurses, midwives and nursing associates*. London: NMC.

Orr T and Baruah R (2018) Consent in anaesthesia, critical care and pain medicine, *British Journal of Anaesthesia*, 18 (5), pp.135-139.

Pickers (2015) *The eight principles of patient care*. One view. Available at: www.oneviewhealthcare.com/the-eight-principlesof-patient-centered-care (accessed 30 July 2020).

Reddy V (2017) Involving families in service design, *Paediatrics and Child Health*, 28(2), pp.100-102.

Royal College of Anaesthesia (2019a) *Guideline for the provision of anaesthetic services*. Chpt 2. Guidelines for the provision of anaesthetic services for peri-operative assessment and preparation. London: RCoA. Available at: www.rcoa.ac.uk/gpas/chapter-2 (accessed 30 July 2020).

Royal College of Anaesthetists (2019b) *Guidelines for the provision of anaesthetic services*. Chpt 6. Guidelines for the provision of anaesthesia services for Day Surgery. London: RCoA. Available at: <https://rcoa.ac.uk/gpas/chapter-6> (accessed 20 July 2020).

Royal College of Anaesthetists (2019c) *Guidelines for the Provision of Anaesthesia services*. Chpt 10. Guidelines for the Provision of Paediatric Anaesthesia. London: RCoA. www.rcoa.ac.uk/gpas/chapter-10 (accessed 20 July 2020).

Royal College of Paediatrics and Child Health (2012) *Pre-procedural Pregnancy checking in under 16s: Guidance for Clinicians*. London: RCPCH. Available at: www.rcpch.ac.uk/resources/pre-procedure-pregnancychecking-under-16s-guidance-clinicians (accessed 30 July 2020).

Royal College of Nursing (2011) *Transferring Children to and from theatre*. London: RCN.

Royal College of Nursing (2013a) *Day Surgery Information – Guidelines 1-5*. London: RCN.

Royal College of Nursing (2013b) *Defining staffing levels for children and young people's services*. *RCN standards for clinical professionals and service managers*. London: RCN.

Royal College of Nursing (2017) *Standards for assessing, measuring and monitoring vital signs in infants, children and young people*. London: RCN. Available at: www.rcn.org.uk/professional-development/publications/pub-005942 (accessed 30 July 2020).

Royal College of Nursing (2017) *Safe and Effective Staffing: Nursing Against the Odds*. London: RCN. Available at: www.rcn.org.uk/professional-development/publications/pub-006415 (accessed 30 July 2020).

Royal College of Nursing (2019) *Safeguarding Children and Young People: Roles and Competencies for Healthcare Staff*. 4th edition. London: RCN. (Intercollegiate Document). Available at: www.rcn.org.uk/professionaldevelopment/publications/pub-007366 (accessed 30 July 2020).

Royal College of Surgeons (2013) *Standards for Children's Surgery*. London: Children's surgical Forum, RCS. Available at: www.rcseng.ac.uk/standards-and-research/standards-andguidance/service-standards/childrenssurgery (accessed 30 July 2020).

Royal College of Surgeons (2015) *Standards for non-specialist emergency surgical care of children*. London: RCSENG. Available at: www.rcseng.ac.uk/library-and-publications/rcs-publications/docs/standards-for-nonspecialist-emergency-surgical-care-ofchildren (accessed 30 July 2020).

Tharakan L and Faber P (2015) Pain Management in day-case surgery, *BMJ Education*, 15(4), pp.180-183. Available at: <https://doi.org/10.1093/bjaceaccp/mku034> (accessed 30 July 2020).

The Association of Anaesthetists of Great Britain & Ireland (2010) *AAGBI Safety Guideline. Preoperative Assessment and Patient Preparation. The role of the anaesthetist*. London: AAGBI. Available at: <https://anaesthetists.org> (accessed 30 July 2020).

The Association of Paediatric Anaesthetists of Great Britain & Ireland (2016) *Guidelines on the prevention of post-operative vomiting in children*. London: APA. Available at: www.apagbi.org.uk/sites/default/files/inlinefiles/2016%20APA%20POV%20Guideline-2.pdf (accessed 30 July 2020).

Thomas M, Morrison C, Newton R and Schindler E (2018) Consensus statement on clear fluids fasting for elective pediatric general anesthesia, *Paediatric Anaesthesia*, 28(5), pp.411-414. Available at: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/pan.13370> (accessed 30 July 2020).

Upadhyay M and Lander A (2013) Day-case surgery in children, *Paediatric Surgery*, 31(3), pp.140-144.

Verma R, Alladi R and Jackson I (2011) Day case and Short stay Surgery:2, *Anaesthesia*, 66(5), pp.417-434.

Welsh Assembly Government (2006) *National Service Framework for Children, Young People and Maternity Services in Wales*. Cardiff: WAG.

Welsh Assembly Government (2014) *The Quality Improvement Guide – Improving quality together*. Cardiff: WAG. Available at: www.1000livesplus.wales.nhs.uk/sitesplus/documents/1011/Quality%20Improvement%20Guide%20-%203rd%20edition%20%28IQT%29%20WEB.pdf (accessed 30 July 2020).

World Health Organization (2009) *Safe Surgery Checklist 2009*. Geneva: WHO. Available at: https://apps.who.int/iris/bitstream/handle/10665/44186/9789241598590_eng_Checklist.pdf?sequence=2 (accessed 30 July 2020).

RCN quality assurance

Publication

This is an RCN practice guidance. Practice guidance are evidence-based consensus documents, used to guide decisions about appropriate care of an individual, family or population in a specific context.

Description

The publication highlights the specific needs of children and young people undergoing day surgery, outlining pre- and post-operative aspects of care and preparation, parental involvement and facilitating discharge.

Publication date: October 2020 Review date: October 2023

The Nine Quality Standards

This publication has met the nine quality standards of the quality framework for RCN professional publications. For more information, or to request further details on how the nine quality standards have been met in relation to this particular professional publication, please contact publicationsfeedback@rcn.org.uk

Evaluation

The authors would value any feedback you have about this publication. Please contact publicationsfeedback@rcn.org.uk clearly stating which publication you are commenting on.

The RCN represents nurses and nursing, promotes
excellence in practice and shapes health policies

RCN Direct
www.rcn.org.uk/direct
0345 772 6100

Published by the Royal College of Nursing
20 Cavendish Square
London
W1G 0RN

020 7409 3333
www.rcn.org.uk

October 2020
Publication code: 009 330

