



National Day Surgery Delivery Pack

Original author:

Dr Mary Stocker – Consultant Anaesthetist, Torbay and South Devon, Immediate Past-President BADS

(Based on an original document produced for Devon STP)

Review Panel:

Dr Chris Snowden – Consultant Anaesthetist, Newcastle, National Clinical Lead GIRFT

Dr Mike Swart – Consultant Anaesthetist, Torbay and South Devon, National Clinical Lead GIRFT

Dr Kim Russon – Consultant Anaesthetist, Rotherham, President BADS

Ms Jo Marsden – Retired Consultant Breast Surgeon, Kings College Hospital Foundation Trust, London, President-elect BADS

Mrs Scarlett McNally - Consultant Orthopaedic Surgeon, Deputy Director CPOC

Mr Simon Fleming - Orthopaedic Specialty Trainee, CPOC Representative

Mrs Ruth Tyrell – National Delivery Director, Getting It Right First Time programme (GIRFT)

Editorial Support:

Mr Thomas Glover – South East Regional Manager, Getting It Right First Time programme (GIRFT)

Ms Nicky Dunning – Devon Clinical Commissioning Group*

Mrs Nicola Dalgleish – Devon Clinical Commissioning Group*

*(Based on original document produced for Devon STP)

Contents	
Executive Summary & Key Recommendations	4
Section 1: General Principles for High Quality Day Surgery	6
Background to day case surgery in the UK.....	6
Hospital Escalation during COVID-19.....	6
Defining Day Surgery.....	7
Resources to assist Choice of Surgical Procedure & Benchmark Data.....	8
Day Surgery Staffing.....	9
Leadership.....	10
Learning from Leading Units.....	10
Day Surgery Facilities.....	10
1. National Recommendations.....	11
2. Productivity and Patient Outcomes.....	12
3. Nursing Experience.....	12
4. Patient Experience.....	12
Hospital Escalation.....	13
Emergency Ambulatory Surgery.....	13
Using Information Technology to Support the Day Case Surgery Pathway.....	15
Using audit and quality improvement processes to expand day case surgery.....	18
Section 2: The Generic Day Case Pathway	20
Referral.....	22
Surgical Outpatient Clinic.....	23
Surgical Criteria for Day Surgery.....	23
Patient Selection.....	24
1. Social Factors.....	24
2. Medical Factors.....	26
A. Diabetes.....	26
B. Elderly Patients.....	26
C. Children.....	27
D. Obesity.....	27
Patient Booking.....	28
Preoperative Assessment and Preparation.....	28
Admission.....	30
Preoperative Fasting.....	30
Surgery and Anaesthesia.....	31
Primary Recovery.....	33
Secondary Recovery and Discharge.....	33
Unplanned Admission after Surgery.....	34
Follow-up and Audit.....	35
Section 3: Procedure specific best practice pathways	36
Key Procedures for improving day case rates.....	36
Key Procedures to move from day surgery to the outpatient setting.....	37
Example Protocols.....	38
Template Documents: Standard letters from preoperative assessment.....	39

Pathway Action Checklists	41
References and Resources	45

Executive Summary & Key Recommendations

Developed in partnership with the Getting it Right First Time (GIRFT) Academy, Centre for Perioperative Care (CPOC) and the British Association of Day Surgery (BADs), this pack is designed to enable NHS Trusts to expand and increase day case surgery for the benefit of the patient and the wider healthcare system.

We recognise that not all recommendations are immediately realisable, but reconfiguration or redevelopment of future hospital services require that serious consideration is given to them. Information within this pack should be used to guide the development of day surgery services in order to enable us to give all patients across the UK the opportunities and clinical outcomes which high quality day surgery pathways confer.

Day surgery needs to be accepted as the major contributor to the future of surgical services. There is still wide variation in day surgery rates throughout the UK. In the lowest quartile of NHS Trusts, twice as many eligible patients are admitted as inpatients as in the highest quartile. This is ripe for improvement. Day surgery should be the default setting for more than just the 200 procedures identified by BADs. This would not only improve patient care and satisfaction, but would also be highly cost-effective, improve efficiency, improve staff retention and morale and reduce the demand for inpatient beds. This expansion can only be achieved safely by following clear guidelines and creating good pathways aimed at improving quality.

Section 1: Background to day case surgery in the UK - addressing common misconceptions and making the case for expanding and increasing day case surgery, especially at a time when the NHS needs to re-start and catch up with demand for elective surgery following the Covid-19 pandemic; identifying variation in day case rates and addressing the areas of greatest opportunity identified by GIRFT.

Section 2: The generic day case pathway – the key components that can be applied to existing inpatient activity to convert to a day case approach, including essential information about the best practice management required for the delivery of a high-quality day surgery service and action check lists for each stage of the pathway.

Section 3: Procedure specific best practice pathways and templates – a list of day case surgery procedures to be used as ‘default’ day surgery pathways together with links to simple trust level process pathways and template documents for everyday use. In addition, procedures that may be undertaken as an outpatient rather than day surgery are listed because there is a national drive to move procedures down the “intensity gradient” from inpatient to day case settings and from day case theatres to outpatient clinics.

Key Recommendations

Throughout the pack there are numerous areas of best practice and suggested actions to support an increase and improvement in day surgery, however the following seventeen recommendations are key to delivering change

1. Surgical teams should embrace the BADS Directory of Procedures and develop day surgery pathways and protocols for all appropriate procedures
2. Default patients undergoing procedures within the BADS Directory to a day case pathway
3. Ensure all potential day surgery patients are listed and coded with a day surgery management intent
4. Ensure preoperative assessment protocols for patient selection are inclusive rather than exclusive of day surgery
5. Progress towards the development of dedicated day surgery units
6. Progress towards the provision of dedicated day surgery teams
7. Establish a multidisciplinary day surgery management team
8. Ensure all day surgery patients are admitted to a dedicated admissions area
9. Embrace use of day case operating trolleys over hospital beds
10. Establish protocols for anaesthesia, perioperative analgesia and take-home medication
11. Ensure that day surgery is a consultant or experienced SAS delivered service, with clear training pathways for the future workforce
12. Equip day surgery facilities with high quality equipment
13. Ensure day surgery patients are discharged through a dedicated day surgery ward staffed by nurses with expertise in day surgery nurse led discharge
14. Ensure the day surgery discharge ward has no capacity to accept inpatient activity and support this with a commitment from managerial teams to protect this policy even at times of escalation
15. Ensure patients are telephoned the day after surgery for clinical support and patient outcome data collection
16. Audit day surgery outcomes and benchmark performance against the BADS Directory of Procedures, the BADS Directory of Procedures National Dataset and the Model Hospital
17. Ensure appropriate coding of procedures to capture accurate activity in benchmarking data (such as Model Hospital and the BADS Directory of Procedures National Dataset)

Section 1: General Principles for High Quality Day Surgery

Background to day case surgery in the UK

Over the past 20 years, numerous attempts to improve day surgery performance in the UK have been developed through initiatives from the NHS Modernisation Agency, NHS Institute and Department of Health. In 2019, the Academy of Medical Royal Colleges also strongly recommended that patients be given the option of day surgery wherever possible;

“If you are having a surgical procedure, day surgery should be considered as the default option and is suitable in many cases (except complex procedures). Day surgery allows for a quicker recovery with less disruption to you and your home life and also cuts the risk of hospital acquired infections.”¹

Day surgery brings recognised benefits for both patients and system-wide efficiencies related to patient quality and experience, reduced waiting times, release of valuable bed stock and significant financial implications. With this in mind, BADS exists as a multidisciplinary professional organisation to pioneer and promote day surgery development, set standards for day surgery and has developed national benchmarking for day surgery performance.

However, whilst pockets of excellence for delivering day case surgery exist across the UK, including some innovative surgical practice, there remains significant variation of day surgery performance. Given an ever-increasing demand vs capacity mismatch for surgical procedures, there is now further incentive to maximise the movement of procedures down the “intensity gradient” i.e. move all appropriate work away from elective inpatient theatres into a day surgery or outpatient pathway.

Hospital Escalation during COVID-19

The Covid-19 pandemic has put unprecedented strain on hospital services, staff and facilities with hospitals having to redesign, pathways and physical spaces. During the acute phase, the majority of elective surgery was suspended resulting in long delays for elective and some urgent surgery. The recovery of elective surgery in the NHS depends not only on the needs to address the back log of patients now requiring treatment but also the recognition that many patients remain increasingly reluctant to come into hospital.

It is imperative to rapidly develop provision for elective and urgent surgery via efficient pathways:

- To tackle expanding waiting lists
- To reduce the secondary impact of Covid-19 relating to morbidity associated with delayed surgery
- To provide an environment and pathway which enables patients to attend with confidence.
- To meet patient preference for day surgery over inpatient care.

There has never been a more important time to push the boundaries of day surgery for all patients by asking:

- “Is there an advantage to admitting this patient into hospital post-operatively?”
- “Does that outweigh the potential risk of infection associated with hospital admission?”

We should now address day surgery as cold site surgery, ideally within a dedicated unit as part of an acute hospital site, and ensure that properly designed units are protected from surges in emergency

¹Academy of Medical Royal Colleges <http://www.choosingwisely.co.uk/i-am-a-clinician/recommendations/>

care admissions. Due to service re-configuration inpatient bed availability will be significantly reduced so the delivery of high-quality day surgery pathways is pivotal to the recovery of our surgical services.

Defining Day Surgery

The definition of day surgery is that:

- The patient should be undergoing a planned procedure
- The patient must have an intended management of day surgery
- The patient must be admitted, operated upon and discharged on the same calendar day

This has several implications:

Emergency Surgery: Many acute surgical conditions such as acute cholecystitis, appendicitis, management of ectopic pregnancy, fractured mandible and closed fractures can be treated as day cases if good pathways exist, including surgical assessment units or fracture clinics for shared decision making with consent and rapid nurse-led preoperative assessment². With the advent of emergency ambulatory pathways, it is important to have clear coding which ensures that these procedures are correctly measured as day cases if undertaken on an ambulatory basis.

Intended Management: For an elective procedure it is essential that the patient has intended management of day surgery when entered onto the hospital waiting list. Day surgery which occurs “by chance” i.e. without being scheduled as such will not be counted in the trust’s statistics. It is also more likely to take up valuable hospital resources (i.e. beds) as the patient more often than not will have an inpatient bed used or at least reserved for recovery. Best outcomes are achieved when the patient is adequately prepared for day surgery, when they and all the staff involved in their care are aware that the intended plan is for day surgery and they follow a clear day case pathway.

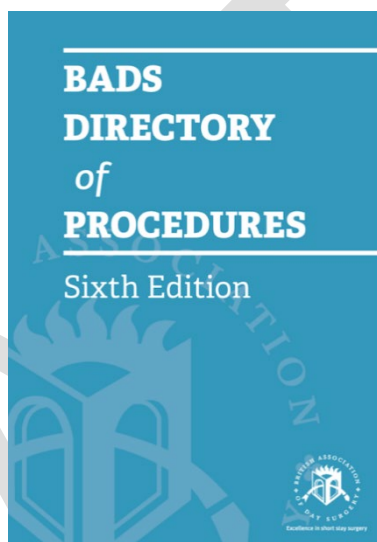
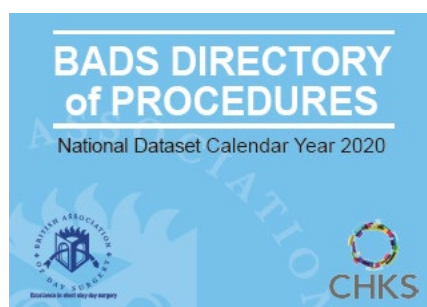
Length of Stay: In America the term “23 hour stay” is included within the day surgery remit. This is not the case in the UK and units which try to combine 23 hour stay wards with day surgery tend to have poorer day surgery outcomes. Reducing inpatient length of stay from 2-3 nights to 1 night is commendable but the process should be separated from day surgery activity. Combined units often send mixed messages to both patient and nursing staff regarding discharge criteria. Rather than seeing all patients being discharged home, patients may see some allocated to stay overnight. Nursing staff may regard admission into an available overnight bed as an easier option rather than aiming for same day discharge.

² Audit of trauma case load suitable for a day surgery trauma list and cost analysis, The Surgeon, Volume 9, Issue 5 doi: <https://doi.org/10.1016/j.surge.2010.10.008>

Resources to assist Choice of Surgical Procedure & Benchmark Data

BADS Directory of Procedures and National Dataset ^{3,4}

The latest BADS Directory of Procedures now lists over 200 procedures suitable for day surgery. For each procedure a benchmark is set with a realistic day case rate based on those currently achieved by the higher performing Trusts in the country. In addition to this, BADS collaborate with Capita Healthcare Knowledge Systems (CHKS), to produce a national dataset annually, each June, which details median, lower and upper quartile day case rates (for England) for all the procedures in the BADS Directory and inpatient bed days which could potentially be saved with improved day surgery performance.⁵



CHKS have a subscription-based benchmarking solution, iCompare⁵, which includes an interactive BADS module providing a display of comparative day case rates for England, Wales and Northern Ireland.

The Model Hospital is a free digital tool from NHS improvement which enables England Trusts to compare their productivity and identify opportunities to improve. It consists of a number of clinical and managerial areas or “compartments”⁶. The day surgery compartment measures day case rates for all Trusts in England for each procedure within the BADS Directory and ranks the English Trusts accordingly, overall, by all procedures performed, speciality and by individual procedure. This enables identification of the top performing trusts for each procedure and provides other trusts with opportunities to learn from best practice. Figure 1 shows the potential for expanding day surgery. Overall day case rates currently range from 60 to 85% across England. This equates to almost three times as many patients - 40%, being admitted to inpatient beds in the lowest performing Trusts, compared with 15% in the highest.

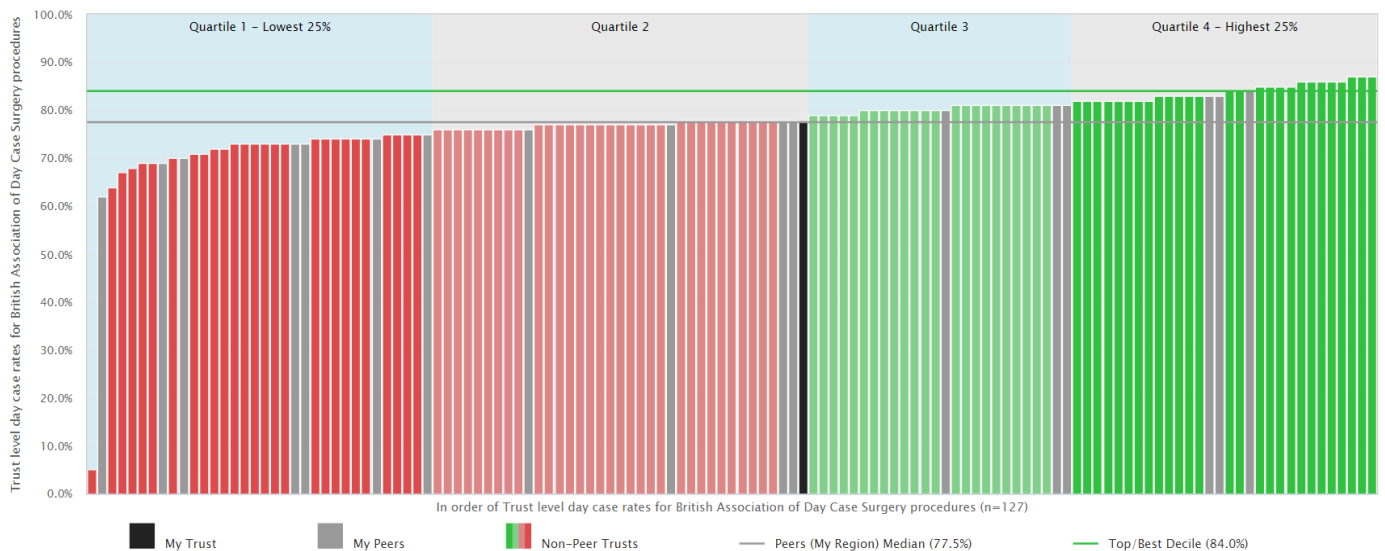
³ British Association of Day Surgery, Directory of Procedures <https://daysurgeryuk.net/en/shop/directory/bads-directory-of-procedures-6th-edition/>

⁴ British Association of Day Surgery, National Dataset [https://daysurgeryuk.net/en/shop/directory/national-dataset-\(calendar-year-2020\)/](https://daysurgeryuk.net/en/shop/directory/national-dataset-(calendar-year-2020)/)

⁵ CHKS iCompare <https://www.chks.co.uk/m/iCompare>

⁶ NHS Improvement, Model Hospital <https://improvement.nhs.uk/resources/model-hospital/>

Figure 1 Trust level day case rates for British Association of Day Case Surgery procedures, National Distribution (Model Hospital)



Day Surgery Staffing

The contribution that the expertise of the entire day surgery team make to the success of the day surgery pathway must not be underestimated.

This includes the booking staff, preoperative assessment nurses, receptionists, theatre teams, recovery and discharge staff supported by the surgical multi-disciplinary team (MDT).

Successful day surgery relies on patients being on a dedicated pathway throughout the whole surgical journey and being given a consistent day surgery message throughout.

Day surgery patients cared for postoperatively alongside inpatients may receive mixed or even conflicting messages. Nursing staff may be less confident discharging patients or be distracted from day surgery discharge by competing requirements to care for higher acuity patients. In this situation it is often (understandably) the day surgery patients whose needs are overlooked.

It is important to establish day surgery teams who are committed to driving service improvement. Training and support for the day surgery team and enabling them to see boundaries being successfully pushed and receiving positive feedback and endorsement will ensure the day surgery service continues to develop

Leadership

The day surgery team should be through a triumvirate approach, including a clinical director for day surgery, a nursing unit manager (Band 7 or 8) and an operational manager with responsibility for day surgery.

The clinical director should have a specific interest in day surgery and some managerial experience. They will be responsible for developing collaborative clinical guidelines and protocols for use within the day surgery pathways (analgesia, anaesthetic guideline, protocols for management of complex patients or complex procedures through day surgery, preoperative assessment protocols etc). They will also be responsible for communicating closely with the nursing and operational manager leads for developing day surgery policy across the trust and working with surgical teams to implement new day case procedures.

The nurse manager should have responsibility for the entire day surgery process (even if it is not possible to deliver this through a dedicated unit) and be committed to the day surgery team. They will oversee staff in preoperative assessment, admission, theatre, recovery and the day surgery ward/discharge team. They may also have responsibility for the administrative and clerical staff working as part of the day surgery team. Regular (weekly) meetings of the day surgery leadership team are essential for the smooth running of the unit and development of new initiatives.

Learning from Leading Units

There are a number of infrastructure factors which result in successful day case surgery and are demonstrated within the nationally leading units in the UK

- Strong consistent leadership
- Dedicated facilities without any inpatient beds, separated and robustly protected from inpatient activity – a functional “cold” site
- A day surgery team who control (almost) the entire pathway and are fully committed to it

Leading units have gained this position due to the skill and experience developed within the day surgery unit teams over many years and willingness of surgical teams to embrace the potential for better outcomes that ambulatory surgery delivers.

Day Surgery Facilities

Best practice recommendation for day surgery is that where possible the entire day surgery process should be undertaken within a dedicated day surgery unit, which is geographically discrete from inpatient activity.

We would recommend that any future building developments should ensure that dedicated day surgery facilities are provided if possible. However, it is recognised that many trusts are limited by current estate configurations and in particular, location of existing operating theatres such that provision of an entirely independent unit is not possible. In these cases, every attempt should be made to provide as much of the day surgery pathway through co-located dedicated day case facilities such as an admissions area, preoperative assessment clinic and secondary recovery and discharge lounge. Day surgery facilities should not contain any beds or facilities to enable overnight stay (e.g. showers) and should be located where possible in an area geographically separated from the inpatient wards. This not only encourages day surgery discharge but prevents medical overflow at times of escalation.

The rationale for supporting dedicated day surgery units is described below:

1. National Recommendations

A variety of national bodies have recommended that day surgery should be undertaken within dedicated facilities:

Department of Health⁷

“The ideal is a self-contained day surgery unit, with its own admission suite, wards, theatre and recovery area, together with administrative facilities. It is also the most cost-effective option”

“Day surgery performed using inpatient wards and inpatient operating theatres is less successful and cannot be recommended. The stay-in rate (unsuccessful discharge of patients’ home on the day of surgery) rises from 2.4% in a free-standing unit to 14% in an inpatient ward”

Royal College of Anaesthetists⁸

“The ideal day surgery facility is a purpose-built, self-contained day surgery unit (DSU), with its own ward, recovery areas and dedicated operating theatre(s).

Dedicated day surgery secondary recovery areas should be provided, which are not part of an inpatient ward area.

Day case patients should only be managed through inpatient wards in rare circumstances, as this greatly increases their chance of an unnecessary overnight stay”

Association of Anaesthetists⁹

“Day surgery should take place within a dedicated unit or area within the main hospital site

All members of the multidisciplinary team should be trained in day surgery practice.

Day case beds on wards do not provide the targeted service that is required to achieve good outcomes”

Royal College of Surgeons of England¹⁰

“Integrated day surgery unit should have its own ward in association with the theatres serving it to form a dedicated unit”

“Dedicated day wards and self-contained DSUs separate from the main hospital building led to significant improvements in same day discharges for patients undergoing intended day case surgery”¹¹

⁷ Department of Health, Day Surgery: Operational Guide August 2002

⁸ The Royal College of Anaesthetists, Guidelines for the Provision of Anaesthesia Services for Day Surgery 2019

⁹ Association of Anaesthetists, Guidelines for day-case surgery April 2019

¹⁰ The Royal College of Surgeons (England), Guidelines for Day Case Surgery

2. Productivity and Patient Outcomes (Torbay and South Devon NHS Foundation Trust)¹¹

Data shows that managing day surgery activity through a dedicated unit results in increased productivity and improved outcomes in terms of unplanned admission rates and postoperative symptoms.

Productivity:

- 33% increase in productivity for hernia repairs if undertaken within the day surgery unit rather than inpatient theatres
- 47% increase in productivity in moving the hand surgery list from inpatient theatres to the day surgery unit
- 2 hour increase in the total pathway time for a day surgery patient if they are managed through the inpatient theatre suite. This results in inefficiencies for the trust and a poorer experience for patients¹²

Patient Outcomes:

There have been three attempts to open a satellite day surgery ward adjacent to the inpatient theatre suite to accommodate day surgery activity being undertaken via the inpatient theatres (largely due to insufficient capacity in DSU).

- 2003-5 Orthopaedic day beds on an elective orthopaedic ward
- 2008 Generic day surgery secondary recovery on an orthopaedic ward
- 2010 Generic day surgery secondary recovery on a previously closed surgical ward

On all three occasions patient outcomes were poorer with higher pain scores and unplanned admission rates being between 3 to 10-fold higher than for matched patients operated upon within the dedicated day surgery unit.

3. Nursing Experience

- Nurses are not distracted by higher acuity patients
- Patients are cared for by nurses with expertise in day surgery pathway resulting higher quality outcomes
- The entire team are committed to high quality day surgery outcomes

4. Patient Experience

- Separation from inpatient activity and “mentality” of beds, nightwear and “the sick role” results in an increase likelihood of successful day case discharge. “Everyone else is going home so I will too” encourages a positive attitude to day surgery.

¹¹ Day Surgery in different guises – a comparison of outcomes. *Journal of One-Day Surgery* 2009, 19, 39-47

¹² The benefits of a Dedicated Day Surgery Unit, *Journal of One Day Surgery* 2020

<https://daysurgeryuk.net/en/resources/journal-of-one-day-surgery/?u=/2020-journal/jods-302-may-2020/the-benefits-of-a-dedicated-day-surgery-unit/>

- Dedicated day case units increase resilience through ensuring activity continues even during maximum escalation resulting in fewer cancellations.

Hospital Escalation

There is a huge temptation during time of high pressures within the hospital system to utilise the day surgery unit either for inpatient theatre cases or as an overflow area for emergency medical admissions. Both these temptations should be strongly avoided. Senior management and ideally board level support is required to ensure that this policy is respected and adhered to.

At times of escalation the day surgery unit is essential to maintain surgical activity when many cases are cancelled due to lack of bed capacity. Transferring inpatient theatre activity into a day surgery unit will result in “clogging-up” the pathway and the inability of the unit to function in an efficient manner. For example, in a day surgery unit a patient may expect to remain in primary recovery for 5-10 minutes postoperatively enabling flow from theatres to primary recovery to proceed in an efficient manner. If a patient needs to return to a ward postoperatively, they will require a longer period of stability in primary recovery before being deemed safe for discharge, there will also frequently be delays before the ward bed is available to accept the patient. Transfer to the ward requires accompaniment by both a porter and a registered nurse to leave the unit for up to 30 minutes to undertake the transfer. Most day surgery units are not staffed to function in the absence of one of the registered nurses. In addition to this the delays in clearing primary recovery result in theatre lists being halted due to no capacity to recover future patients.

Movement of emergency inpatient beds into a day surgery unit results in the inability to proceed with day surgery activity. Whilst it is potentially an easy solution to the complex difficulties encountered by the managerial teams when the hospital is at maximum escalation, the consequences of loss of activity far outweigh the potential gains of housing inpatient activity. Trusts which have allowed their day units to be used in such a way have encountered great difficulties with day surgery performance, staff morale and retention, with resultant transformation of successful day surgery services into underperforming units.

It is particularly important in the Covid-19 era, that day surgery units are retained as facilities with a low risk of Covid-19 (Green), to ensure patients requiring elective surgery have minimal risk of contracting the virus. This means that they should only be used for patients on a day surgery pathway. Where emergency patients are undergoing day surgery, local protocols are required for preoperative isolation and COVID-19 swabs.

Emergency Ambulatory Surgery¹³

Following the success of day surgery pathways for elective procedures an increasing number of units have introduced pathways for the management of common surgical emergency procedures. Historically, a significant proportion of acute surgical patients occupy hospital beds while awaiting minor or intermediate emergency procedures, these are often delayed by major procedures rightfully taking priority. The result is increased bed occupancy, unnecessary prolonged fasting and patient dissatisfaction. The International Association of Ambulatory Surgery (IAAS) defines ambulatory emergency surgery as ‘the management of an emergency patient according to an ambulatory surgical

¹³ *Surgical same-day emergency care, 2nd edition, British Association of Day Surgery Publication 2020*

pathway, avoiding overnight stay following their surgical procedure’. In 2019 BADS issued a table of emergency procedures suitable for day surgery (table 1)

Table 1. Types of urgent surgery suitable for day case procedures

General surgery	Gynaecology	Trauma	Maxillofacial
Incision and drainage of abscess	Evacuation of retained products of conception	Tendon repair	MUA fractured nose
Laparoscopic cholecystectomy	Laparoscopic ectopic pregnancy	MUA of fracture	Repair of fractured mandible
Laparoscopic appendicectomy		Plating of fractured bone	
Temporal artery biopsy			

MUA, manipulation under anaesthesia.

There are a variety of pathways which can be introduced to enable emergency patients to be managed on a day case basis:

1. Assess, discharge and admit to future CEPOD or Trauma List (ideally 1st slot on the list)
e.g. surgical management of abscess, MUA or ORIF of fracture
2. Assess, discharge and admit to elective day surgery list
e.g. surgical management of miscarriage, knee arthroscopy, ACL reconstruction or tendon repair
3. Assess, discharge and admit to dedicated emergency day surgery List
e.g. acute cholecystectomy, laser fragmentation of ureteric stones, day surgery trauma
4. Assess, operate via CEPOD list and discharge via day surgery pathway post-operatively
e.g. management of ectopic pregnancy, testicular torsion, appendicitis

Different hospitals may choose to use a variety of these pathways for different surgical procedures. Use of the first slot on a CEPOD list often enables improved utilisation of these lists – a patient can be admitted to the Day Surgery Unit or Surgical Assessment Unit and be operated upon via the CEPOD theatre whilst the team are co-ordinating the more complex emergency patients for the day. In this way the day surgery patient is operated upon and often back in the day unit prior to any of the main surgical emergency activity commencing.

The advent of COVID-19 may necessitate adjustments to some such emergency pathways. If a Day Surgery Unit requires patients to self-isolate prior to admission to a ‘green pathway’ it will be difficult to accommodate emergency or urgent activity. New pathways for delivering such care will emerge over coming months and years as the future restrictions regarding hospital admission are clarified.

Facilities and staffing

Surgical Assessment Units are pivotal to the co-ordination of emergency day surgery pathways. These can be single or multi-specialty units but the key factors for success is an ethos throughout the team of admission avoidance.

The following questions are key:

- Are additional investigations required for diagnosis?
- Can we avoid admission prior to diagnostics?
- Does the patient have a diagnosis which requires surgery?
- Is it safe to discharge the patient with analgesia to await a theatre slot?
- Is there an opportunity for surgery today and day case discharge post-operatively?

The surgical assessment team must develop processes which enable all patients to be tracked once discharged and re-admitted in a timely manner to an elective or semi-elective theatre list via a day surgery pathway. Patients need clear instructions regarding who to contact out of hours should there be any deterioration in their condition.

The following key factors have been identified which reduce stress and cancellations:

- A protocol for booking
- Early discussion with the operating surgeon
- Written information for the patient

Daily “hot” surgical clinics enable patients on an ambulatory emergency pathway to be reviewed by senior decision makers. Access to diagnostics (in particular ultrasound scans) is pivotal to the smooth running of these pathways, ideally a number of slots a day would be provided for this service or a sonographer and scanner present within the clinic for a certain time each day.

Dedicated regular day surgery emergency lists are required to deliver a smooth and efficient ambulatory emergency surgical service. Ideally a patient will be booked directly onto one of these lists whilst still in the surgical assessment unit and be given a specific time to return for surgery.

Coding

Capturing day case emergency activity can be challenging especially if a patient is admitted pre-operatively but discharged on the day of surgery. A common pitfall is for patients who are discharged and re-admitted for surgery to be coded as elective rather than emergency admissions. The key coding component is to ensure that the “method of admission” is captured as emergency. The Model Hospital Emergency Ambulatory Surgery Compartment considers two groups of patients as day cases; those who are true day cases (i.e. admitted, operated-upon and discharged on the same calendar day but with admission method recorded as emergency rather than elective, the second group are those emergency patients who may have been admitted preoperatively but are discharged on the same day as surgery (i.e. they are on a day case pathway once decision to treat is made in accordance with the IAAS definition).

Using Information Technology to Support the Day Case Surgery Pathway

High quality day surgery pathways are strongly supported by and in many ways dependent upon, good information technology. Ideally an electronic patient record (EPR) should be used to support the entire day surgery pathway and if developed with this in mind can in fact be pivotal in driving day surgery success.

Components of such a system include:

Electronic theatre booking form

- Listing patients electronically by the surgeon directly from their outpatient clinic confers a number of benefits. In particular it ensures that the procedure intended by the surgeon is accurately recorded and transferred directly to the patients record and subsequently theatre operating list. This avoids transcription errors resulting from matching a procedure description to PAS codes or due to incorrect deciphering of handwriting. This system will ideally include the following:
- Drop down of common procedures automatically mapped to the correct OPCS code, with the ability to amend with free text if required.
- Management intent (day case or inpatient)
- Details of equipment required (e.g. x-ray, laser theatre, specific equipment)
- Ability to highlight any medications which need stopping preoperatively e.g. anticoagulation, biologic medication. This enables clear communication with the Preoperative Assessment Clinic (POAC), who can then arrange stopping and bridging therapy if required
- Other communication to POAC teams
- Urgency and/or specific date for surgery if known
- Details of which surgeon (s) would be appropriate for the procedure (i.e. does it need to be a surgeon of a particular grade or even a specific surgeon)
- Free text section for messages to the booking team

Ideally the procedure description and equipment required should populate directly:

- Onto the theatre operating list to enable good communication in advance with the theatre staff
- Into the hospital booking system and preoperative assessment record to avoid transcription errors

Electronic preoperative assessment

A major benefit of an electronic preoperative assessment record is the ability for staff to review the record without recourse to a patient's notes. This enables teams to review their patients record in advance of surgery and identify any concerns or outstanding issues.

This should include all the key aspects of the patient's medical history formulated as a series of drop-down menus ideally with decision support guidance. Any investigations required will ideally be ordered directly from this system and results will populate automatically into the record.

Electronic record of the day of surgery

This includes:

- Time stamps of admission time, time to theatre, operation start and finish time, time into recovery and discharge time
- Any reasons for cancellation after arrival
- Personnel involved in the patients care
- Record of the procedure undertaken, type of anaesthesia and the staff involved
- Key outcome data from primary recovery such as pain and nausea scores
- Documentation of discharge criteria being achieved with details of time and nurse undertaking the discharge

- Information regarding whether a patient was admitted or discharged and reason for any unplanned admission

Electronic operation notes

This should include key information much of which populates directly into the patients discharge letter which is generated automatically at point of discharge

- Procedure undertaken
- Description of procedure
- Staff involved
- Antibiotics
- VTE prophylaxis in theatre
- Details of specimens sent
- Follow-up required (clinic appointment)
- Any specific information to primary care
- Whether the surgeons wish to see the patient prior to nurse-led discharge

Follow-up information should download onto a master spreadsheet viewable by the administration team to ensure that all appointments are booked. If a specimen is sent this information should download onto a specific spreadsheet to ensure that all specimens are followed up and results checked

Electronic anaesthetic charts

These support accurate documentation of vital signs, physiological parameters, medications administered, and procedures undertaken using simple drop-down menus and an interface between the computer system and anaesthetic monitors to enable data transfer

Electronic prescription of take-home analgesia

Standardised prescriptions of analgesia are key to good postoperative pain outcomes. Ideally all procedures should be mapped to a specific pain category (as described earlier in this document) and the corresponding analgesia automatically prescribed at the end of the procedure. This information should populate directly into the GP discharge letter. If any strong opioids are prescribed (such as oxy-codone following day case joint replacements) the prescription should include instructions to the GP indicating that repeat prescription is not advised to avoid the increasing risk of opioid dependence in the community.

Automatic generation of discharge letter

Once a patient is discharged electronically from the system by the secondary recovery nurse a standard discharge letter should be generated.

Copies (paper or electronic) are required for:

- Patients notes
- The GP
- The patient to take home

The discharge letter should include the following:

- Surgical procedure
- Date of procedure
- Surgeon responsible for care
- Analgesia and other medications prescribed (pulled through from the TTO prescription)
- Reminder to step down any opioids prescribed

- Follow-up required (pulled through from surgeon's operation note)
- Any information for the GP (from surgeon's operation notes)
- Details for the patient of a contact telephone number to call if assistance is required over night

Electronic record of follow-up telephone call

Each morning a list should be generated by the IT system with patient details from the following day. This should include the patient's name, their telephone number and procedure undertaken. As the follow-up call is made the patient is removed from the list. Information obtained from the telephone call is entered directly onto the IT system via a series of drop-down menus (e.g. pain score: none/mild/moderate/severe).

Audit Data

All the information from the EPR should download into a central database which can be easily interrogated by clinicians and hospital informatics teams to support regular audit of activity and outcomes which will promote continuous quality improvement.

Using audit and quality improvement processes to expand day case surgery

In addition to national audits such as Patient Recorded Outcome Measures (PROMS) and the NHS Friends and Family Tests, continuous audit of day surgery rates and patient outcomes is essential for service improvement. Comparison with national benchmarks and data from other trusts will drive this still further. Data can be obtained from the Model Hospital day surgery compartment, CHKS iCompare, hospital information departments and departmental data. The following dataset is a basic requirement:

Day Surgery Rates:

- Overall rates for all procedures in BADS Directory of Procedures
- Specialty specific rates for procedures within the BADS Directory of Procedures
- Individual day surgery rates for all procedures within the BADS Directory of Procedures

Unplanned Admission Rates

High unplanned admission rates reflect a "failure" at some point in the pathway and is a key measure of the quality of a day surgery pathway. They may be due to poor patient preparation, poor theatre scheduling (complex procedures scheduled late in the day resulting in insufficient recovery time), inappropriate anaesthetic techniques, lack of robust protocols for postoperative analgesia, insufficient seniority of anaesthetic or surgical staff and inexperience of day surgery ward staff to confidently achieve patient discharge. Whilst traditionally an overall target of <2% was recommended it is appreciated that those units attempting more challenging procedures as day surgery such as hysterectomies, major joint replacements and mastectomies will have a higher unplanned admission rate than those whose case mix is more conservative (such as dental extractions and cataract surgery). This is reflected in the data from the Model Hospital which enables Trusts to benchmark their performance in terms of unplanned admissions by individual procedure providing more relevant information than a global overall figure.

Missed Opportunities (inpatients with length of stay = 0)

These are patients booked for inpatient admission who are discharged on the day of surgery. These reflect a missed opportunity as they will not count as day cases in your hospital performance tables due to lack of day case management intent. They also have often consumed more resource in terms of ward beds and staffing than they would have done if managed through a dedicated day surgery pathway. Evaluation as to whether there is a particular specialty which contribute disproportionately to missed opportunities can lead to identification of procedures where more confident booking of patients for day surgery management can reap big rewards with minimal changes required in the clinical pathway.

Postoperative Symptoms

Evaluation of patient symptoms after discharge is an important measure of the quality of the service we provide. In particular rates of postoperative pain, nausea and vomiting (PONV) and bleeding should be ascertained for all patients. Annual audits should be undertaken to determine any trends in postoperative symptoms associated with for example, medical personnel, specific procedures, and anaesthetic techniques.

The Royal College of Anaesthetists have produced 10 Quality Improvement Programme recipes pertaining to day surgery as part of their new Quality Improvement Book¹⁴. These are listed below and are due for publication in 1st September 2020. This book developed from their popular Audit Recipe Book "Raising the Standard: a compendium of audit recipes" the 3rd edition is available online.

- Performing Emergency Ambulatory Surgery
- The need for a carer at home after day surgery
- Day surgery within the main theatre setting
- Day surgery theatre utilisation and cancellations
- Evaluating your day surgery pathway
- Optimising your day case rates
- Pain relief after day surgery
- How effective is your day case spinal service?
- Unplanned hospital admission after day surgery

¹⁴ The Royal College of Anaesthetists, *Raising the Standard: a compendium of audit recipes for continuous quality improvement in anaesthesia (2012)* <https://www.rcoa.ac.uk/safety-standards-quality/support-anaesthetic-departments/quality-improvement-book>

Section 2: The Generic Day Case Pathway

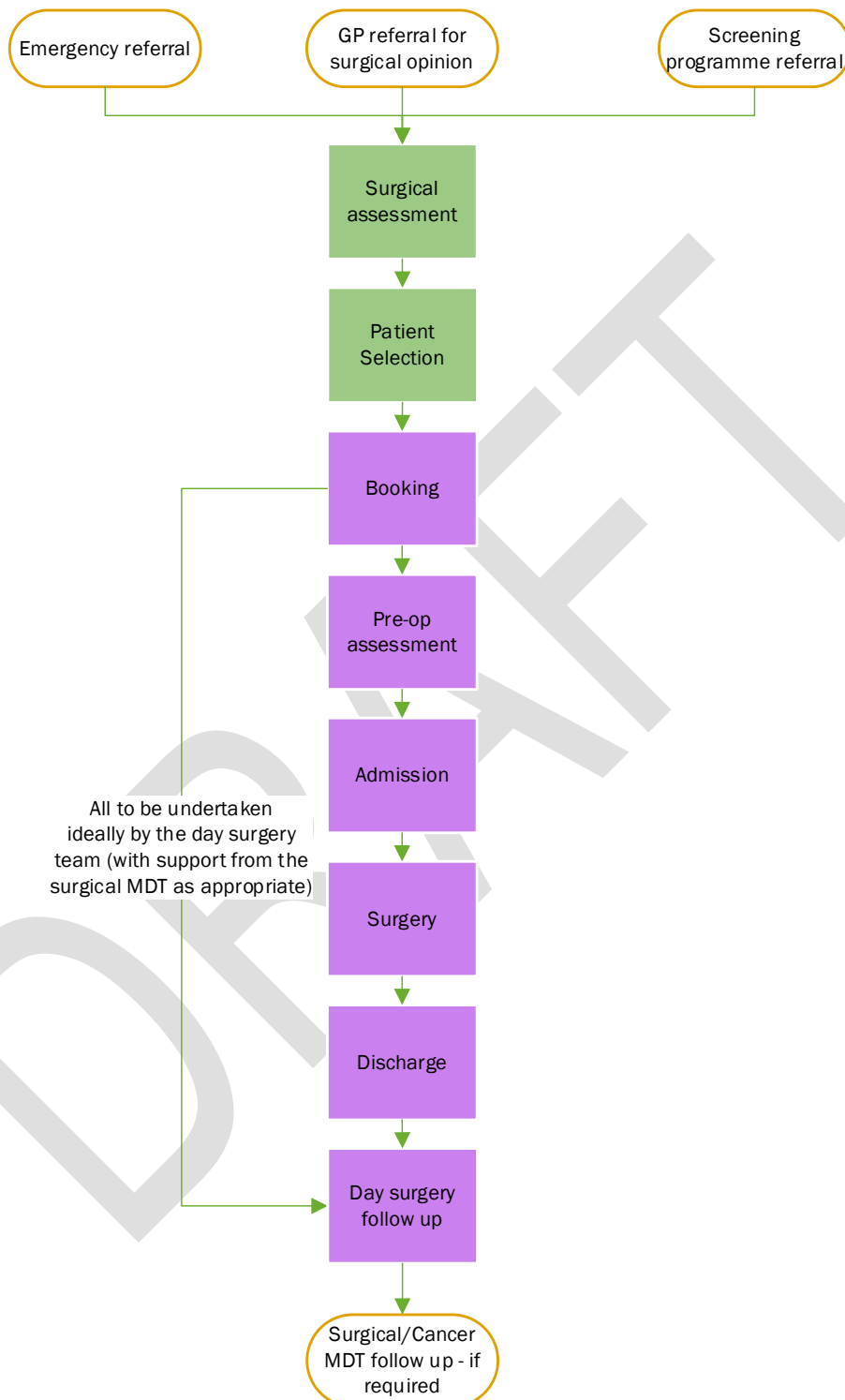
It is now recognised that the majority of surgery within all specialties should be undertaken via a day case pathway. This is now the standard pathway of care and medical culture needs to change to embrace this ethos and accept that very few, if any specialties will not have day surgery as the focus for most of their surgical activity. As such, it is essential to develop high-quality day surgery pathways.

The day surgery pathway usually starts with GP referral and ends after discharge home and active follow up. It is essential that there is **consistency of message** from all healthcare professionals with whom the patient interacts and that day surgery is reinforced at every stage of the pathway. Ensuring that where possible all aspects of the pathway are undertaken by the day surgery team will improve consistency of message and expertise.

It is however essential to maintain close-collaboration with all members of the surgical specialist multidisciplinary team (e.g. breast-care nurses, orthopaedic physiotherapists) to ensure a high-quality patient experience. Their input both pre and postoperatively is vital to the smooth running of some surgical pathways. This is particularly important as more challenging surgical procedures are undertaken.

DRAFT

Generic Day Case Pathway



Referral

1. Primary Care

GP's refer patients to secondary care for management of an obvious surgical diagnosis (e.g. inguinal hernia) or for diagnosis and management of specific signs and symptoms, which may lead to surgery being recommended, or not. They play a vital role in starting the day surgery message and in ensuring that patients are "fit to refer" and fully optimised prior to a request for a surgical opinion. A pre-emptive review of chronic conditions such as hypertension, atrial fibrillation, diabetes and anaemia, in order to optimise a patient prior to referral is extremely valuable. GPs will also likely have knowledge of social factors and can provide advice about lifestyle choices that may impact on surgical outcomes including smoking, high body mass index, alcohol consumption and recreational drug use. It is helpful at this stage if patients are made aware of literature to support "fitness for surgery" such as the publication by the Royal College of Anaesthetists "Preparing for Surgery"¹⁵.

It is essential that GP colleagues are regularly made aware of the increasing range of procedures which may be undertaken as day case surgery and the expanding patient groups considered suitable. However, they will only do this if we clearly communicate as our services evolve. GPs should be provided with access (via Clinical Commissioning Groups) to the BADS Directory of Procedures and should be informed which of these are undertaken as day surgery in their provider Trusts (figure1).

2. Screening Programmes

In circumstances where patients are diagnosed via a national screening programme, GPs are not responsible for referral. However, there is still responsibility for informing the treating secondary or tertiary referral unit of underlying co-morbidity, social and lifestyle impediments, which may impact on outcomes, as above once they have been notified that surgery is recommended. The surgical team should ensure mutual communication channels are in place to identify potential 'flags' about medical and social circumstances and hence enable safe pathway planning.

3. Emergency Departments

Patients with acute conditions, which require urgent surgery can be managed as a day case in a semi-elective pathway and may present via the emergency department or surgical take. Further details about this pathway have been covered in the Emergency Ambulatory Surgery section earlier in the document.

Action Checklist

- ✓ GPs provided with access to the BADS Directory of Procedure (via CCGs)
- ✓ Trusts day case procedure list to be shared with GPs and regularly updated
- ✓ GPs ensure patients are "fit to refer" and fully optimised – reinforce reality that "not fit for day case surgery" means they are not fit for any surgery
- ✓ GPs share patient education leaflets e.g. "Preparing for Surgery"

¹⁵ Centre for Perioperative Care, Fitter Better Sooner Toolkit <https://www.cpoc.org.uk/patients/fitter-better-sooner-toolkit>

Surgical Outpatient Clinic

The initial message delivered at the surgical outpatient clinic is pivotal in setting patients' expectations. Surgeons need to be fully aware of which procedures are appropriate for day surgery and default these procedures to day case intention.

They also need to be informed that it is unusual for a specific patient to be unsuitable for day surgery (see section on patient selection below) If a patient is unfit for day surgery they are probably unsuitable for elective surgery and should not simply be switched to an inpatient pathway. Instead, if time allows, they should be optimised and then re-listed as a day case once fit.

Surgeons, including newly appointed consultants, SAS surgeons and those in training, should be educated regarding the principles of day surgery management and fully briefed as to the patients who could and should be listed for day surgery. They should understand shared decision making and agree expectations with the patient. Consent is an iterative process and should not be left to the day of surgery.

Action Checklist

- ✓ Default procedures appropriate for day surgery to day case intention
- ✓ If not fit for day surgery, optimise the patient and then re-list as day case once fit
- ✓ Build education of principles of day surgery management into junior doctor and consultant induction

Surgical Criteria for Day Surgery

With developments in surgical and anaesthetic techniques the large majority of surgery is now appropriate to be undertaken on a day case basis. Major procedures previously not considered appropriate are now routinely undertaken as day cases in some centres including;

- Laparoscopic hysterectomy
- Laparoscopic nephrectomy
- Laparoscopic prostatectomy
- Mastectomy
- Vaginal prolapse surgery
- Lumbar discectomy
- Total hip and knee replacements
- Some craniotomies
- Urgent laparoscopic cholecystectomy
- Appendicectomy

In determining whether a procedure is appropriate for day surgery the following questions should be considered:

1. Can the patient be reasonably expected to manage oral nutrition postoperatively?
2. Can the pain of the procedure be managed by simple oral analgesia supplemented by regional anaesthetic techniques?

3. Is there a low risk of significant immediate postoperative complications (e.g. catastrophic bleeding)?
4. Is the patient expected to mobilise with aid postoperatively, and if so, can this be taught in advance?

The next step is to evaluate existing inpatient procedures and determine what (if any) aspects of the pathway require modification to enable the procedure to be undertaken as a day case.

Importantly, surgical duration is no longer considered a limitation for day surgery and procedures lasting 3 or 4 hours are now routinely undertaken on a day case basis.

Action Checklist

- ✓ Do not consider long length of procedure e.g. 3 or 4 hours as default criteria for inpatient pathway
- ✓ Review existing default inpatient procedures and identify if criteria questions (1-4 above) are met
- ✓ Evaluate inpatient procedures and determine what (if any) aspects of the pathway require modification to enable them to be undertaken as day cases

Patient Selection

Traditionally, many patients were deemed unsuitable for day surgery for a variety of reasons. Experience suggests that the majority of patients are in fact appropriate for day case management or can be enabled to be so with careful organisation and proactive management.

1. Social Factors

- **Adequate housing conditions** - Most patients now have access to inside bathroom facilities and a telephone, so it is unusual to be excluded from day surgery on this basis
- **Distance from hospital** - Patients should live within approximately one hours drive of a hospital which would be able to provide care resulting from a complication of the surgery. It is important to note that this may **not** be the hospital in which the surgery was undertaken. There are very few places where this poses a challenge. In some remote island communities, it may be necessary for patients to be accommodated in a local hotel on the first postoperative night before travelling to their final destination the following day. This is still a better and more cost-effective environment than keeping the patient in a hospital bed unnecessarily.
- **Availability of someone to care for the patient overnight** - Standard guidance is that patients should be escorted home by a responsible adult who should remain in their home for 24 hours after surgery. However, an increasing number of patients live alone, and a small number have great difficulty finding anyone to provide this care.

- **Alternative approaches** - Two alternative solutions have been used in a number of Trusts and are endorsed by national bodies (BADs, RCOA, AAGBI)^{8,9}
 - **Providing carers into a patient’s home** - If a patient is unable to arrange a carer overnight an alternative is for a carer to be provided from a community team. The patient can be taken home by hospital transport where the carer/“sitter” meets them and remains in their home overnight. This has been used very successfully for a number of years in some centres.
 - **Sending patients home alone** - newer anaesthetic agents have very short duration and subsequent return to cognitive function is rapid. It is appropriate therefore that not all procedures are considered equal in terms of the requirement for postoperative care and the duration required for a carer.

Figure 2 Printed with permission from Norfolk & Norwich Day Surgery Team

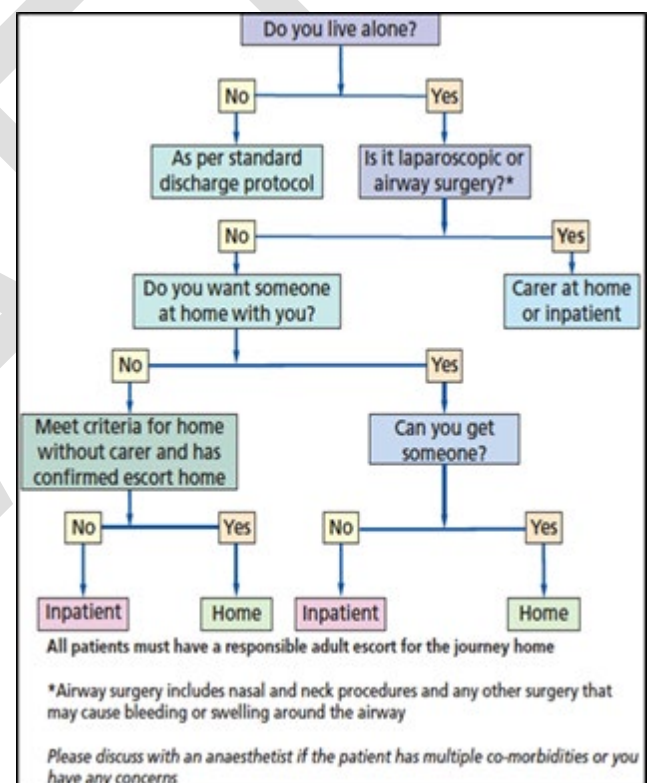
Patients who have had minor surgery and who are happy to be “home alone” after a day case procedure, this should be considered for this pathway. This needs to be discussed with the patient at the time of their preoperative assessment appointment and the nurse undertaking the assessment should evaluate whether the individual patient is appropriate for this option.

Exclusions to the “home alone” pathway include:

- Airway surgery
- Laparoscopic surgery
- Patients with dementia or learning disabilities

It is important to ensure that patients who are not going to have a carer in their home overnight have arranged someone to escort them home and ensure they have all they need before leaving them alone.

This pathway has been used successfully for a number of years in at Norfolk and Norwich University Hospital and has now been adopted by other units.



Action Checklist

- ✓ Social factors are increasingly rare reasons to exclude a patient from day surgery, where they are identified, ensure they are discussed and a joint plan to address them is agreed by the preoperative assessment team in partnership with the patient and recorded onto the patient notes
- ✓ If patient is unable to provide their own carer then consider alternative options such as providing a carer or following the home alone assessment process

2. Medical Factors

Traditional limitations for day surgery such as age, Body Mass Index (BMI) and American Society of Anesthesiologists (ASA) physical health classification have now largely been abandoned with the recognition that arbitrary limits did not relate to patient outcome.

Medical exclusions to day surgery

There are not many.

- **Unstable** ASA III or IV
- Any poorly controlled comorbidity
- Neonates
- Ex-premature infants < 60 weeks post conceptual age
- Young sibling of SIDS child

ASA

- There are no arbitrary cut offs for ASA for day surgery
- Most **stable** medical conditions can reasonably be managed as a day case
- Most patients with **unstable** medical conditions should not be undergoing elective surgery
- Urgent or emergency surgery in these patients may require inpatient stay

Recommendations are that if a patient is not suitable for day surgery, in the majority of cases they probably should not be undergoing elective surgery at all until their medical condition has been optimised. Once this has occurred, they can proceed on a day case basis.

A. Diabetes

The value of day surgery for patients with diabetes has been recognised within the AAGBI guidelines for perioperative management of patients with diabetes and the guidelines written by NHS Diabetes¹⁶. Patients with diabetes are more likely to maintain good diabetic control if they are in their normal environment with their normal diet and medication. Bringing them into hospital as an inpatient often results in poorer control as usual routines are disrupted.

Diabetic patients are often better at managing their own diabetes than doctors and nurses.

Important points to note:

- “Glycaemic control should be checked at the time of referral for surgery “
- HbA1c should be < 69 mmol.mol⁻¹ within the last 3months
- If HbA1c ≥ 69 mmol.mol⁻¹, elective surgery should be postponed while control is improved before proceeding with day surgery

B. Elderly Patients

There are no upper age limits for day surgery. The elderly in particular benefit from day surgery with minimal disruption to their daily routine and return to their normal environment as soon as possible. In 2019 the national audit office identified that an average 67-year-old admitted to hospital loses 5% of their muscle function/day.¹⁷

¹⁶ Management of adults with diabetes undergoing surgery and elective procedures: Improving standards, Joint British Diabetes Societies. 2016.

¹⁷ National Audit Office, Discharging older patients from hospital <https://www.nao.org.uk/wp-content/uploads/2015/12/Discharging-older-patients-from-hospital.pdf>

C. Children

The majority of paediatric surgery should be undertaken as day surgery. The main exclusions are:

- Neonates
- Ex-premature infants (<60 weeks post gestational age)
- Young sibling (< 2 years) of Sudden Infant Death Syndrome (SIDS) child
- Child with severe sleep apnoea undergoing tonsillectomy

Postoperative respiratory observations are required in these children due to the higher risk of postoperative apnoea

D. Obesity

There are no upper limits for BMI for day surgery. Even morbidly obese patients can be safely managed through a day surgery pathway as long as appropriate staff and equipment (e.g. long instruments, appropriate operating table, difficult airway equipment) are available. Day surgery is particularly advantageous for these patients who benefit from the short duration anaesthetic techniques and early mobilisation associated with day surgery and the potentially reduced risks of venous thromboembolism (VTE) and hospital acquired infection. Most potential complications of obesity are limited to the intra- and immediate postoperative environment. Once the patient has left primary recovery they are at no increased risk of complications as a day case compared with an overnight stay. Morbidly obese patients may not be appropriate to manage on an isolated site; however, they should still be managed through a day surgery pathway in the main hospital environment^{18 1920}.

Whilst obesity is not a contraindication, theatre personnel should be aware of upper weight limits for trolleys in use. These should be suitable to manage patients across a wide weight range. If operating tables are moved between theatres for this purpose, trolleys are preferable to reduce manual handling risks for staff.

Action Checklist

- ✓ Ensure existing medical criteria for day surgery are reviewed, updated and, if appropriate removed
- ✓ Ensure diabetic patients have their disease well controlled and thus are not unnecessarily excluded from day surgery
- ✓ Ensure elderly patients are not unnecessarily excluded from day surgery
- ✓ Ensure paediatric exclusions to day surgery are limited to neonates, ex-premature infants (<60 weeks post gestational age), young sibling (< 2 years) of SIDS child, child with severe sleep apnoea undergoing tonsillectomy

¹⁸ Selection of obese patients undergoing ambulatory surgery: a systematic review of the literature DOI: [10.1213/ANE.0b013e3182a823f4](https://doi.org/10.1213/ANE.0b013e3182a823f4)

¹⁹ Ambulatory anesthesia for the obese patient DOI: [10.1097/ACO.0b013e328010cb78](https://doi.org/10.1097/ACO.0b013e328010cb78)

²⁰ Obesity and day-case surgery. *Anaesthesia*. 2001;56(11):1112-1115. DOI: [10.1046/j.1365-2044.2001.01962-5.x](https://doi.org/10.1046/j.1365-2044.2001.01962-5.x)

Patient Booking

Ideally booking staff should be part of the day surgery team and based within the day surgery unit. This confers the following advantages:

- Interaction with theatre teams resulting in improved teamwork and list scheduling
- Interaction with the surgical team ensures appropriate list case mix
- Booking team can attend theatre debrief and learn ways of improving future list scheduling
- Attendance at debrief gives positive feedback of a “good job done” and learning opportunities

Lists should be planned in a “smart order” giving consideration to recovery times for different procedures or types of patients e.g. diabetic patients, the very young and the very elderly

Preoperative Assessment and Preparation

This serves a three-fold opportunity;

- To prepare the patient for their day surgery journey with reinforcement of day surgery pathway message
- Identification of medical concerns with the opportunity for early intervention
- Holistic optimisation of the patient. This includes optimisation of any medical conditions, medication review, psychological and practical preparedness, help with smoking cessation, exercise and attention to alcohol and nutrition; these minimise complications and empower patients at the ‘teachable moment’.

This should be at a time and place convenient and appropriate for the patient. Ideally offer the option of a one-stop service immediately after surgical outpatient clinic which provides a number of benefits:

- Avoids the need for the patient to return to the hospital for a further appointment
- Ensures that the patient is preoperatively assessed early in the pathway leaving the maximum time for any optimisation required
- Ensures that there is a pool of patients who have undergone preoperative assessment and are “good to go” maximising the likelihood of being able to fill gaps resulting from short notice availability.

There are some occasions where a one-stop service is not appropriate, in particular for patients who require multi-disciplinary preoperative input (e.g. with physiotherapy or a clinical nurse specialist). Ideally this input can be arranged to take place on the same day as the preoperative assessment appointment but co-ordinating this is likely to require a separate appointment rather than a one-stop process.

Most patients should have a face to face assessment with a nurse. Occasionally telephone assessments are appropriate for example, patients who attend regularly for check cystoscopies or those attending for termination of pregnancy). However, the recent experience of video consultation gained during the COVID-19 pandemic may result in further developments in this area in the future.

Ideally the assessment should be undertaken by nurses who are part of the day surgery team to ensure that the patient is appropriately prepared for their day surgery journey. ECGs and blood tests are rarely required prior to day surgery.

Exceptions include:

- LFTs in patients scheduled for Laparoscopic Cholecystectomy (if not already performed by surgical team),

- HbA1c in diabetic patients if no result for 3 months,
- Haemoglobin in patients undergoing major surgery (e.g. arthroplasty) who may benefit from preoperative oral or intravenous iron if anaemia is detected.
- Group and Save for procedures where major haemorrhage could occur such as nephrectomies, endovascular aneurysm repairs and where rhesus status is required e.g. evacuation of retained products of conception or termination of pregnancy.

Standard protocols should be provided for management of patients with:

- Newly detected or poorly controlled hypertension
- Newly detected atrial fibrillation
- New abnormalities in blood results
- Poorly controlled diabetes

Normally a standard letter can be sent to the GP highlighting the abnormality detected. In most cases (with the exception of poorly controlled diabetes) it will not preclude surgery from progressing. Examples of standard letters are included in section 3.

Anaesthetic support must be provided for review of notes or patients as appropriate. This should ideally be provided by anaesthetists with expertise in day surgery pathways and familiarity with all the protocols within the unit. Dedicated time must be allocated in job plans for this. Most referrals from the nursing team can be managed by review of patients notes supplemented by a phone call if required. The purpose of the review is to ascertain whether any further optimisation is required to enable surgery to proceed or whether any specific additional equipment, specialised staff or variation in process might be required to safely care for a particular patient. For patients with significant co-morbidities or unstable disease there may be a need to co-ordinate a discussion between the day surgery team, surgeon and patient as to whether surgery is in the patients best interests at this time as part of a shared decision making process. Occasionally patients will require an additional face to face consultation to facilitate this discussion.

Action Checklist

- ✓ Day surgery team should include dedicated booking staff where possible
- ✓ Plan lists in a “smart order” giving consideration to recovery times
- ✓ Provide preoperative assessment as a one-stop service where appropriate and immediately after outpatient clinic if possible
- ✓ Have a process for identifying and contacting patients who are fit for surgery and have flexibility to attend at short notice, in line with Trust screening protocols.
- ✓ Preoperative assessment should be led by a day surgery team nurse undertaken face to face with telephone or video consultations used as appropriate
- ✓ ECGs and blood tests should not be undertaken as a default but only for specific purposes
- ✓ Standard protocols should be provided for the management of patients with newly detected or poorly controlled hypertension; newly detected atrial fibrillation; new abnormalities in blood results; poorly controlled diabetes
- ✓ Anaesthetic support must be provided for review of notes or patients as appropriate throughout the preoperative assessment process

Admission

Admission to a dedicated day surgery area provides the best quality environment. Ideally this will be part of a day surgery unit (see facilities section) however an admissions area adjacent to the day surgery postoperative ward is the “best alternative” if a separate day surgery unit is not an option. The admission area should be close to the operating theatre to avoid delays, aid communication between theatre and admission teams and enable patients to walk to theatre. Any preoperative interventions which prevent walking should be reviewed. Where possible admission times should be staggered and fasting times minimised.

It is preferable not to admit patients directly to a bed or trolley area. Instead they should remain in a waiting area, where they can stay dressed, with their relatives or carers and have facilities to watch television etc until they need to change for theatre. Consultation rooms should be available for preoperative review by the surgical and anaesthetic team. Admitting preoperative patients to their postoperative “trolley” space may limit the use of this space by preceding patients resulting in reduced efficiency and the requirements for more trolley space. However, if separate consultation rooms are not available and use of the postoperative area for preoperative admission is necessary, patients should return to a waiting area once reviewed to enable separation of pre-and postoperative processes.

Patients should be changed for theatre at an appropriate time to avoid delays but minimise the time waiting in a theatre gown to reduce hypothermia.

Preoperative Fasting

Excessive preoperative fasting results in feelings of thirst, discomfort and a significant increase in postoperative nausea and vomiting. Stipulating 2 hours fasting from clear fluids preoperatively inevitably results in excessive fasting times as it is difficult for staff to judge when that 2-hour period begins. Recent evidence shows that allowing patients free access to water and encouraging drinking is associated with no increase in adverse events and a significant reduction in postoperative nausea and vomiting²¹. European fasting guidelines which permit tea and coffee with milk to be consumed until 2 hours preoperatively (endorsed by the Association of Anaesthetists) should now be embraced, as this will encourage patients to have a morning drink prior to coming to hospital for their surgical procedure²².

Action Checklist

- ✓ A dedicated day surgery area should be used whenever possible
- ✓ Patients should not be admitted to a bed or trolley area but remain in the waiting area until they need to change for theatre
- ✓ Consultation rooms should be available for pre-operative review by the surgical & anaesthetic team
- ✓ Tea and coffee with milk may be consumed up to 2 hours pre-operatively
- ✓ Consider free access to water until the time of surgery

²¹ Postoperative nausea and vomiting after unrestricted clear fluids before day surgery McCracken Graham C.; Montgomery Jane; *European Journal of Anaesthesiology*. 35(5):337-342, May 2018

²² *European Fasting Guidelines*; Ian Smith, Peter Kranke, Isabelle Murat, Andrew Smith, Geraldine O’Sullivan, Eldar Søreide, Claudia Spies and Bas in’t Veld 2011. <https://anaesthetists.org/Home/Resources-publications/Guidelines/Perioperative-fasting-in-adults-and-children>

Surgery and Anaesthesia

- **Staffing:** day surgery should be a consultant or experienced SAS delivered service for both surgery and anaesthesia. There are many opportunities for teaching and learning in the day surgery environment and junior staff should be supervised to ensure high quality day surgery outcomes
- **Equipment:** the day surgery facilities should be equipped to the same standard as any inpatient operating theatres. If complex surgery is to be undertaken to a high enough standard to enable same day discharge, the best equipment is required
- **Operating Trolleys:** the large majority of procedures should be undertaken on operating trolleys. Patients should get onto the trolley in the anaesthetic room and remain on the same trolley until ready for mobilisation prior to discharge.

Advantages:

- Reduced time delays transferring patients from trolley to operating tables
 - Reduced postoperative nausea and vomiting associated with rolling and transfer
 - Reduced manual handling risks for staff
- **Anaesthesia:** guidelines should exist for the provision of short acting anaesthesia and multimodal analgesia. The principles of anaesthesia for day case surgery are as follows:
 - Premedication with oral analgesia
 - Short acting anaesthetic agents
 - Avoidance of emetogenic medication
 - Multi-modal analgesia²³
 - Short acting opioids for rescue analgesia if required
 - Good post-operative analgesia
1. Premedication: Patients should be premedicated with oral paracetamol and if appropriate a non-steroidal anti-inflammatory drug (NSAID). If NSAIDs are used, then long acting preparations such as Ibuprofen slow release 1600mg have found to be efficacious in a number of leading day surgery centres and avoid the risk of “missed doses” later in the day.
 2. Intraoperative Anaesthesia:
Short acting anaesthetic agents should be used. Total intravenous anaesthesia (TIVA) is ideally suited to day surgery anaesthesia however units also have also had success using the short acting volatile anaesthetic agent Sevoflurane. Caution should be taken using Isoflurane for day surgery due to the longer “hang-over” effect and manufacturers advice not to drive for 48 hours post-operatively when this is used. Avoidance of agents likely to contribute to postoperative nausea and vomiting (PONV) such as nitrous oxide or long-acting opioids (morphine) is important.
Patients should be warmed and hydrated with 1litre of crystalloid fluids.

²³ Analgesia for Breast Surgery — A Brief Overview

https://www.wfsahq.org/components/com_virtual_library/media/289880390b7f23adf3bd14879a3d6508-atow-403-00.pdf

With these techniques routine use of anti-emetic medication is often not required. However for patients with a significant history of PONV or having particularly emetogenic procedures such as tubal or ovarian, testicular, laparoscopic, squint or middle ear surgery prophylactic antiemetic use should be considered.

3. Post-operative medication (see example protocol):

- Simple analgesia is often sufficient (regular paracetamol and ibuprofen)
- There should be agents available for rapid analgesic rescue if required. Standard prescriptions of intravenous fentanyl (6xdoses of 25mcg) and oral morphine sulphate are effective.
- Rescue anti-emetic medication should be available

4. Spinal and Regional Anaesthesia

Proving alternatives to general anaesthesia or sedation has proved extremely advantageous during the COVID-19 pandemic. General anaesthesia is invariably associated with the use of aerosol generating procedures (AGPs). These procedures dictate that for any patient deemed at risk of having COVID-19 (or being an asymptomatic carrier) then Level 3 PPE must be used for AGPs related to general anaesthesia. Current guidance also requires airway devices to be removed in theatre and stand down time duration of which will depend on theatre air exchange rates. Significant inefficiencies result from these essential safety measures. Use of regional anaesthetic techniques and awake surgery enables the patient to be transferred from the operating theatre as soon as the surgical procedures is finished, resulting in reductions in theatre turnaround time and in risk to staff from COVID-19 exposure.

- Spinal anaesthesia is appropriate for day surgery using short acting agents with appropriate dosing regimens (see protocol).
 - Regional anaesthesia may be very useful. A number of centres are developing “awake surgery” pathways which have been demonstrated to significantly increase efficiency in terms of list turnover, and to reduce resources and staffing required (for example no primary recovery unit or staff are needed as the patient can progress directly from the operating theatre to the secondary recovery ward prior to discharge).
 - Patients should be advised to have oral analgesia available at home for when the block reduces, lest they fear worsening pain is a cause for concern.
 - Local anaesthesia can be useful. Ideally, the cases would be planned into lists to avoid the need for an anaesthetist or recovery staff.
- **Take home medication:** Protocols should exist to ensure that the correct analgesia regimes are prescribed and dispensed according to procedure severity. Prescribing according to evidence-based guidelines rather than individual clinicians’ preference results in improved analgesia after discharge

Action Checklist

- ✓ Day surgery should be a consultant or experienced SAS delivered service for both surgeons and anaesthetists.
- ✓ Day surgery facilities should be equipped to the same standard as inpatient operating theatres in order to expand the range of procedures that can be undertaken and ensure the best equipment is available
- ✓ The large majority of procedures should be undertaken on operating trolleys to minimise transfer delays and manual handling risks
- ✓ Guidelines should exist for the provision of short acting anaesthesia
- ✓ Regional anaesthetic techniques should be employed to support day surgery
- ✓ Protocols should exist for take home medication including evidence based prescribing rather than clinician preference

Primary Recovery

This is the first stage of recovery after surgery. Most patients spend a period of time here varying from 10 minutes to an hour immediately after leaving the operating theatre. 1:1 nursing care is provided until a patient is fully awake with any airway adjunct removed and any immediate postoperative symptoms of pain or nausea are under control. Standard perioperative prescription charts should be available in primary recovery to ensure immediate availability of analgesic and anti-emetic medication (see example chart). Shared primary recovery facilities with inpatient surgery are likely to result in delays in the timely management of the day surgery patients. Patients should remain in primary recovery only until they are awake with a patent airway, conversive and have immediate postoperative symptoms managed. There should be no minimum time duration for primary recovery enabling patients to be transferred to the secondary recovery ward within a few minutes of regaining consciousness. Patients undergoing procedures under spinal, regional or local anaesthesia may bypass primary recovery and transit directly to the secondary recovery area enabling more efficient use of space and faster progression through the day surgery pathway.

Secondary Recovery and Discharge

The secondary recovery unit or ward is the area where patients spend the majority of their postoperative recovery prior to being fit for discharge. It should be staffed by nurses trained in nurse-led discharge for day surgery²⁴ and ideally be entirely trolley based care with no bed stock. Patients should be encouraged to drink, eat, mobilise, dress and be discharged in a timely manner. Nurses expert in the field of day surgery are essential to ensure that the focus on progression through the secondary recovery process occurs without delay. Support from clinical nurse specialists and other members of the MDT may also be invaluable following specialist surgery.

Discharge criteria include:

- Pain controlled with oral analgesia
- Nausea and vomiting controlled (or acceptable for transfer home)

²⁴ Nurse Led Discharge (2nd Edition), British Association of Day Surgery Publication

- Patient tolerates oral fluids
- Patient can mobilise safely
- Patient has stable observations

For most patients there is no specified time period before which they can be discharged. The exception to this is patients who have undergone tonsillectomy. Current guidance (which may be subject to future review) is that these patients must stay in the unit for 4 hours postoperatively to mitigate against the risk of primary haemorrhage.

Most patients do not need to pass urine prior to discharge, the exceptions to this are some patients who have had spinal anaesthesia and those who have undergone urological surgery or gynaecology incontinence surgery²⁵. Patients who have not passed urine following high risk surgery should have a bladder scan to determine whether they are in retention. In which case they can be discharged home with a catheter in situ and either return to the day unit for a trial without catheter or have this undertaken in the community. Failure to pass urine should not necessitate hospital admission.

Information on discharge (see attached protocols):

Patients must have the following information prior to discharge. This should be explained to them and their carer and also provided in written form.

- A copy of their discharge letter detailing the procedure they have had undertaken and any follow-up arrangements
- 5 day supply of postoperative medication (see example protocols)
- Instructions as to when the medication is next due (see example chart)
- Details of who to contact if they have any concerns. This should be a dedicated phone line to the day surgery unit within hours and a senior surgical nurse out of hours. It is not appropriate for them to be directed to GP out of hours services, the emergency department or 111

Unplanned Admission after Surgery

Implementation of best practice guidance with respect to facilities, staffing and protocols will ensure that rates of unplanned hospital admission are kept to a minimum. It is important that there is a route of admission to the hospital such that patients who are deemed unsafe for discharge gain access to a hospital bed. However, too easy access to hospital beds such as in 23-hour stay units can adversely affect outcomes and significantly increase unplanned admission rates. Often patients are admitted overnight and receive no additional medication, observations or management to that which they would have had available at home. A key question for the day surgery team and indeed the patient if hospital admission is being considered is “what care will be provided overnight in hospital which would not be available at home?” Follow-up of any patient admitted the previous day by a nurse from the day surgery team can result in increased understanding of this and often give the nursing teams confidence to support patients in returning home after surgery, even where their postoperative symptoms are not fully controlled.

²⁵ *Spinal Anaesthesia for Day Surgery Patients – A practical guide (4th Edition), British Association of Day Surgery Publication*

Follow-up and Audit

Follow-up and audit are an essential component of the day surgery pathway. It ensures that we deliver a high-quality patient centred service and drives quality improvement. Data capture from all day surgery patients is much more effective than ad hoc retrospective audit. The ideal is a telephone call to all patients the day after surgery. Data obtained should be directly entered into a dedicated database ideally at the time of the call to avoid duplication of effort and transcription errors or omissions.

- Data collection may include:
- Pain scores
- Nausea and vomiting score
- Satisfaction
- General well-being “how do you feel?”
- Whether the patient liked being a day case
- Whether the patient liked the unit they were treated in
- Whether they have needed to seek any additional medical help or advice since discharge
- Any other specific comments/concerns

Action Checklist

- ✓ 1:1 nursing care provided for primary recovery phase until the patient has met primary recovery criteria – there should be no minimum time duration
- ✓ Standard perioperative prescription charts should be available
- ✓ Pathways should exist to enable patients who have undergone regional or spinal anaesthesia to bypass primary recovery
- ✓ Secondary recovery area should be staffed by nurses trained in nurse-led discharge for day surgery
- ✓ Support from clinical nurse specialist and other MDT members should be available following specialist surgery
- ✓ There should be an agreed process for admission to a hospital bed for patients deemed unsafe to discharge
- ✓ A nurse from the day surgery team should undertake a next day follow up telephone call for all discharged patients to provide advice and collect audit data to drive service improvement
- ✓ A nurse from the day surgery team should undertake a next day follow up visit to any patient admitted to review the benefit of that overnight stay

Section 3: Procedure specific best practice pathways

The following elective and emergency procedures should serve as a focus for development of day surgery pathways across a range of surgical specialities. Many of these have been identified by the GIRFT team for particular support due to wide variation in day case rates across the country. Development of robust day surgery pathways for these procedures should then result in other surgical activity within the same specialty being encouraged into the day surgery arena.

Key Procedures for improving day case rates

Breast Surgery

- Simple mastectomy with or without axillary clearance
- Wide local excision of breast (partial excision of breast) with or without axillary clearance

Gynaecology

- Laparoscopic hysterectomy
- Vaginal hysterectomy
- Anterior or posterior vaginal repair

General Surgery

- Hernia repair (excluding incisional hernias)
- Laparoscopic cholecystectomy
- Haemorrhoids/anal fissure surgery
- Laparoscopic repair of hiatus hernia

Orthopaedics

- Anterior cruciate ligament reconstruction
- Uni-compartment knee replacement
- Total hip replacement
- Therapeutic shoulder arthroscopy (rotator cuff repairs, subacromial decompression)
- Bunion surgery

ENT

- Tonsillectomy
- Tympanoplasty
- Septoplasty
- Mastoidectomy
- Stapedectomy
- Functional endoscopic sinus surgery (FESS)

Urology

- Transurethral resection of prostate (TURP)
- Transurethral resection of bladder (TURBT)
- Laser destruction of prostate
- Ureteroscopic destruction of calculus in ureter

- Endoscopic insertion of prosthesis into ureter

Ophthalmology

- Vitrectomy

Emergency

- Laparoscopic cholecystectomy
- Appendicectomy
- Incision and drainage of abscess
- Removal of products of conception from fallopian tube (ectopic pregnancy)
- Evacuation of retained products of conception
- Open reduction and internal fixation of mandible
- Open Reduction and Internal fixation of wrist or ankle
- Management of ureteric stones (laser and stent)

Vascular

- Endoluminal operations on femoral or ileac arteries (angioplasty)
- Varicose vein surgery
- Carotid endarterectomy
- Endovascular aneurysm repair (EVAR)

Key Procedures to move from day surgery to the outpatient setting

It is important that appropriate outpatient minor procedures facilities exist to enable the change in care setting. Procedures where the focus should be to develop an outpatient rather than day surgery pathway include:

- Cystoscopy
- Template prostatic biopsy
- Urolift for prostatic hypertrophy
- Hysteroscopy
- Evacuation of retained products of conception
- Termination of pregnancy
- Endometrial ablations
- Local anaesthetic varicose vein procedures
- Haemorrhoid "HALO" procedures

Example Protocols

Section 1 (Appendix A)

Day Case Arthroplasty Patient self-medication information and chart

Perioperative prescription chart

Paediatric perioperative prescription chart

Take home medication protocol

Example discharge letter

Spinal anaesthesia in day surgery

Bladder management flowchart

Process for arranging overnight care

Postoperative telephone call proforma

Section 2 (Appendix A)

Day surgery hip replacement anaesthetic protocol

Day surgery hip replacement pathway

“How to Do It” series of Articles (reproduced with permission from the Journal of One-Day Surgery)

- Day Case Laparoscopic Nephrectomy
- Day Case Laparoscopic Hysterectomy
- Day Case Tonsillectomy
- Day Case Green Light Laser Prostatectomy
- Day Case Anterior Cruciate Ligament Reconstruction
- Day Case Laparoscopic Cholecystectomy
- Day Case Trans-Urethral Resection of Prostate
- Day Case Bipolar Saline Prostatectomy

Template Documents: Standard letters from preoperative assessment (examples from Torbay and South Devon, 2020)

Template: Newly detected Atrial fibrillation

Private & Confidential

To: GP

Your patient (insert name ...) attended the preoperative assessment clinic today. Routine ECG showed her to be in atrial fibrillation, I enclose a copy. We have no record of this patient previously being in atrial fibrillation and thought it may be useful for you to be aware of this.

With best wishes.

Yours sincerely

Template: Poorly controlled hypertension

The above patient came into the Day Surgery Unit today for Pre-Assessment for surgery.

We have taken a blood pressure reading and this is showing: -

Systolic: Time:
Diastolic: Time:

I would be grateful if you would see this patient and assess whether or not they would benefit from anti-hypertensive treatment.

The patient has been asked to make an appointment to see you in the near future.

Template: Abnormalities of blood results

Your patient attended the Day Surgery Unit for pre-assessment and had some investigations performed.

Mr results (attached) have shown some abnormality and although this does not preclude Mr from surgery, I am bringing this to your attention for further action if you think it necessary.

Template: Poorly Controlled Diabetes (patient letter – routine surgery)

I am writing to you because at your recent pre-operative assessment appointment we took the opportunity to check how well controlled your diabetes is. Unfortunately your HbA1c (a blood test which measures your long term blood sugar control), was found to be very high and is currently at mmols/ml

I have sent a letter to your Surgeon, your GP and our specialist diabetes team. I have asked the healthcare professionals who are responsible for your diabetes care (usually your GP or in some cases our hospital-based specialist diabetes team) to work with you to help support you in improving your blood sugars. Because of this, your Surgeon may decide that your operation needs to be delayed until your blood sugars are better controlled. This is because there are more complications after surgery in those patients who have high blood sugars. The recommended target HbA1c to safely proceed with non-urgent surgery is less than 69mmols/ mol.

Please do not hesitate to contact us if you have any concerns regarding this and we very much hope that you will be able to work with your diabetes care providers to help improve your blood sugar levels before surgery. This is important to reduce the risk of surgical complications and improve the outcome following your surgery. It will also reduce your risk of subsequent complications resulting from your diabetes.

Template: Poorly controlled diabetes (patient letter - urgent surgery)

I'm writing to you because you recently attended a pre-operative assessment appointment at the Day Surgery Unit in preparation for youroperation.

As part of this assessment we checked a blood test which measures how well controlled your diabetes is. This blood test is called HbA1c and your value came back as mmol/mol. This indicates that your diabetes is not very well controlled at the moment. Because surgeon..... needs to go ahead with your operation fairly urgently we will not be delaying your operation, however if you were to need surgery in the future which was not urgent, we would not be able to proceed with this until your diabetes is under better control.

I have today written to your GP and asked that they work with you to improve the control of your diabetes both for your long term health, but also to ensure that any future surgery is able to proceed without delay.

If you have any questions regarding this please do contact your GP for further advice.

Template: Poorly controlled diabetes (letter to surgeon and GP)

Your patient attended the pre-operative assessment clinic this week prior to ...his/her elective surgery. Mr/s is known to suffer from diabetes and unfortunately at the time of his/her pre-operative assessment his/her HbA1c was found to be high.

Mr/s current HbA1c is mmols/mol.

Local and national guidelines recommend that glucose control should be optimized aiming for a HbA1c of less than 69mmols/mol prior to surgery, where it is appropriate to do so safely. This is because of significant increase in perioperative mortality and morbidity including the increased risk of infection, in undertaking surgery in patients with persistently elevated blood glucose levels.

I am copying this letter to your patient's GP, to ask that they work with him/her to try to improve his/her control. I have also alerted our specialist diabetic team who are happy to be contacted to provide additional support should the primary care team require advice about how best to optimize diabetic management of this patient.

Please would you review whether this surgery needs to proceed as planned or whether it can be deferred until such time that his/her GP or diabetic team confirm that his/her diabetic control has been optimized.

I have written to him/her to inform him/her that his/her surgery may be delayed and encourage him/her to engage with the relevant healthcare professionals in order to improve his/her diabetic control.

Please don't hesitate to contact me if you have any questions regarding this.

Pathway Action Checklists

GP Referral

- ✓ GPs provided with access to the BADS Directory of Procedure (via CCGs)
- ✓ Trusts day case procedure list to be shared with GPs and regularly updated
- ✓ GPs ensure patients are “fit to refer” and fully optimised – reinforce reality that “not fit for day case surgery” means they are not fit for any surgery
- ✓ GPs share patient education leaflets e.g. “Preparing for Surgery”

Surgical Outpatient Clinic

- ✓ Default procedures appropriate for day surgery to day case intention
- ✓ If not fit for day surgery, optimise the patient and then re-list as day case once fit
- ✓ Build education of principles of day surgery management into junior doctor and consultant induction

Surgical criteria for day surgery

- ✓ Do not consider long length of procedure e.g. 3 or 4 hours as default criteria for inpatient pathway
- ✓ Review existing default inpatient procedures and identify if criteria questions (1-4 above) are met
- ✓ Evaluate inpatient procedures and determine what (if any) aspects of the pathway require modification to enable them to be undertaken as day cases

Patient selection and Social factors

- ✓ Social factors are increasingly rare reasons to exclude a patient from day surgery, where they are identified, ensure they are discussed and a joint plan to address them is agreed by the preoperative assessment team in partnership with the patient and recorded onto the patient notes
- ✓ If patient is unable to provide their own carer then consider alternative options such as providing a carer or following the home alone assessment process

Medical Factors

- ✓ Ensure existing medical criteria for day surgery are reviewed, updated and, if appropriate removed
- ✓ Ensure diabetic patients have their disease well controlled and thus are not unnecessarily excluded from day surgery
- ✓ Ensure elderly patients are not unnecessarily excluded from day surgery
- ✓ Ensure paediatric exclusions to day surgery are limited to neonates, ex-premature infants (<60 weeks post gestational age), young sibling (< 2 years) of Sudden Infant Death Syndrome (SIDS) child, child with severe sleep apnoea undergoing tonsillectomy

Patient Booking, Preoperative assessment and preparation

- ✓ Day surgery team should include dedicated booking staff where possible
- ✓ Plan lists in a “smart order” giving consideration to recovery times
- ✓ Provide preoperative assessment as a one-stop service where appropriate and immediately after outpatient clinic if possible
- ✓ Have a process for identifying and contacting patients who are fit for surgery and have flexibility to attend at short notice, in line with Trust screening protocols.
- ✓ Preoperative assessment should be led by a day surgery team nurse undertaken face to face with telephone or video consultations used as appropriate
- ✓ ECGs and blood tests should not be undertaken as a default but only for specific purposes
- ✓ Standard protocols should be provided for the management of patients with newly detected or poorly controlled hypertension; newly detected atrial fibrillation; new abnormalities in blood results; poorly controlled diabetes
- ✓ Anaesthetic support must be provided for review of notes or patients as appropriate throughout the preoperative assessment process

Admission and Pre-operative fasting

- ✓ A dedicated day surgery area should be used whenever possible
- ✓ Patients should not be admitted to a bed or trolley area but remain in the waiting area until they need to change for theatre
- ✓ Consultation rooms should be available for pre-operative review by the surgical & anaesthetic team
- ✓ Tea and coffee with milk may be consumed up to 2 hours pre-operatively
- ✓ Consider free access to water until the time of surgery

Surgery and Anaesthesia

- ✓ Day surgery should be a consultant or experienced SAS delivered service for both surgeons and anaesthetists.
- ✓ Day surgery facilities should be equipped to the same standard as inpatient operating theatres in order to expand the range of procedures that can be undertaken and ensure the best equipment is available
- ✓ The large majority of procedures should be undertaken on operating trolleys to minimise transfer delays and manual handling risks
- ✓ Guidelines should exist for the provision of short acting anaesthesia
- ✓ Regional anaesthetic techniques should be employed to support day surgery
- ✓ Protocols should exist for take home medication including evidence based prescribing rather than clinician preference

**Recovery
and
discharge**

- ✓ 1:1 nursing care provided for primary recovery phase until the patient has met primary recovery criteria – there should be no minimum time duration
- ✓ Standard perioperative prescription charts should be available
- ✓ Pathways should exist to enable patients who have undergone regional or spinal anaesthesia to bypass primary recovery
- ✓ Secondary recovery area should be staffed by nurses trained in nurse-led discharge for day surgery
- ✓ Support from clinical nurse specialist and other MDT members should be available following specialist surgery
- ✓ There should be an agreed process for admission to a hospital bed for patients deemed unsafe to discharge
- ✓ A nurse from the day surgery team should undertake a next day follow up telephone call for all discharged patients to provide advice and collect audit data to drive service improvement
- ✓ A nurse from the day surgery team should undertake a next day follow up visit to any patient admitted to review the benefit of that overnight stay

DRAFT

Publications available from the British Association of Day Surgery

Current publications

Benchmarking

- BADS Directory of Procedures – 6th Edition (2019)
- BADS Directory of Procedures National Dataset (Calendar Year 2020)

Generic day surgery pathway planning

- The Pathway to Success: Management of the Day Surgical Patient (2012)
- Ten Dilemmas in the Day Surgery Pathway (2013)
- Patient Safety in the Ambulatory Pathway (2013)
- Managing Patients with Diabetes for Day and Short Stay Surgery - 4th Edition (2016)
- Nurse Led Discharge – 2nd Edition (2016)

Day case anaesthesia

- Spinal Anaesthesia for Day Surgery Patients: A Practical Guide – 4th Edition (2019)

Pathway specific handbooks

- Day Case Laparoscopic Cholecystectomy – 3rd Edition (2018)
- Issues in Paediatric Day Surgery – 2nd Edition (2018)
- Day Case Breast Surgery – 2nd Edition (2020)
- Surgical Same-Day Emergency Care – 2nd Edition (2020)
- Day Case Hip and Knee Replacement – 2nd Edition (2020)

Future publications 2020-2021

- Day Surgery Gynaecology
- Day Case Foot and Ankle Surgery

References and Resources

Association of Anaesthetists '*Guidelines for day case surgery 2019*' offer information and guidance on day care and short stay surgery.

Visit - <https://anaesthetists.org/Home/Resources-publications/Guidelines/Day-case-surgery>

British Association of Day Surgery (BADS) publish an annual '*Directory of Procedures*' which provides aspirational benchmarks for day surgery (including outpatient surgery).

Visit - <https://daysurgeryuk.net/en/home/>

Model Hospital is a free digital tool which enables trusts to compare their productivity and identify opportunities to improve. The database contains published GIRFT and BADS Day case metrics across an array of specialties.

Visit - <http://www.model.nhs.uk/>

Royal College of Anaesthetists have published '*Guidelines for the Provision of Anaesthesia Services for Day Surgery 2020*' to support Trusts in developing their day case practice.

Visit - <https://www.rcoa.ac.uk/gpas/chapter-6#>

DRAFT