

Model of Care for Elective Surgery

Including Implementation Guide

National Clinical Programme in Surgery



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



Tús Áite do
Shábháilteacht 1 Othar
Patient Safety 1 First



Elective Surgery Programme Implementation Support Guide

Health Service Executive
Royal College of Surgeons in Ireland
College of Anaesthetists of Ireland



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Overview of the Elective Surgery Programme

Health Service Executive
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Irish College of Anaesthetists



WHAT IS THE ELECTIVE SURGERY PROGRAMME?

The Elective Surgery Programme (ESP) sets out to address how elective surgery can best be delivered by surgeons, anaesthetists and other health workers in partnership with their patients so that it is safe, efficient and cost effective. This will be delivered through a set of high quality and reproducible processes. This work is being carried out as one of the joint programmes between the HSE, the College of Surgeons and the College of Anaesthetists and is being led by Prof. Frank Keane and Dr Jeanne Moriarty.

The Elective Surgery Programme has four sub-programmes. They are as follows:

Average Length-of-Stay or AvLOS sub-programme

Targets for elective 'day' and 'stay' procedures have been agreed with 14 surgical specialties. These targets will save bed days and reduce surgical waiting lists. Based on 2009 activity potential savings are in the order of 41,500 bed days and a reduction in waiting times for patients. The incentive for participation by surgeons, therefore, will be the provision of protected beds. See under "What is AvLOS?"

There are a number of ways these targets for length-of-stay can be achieved. The *"Elective Surgery Model of Care"* outlines an agreed set of guidelines for pre-admission assessment clinics, day surgery, day-of-surgery admissions and discharge planning, each of which has the potential to reduce average length-of-stay. The document is designed to help develop local care pathways and it aims to help all hospital staff including management, doctors, nurses and ancillary staff. (See attached)

Audit sub-programme

The third element of the Elective Surgery Programme is Audit. Simply shortening hospital stay as a goal on its own is not appropriate without knowing the outcomes of the care provided. RCSI, together with the HSE, is introducing a National Audit of Surgical Mortality which will examine all deaths occurring during surgical care (See under "What is IASM?") as well as a Joint Register (See under "What is the Joint Register")

Theatre Journey sub-programme

The final element of the Elective Surgery Programme plans to introduce and implement the Productive Theatre Programme, also known as 'TPOT'. The operating theatre is a common pathway for most surgical patients. For reasons of safety, efficiency and cost containment it is important that this resource is used effectively. The TPOT programme is a comprehensive package designed by NHS Innovation. (See under "What is TPOT?")

In summary, the Elective Surgery Programme aims to improve the patient journey along the elective surgical pathway by delivering on access, quality and cost. The planning stage has been completed but implementation, the hard bit, is yet to come. It will require very close co-operation between the Colleges and the HSE, and regional and hospital management, clinical directors and, most importantly, surgeons, anaesthetists, nursing and ancillary staff.

What is AvLOS?

It is a sub programme of the Elective Surgery Programme – a partnership between the Royal College of Surgeons in Ireland (RCSI) and the Directorate of Clinical Strategy and Programmes of the HSE. AvLOS stands for Average Length of Stay but in this context refers to both day and stay cases.

What is the purpose of AvLOS?

As part of the Elective Surgery Programme it is designed to improve access and quality of care for patients coming to hospitals for elective surgery, to provide surgeons with more predictable work patterns and better information about their practice and finally to improve efficiencies and create cost savings.

How does it work?

The underlying principle was an agreement on length of stay targets with specialist surgeons for specific procedures that they undertake. One of the benefits for agreeing to and hitting these targets will be the provision of protected beds.

What are the specific procedures?

The programme group sat down with representatives of all the surgical specialties and agreed a basket of common day and stay procedures to be used as targets. In the end we agreed to look at 87 stay procedures and 43 day procedures across the range of surgical specialties (except for Paediatric surgery at present). Looking at 2009 data these procedures would have accounted, in that year, for 57% of day procedures and 45% of stay procedures – a substantial percentage.

What are the targets?

These are different for stay procedures as compared to day cases. For stay procedures we worked out an 'average length of stay' target and, for day procedures, we agreed a target for the percentage of patients having that procedure that one would expect should be done as a day case.

For stay patients is length of stay the only parameter that can be measured?

No. Other parameters can also be looked at, for example, pre-operative length of stay, day of surgery admissions and post operative length of stay. It is from this data that the number of protected beds that will be required will be calculated.

How will this activity be monitored?

This will be done through the HIPE (Hospital Inpatient Inquiry) system that is present in each hospital. It will be most important that accurate and full data is collected. This will mean that surgeons will be expected to participate in the HIPE coding process particularly for the target procedures.

How do we know that the HIPE codes of the procedures are being monitored?

The target procedures together with their ICD-10 procedure codes are attached. HIPE codes, preferably generated by surgeons, will be returned by hospital HIPE Officers through the ESRI and then to the Casemix/ Health Intelligence Unit of the HSE and through the new National Office for Clinical Audit in Surgery (NOCAS) based at RCSI. A dedicated reporting tool is being developed which will deliver reports nationally, regionally, to hospitals and to individual surgeons.

Are these procedure codes specific?

Yes. Coding must be accurate. The codes that have been selected for this programme are not comprehensive even for the procedures that are itemised. For example, if one were to perform a straight forward laparoscopic cholecystectomy the code would be 30445.00. However a laparoscopic cholecystectomy proceeding to an open cholecystectomy comes under a different code 30446.00. This latter code is important in its own right but it will not be one of the procedures that will be monitored in this programme. Nevertheless the correct code must be entered.

Why have a limited number of codes been targeted?

Accurate coding is a time consuming exercise especially in cases of complexity. Our aim was to focus on and target a limited number of codes that are commonly used in order to make the exercise as simple and straightforward as possible. At this point we wish to look at only a limited number of codes in detail notwithstanding the fact that all coding must be done accurately.

Is accurate coding only necessary for these proceedings?

No. All procedures should be accurately coded and preferably involve both surgeons and HIPE coders. Having a limited number of codes like the ones targeted means that surgeons can have this list easily accessible so that, for example, a code can be written on the operation sheet immediately after surgery for the benefit of HIPE coders.

Will hitting targets make a difference?

We know, by extrapolating back to 2009 data, that, had all the targets been reached nationally in all specialties, we would have saved nearly 42,000 bed days. Having this kind of data is a powerful tool for bringing about an ability to plan surgery and operate protected beds. These will not only be forthcoming but, by shortening waiting lists, we will also obviate the necessity for the NTPF.

How can targets for length of stay be achieved?

This should best be done by avoiding bad habits such as bringing patients in for investigations, hot bedding, delayed discharges etc. Moreover, the Elective Programme has published a Model of Care which includes guidelines for pre-admission assessment clinics, day surgery, day of surgery admissions and discharge planning. Many of these modalities are already in widespread use but the Model of Care

is aimed at setting a standard not only for surgeons but also for nurses, allied health professionals, management and administration.

Should the ultimate aim of AvLOS not be to achieve better standards of care as measured by better outcomes?

Yes, this would be ideal. Most of our measures are ones of process rather than outcome. However, clearly it is not satisfactory if a patient is brought in to hospital and then discharged as quickly as possible only to have to be readmitted because of problems arising within the next few days. Hence we will monitor readmission rates.

It is possible to look at clinical outcome measures with the HIPE system but this would add a significant level of complexity to the process at the present time. However, we do intend to measure some clinical outcomes. In addition, as a separate part of the surgery programme, we will be introducing a National Mortality Audit and the Joint Replacement Register, amongst others.

What other component of the Elective Surgery Programme is relevant to AvLOS?

The Productive Theatre Programme is aimed at increasing efficiencies in and better use of our operating theatres, thereby generating capacity and cost savings as well as being a very important part of the patient's own journey by reducing errors. The Productive Theatre Programme will not only increase capacity to assist the AvLOS Programme but also, by providing greater patient safety, will also contribute to reducing the length of hospital stay.

What is TPOT?

It is a sub programme of the Elective Surgery Programme - a partnership between the Royal College of Surgeons in Ireland (RCSI) and the Directorate of Clinical Strategy and Programmes of the HSE. TPOT stands for The Productive Operating Theatre. It is a programme that was devised by NHS Innovation (UK) to improve operating theatre performance. This has been introduced into and will be disseminated throughout Ireland.

What is TPOT designed to do?

In essence it is a toolkit designed to help those working in operating theatres to understand their current ways of working and to see where and how improvements can be made. Rather than being seen as a series of instructions delivered from management, it is designed to engage the multidisciplinary team properly and give them ownership of their own service redesign. It has been described by one of the pilot sites as, 'Packaged Common Sense'!

What kind of improvements can TPOT instil?

It can help us to improve patient experience by making their surgical journey smoother. It can also help us to provide better outcomes delivered with greater safety and reliability. It will help to improve team performance as well as job satisfaction amongst all theatre staff. Finally, it can help add value to the service and improve efficiency whilst still focussing on quality rather than finance. Nevertheless, we have to remember that theatres are one of the financial "powerhouses" of hospitals - it costs up to €2.5m per year to run an operating theatre in Ireland. It is important that the most is made of their use.

What tools does TPOT use?

Team-working requires meetings which most of us regard with dread! However, TPOT helps to put these in perspective and sets out to make them more focused, productive and enjoyable. The aim is to harness ideas and build consensus. TPOT also provides various tools and suggestions around audit planning, theatre utilisation, process mapping and cost benefit analysing; as well as aids for monitoring activity, identifying problems for remediation, communicating current status at a glance and, finally, for sustaining improvement. TPOT also offers suggestions as to how to organise the workplace, and identify waste. Waste can come through unnecessary duplication of effort, over processing, delays or keeping excess stock. In matters of safety and reliability TPOT endorses safety checklists and formalises clinical incident reporting.

Can the TPOT tools be introduced without doing the training course and without team-working?

We would suggest that the introduction of a TPOT programme without first doing the course would be well nigh impossible. Furthermore, it is important that the courses are attended by at least three people from any one department and including a senior nurse, Consultant Surgeon and Consultant Anaesthetist.

As for team-working, this is an essential ingredient of the programme. Real and sustained improvements cannot occur without buy-in and a feeling of ownership amongst all theatre staff.

What other ingredient other than team-working is important for TPOT?

Measurement of theatre processes is an important component because it is measurement that should drive decision making. It has been said, “Without data it is just a change; with data you can prove it is an improvement”

What do you need to get TPOT started?

Firstly, you have to have buy-in from your highest institutional governing bodies including the Board and the Senior Management Team. It is they who must supply the support that is required and it is they that should be informed of and should monitor and help sustain improvement. The governance of the programme itself should rest with an executive leader, a programme leader, an improvement facilitator, surgical and anaesthetic clinical leads and an information analyst. Each should have dedicated time to fulfil their roles and responsibilities which should in turn be supported by a steering group.

Are there differences between Ireland and the UK with regard to TPOT and its implementation?

Most of the issues are very similar. However, the UK operates a different funding model to Ireland. For example, in their system, productivity and performance improvements can lead to direct resource gain for those theatre units that achieve them. This situation is not mirrored in Ireland, as yet, but this is expected to change in time.

When introducing TPOT to your hospital is it advisable to introduce it into just a single theatre or into all theatres?

So far it would be our experience that this is best done in a single theatre initially in order to learn and practice the process. Once teams are confident with the programme then it can be rolled out to other operating theatres.

What is the situation with regard to the roll-out of TPOT in Ireland at the present time?

So far, 5 hospitals have completed the TPOT course which was run by NHS Innovation. Teams from each of those hospitals have introduced and developed the programme within their own institutions. Already they have started to introduce improvement changes based on information they have collected. Each of the hospitals has had to make presentations to the CEO of the HSE, Mr. Cathal Magee, and the value of TPOT has already become plain for all to see. Six more hospitals will be starting the programme this autumn and thereafter the education programme, as well as its roll-out, will continue to be managed as a programme between the HSE and RCSI.

What is IASM?

It is a part of the Surgery Programme developed with the Directorate of Clinical Strategy and Programmes of the HSE. IASM stands for Irish Audit of Surgical Mortality and will mirror SASM (Scottish Audit of Surgical Mortality) which has run for over 20 years in Scotland and has led to improvements in care for surgical patients.

What will IASM do?

IASM will examine all deaths that occur in surgical units in Ireland. Deaths following both elective and emergency admissions will be examined in all of the surgical specialties.

Who will make reports on these deaths?

Surgeons and anaesthetists. Surgeons will be encouraged to self report all deaths under their care whether or not they have undergone surgery. Failing this, mechanisms will be put in place to retrieve timely notification of deaths from both hospital administrators and using the HIPE process. Anaesthetists will also report on peri-operative deaths where relevant.

How will this happen?

Data entry will be by proforma on an electronic format using a secure webpage within the National Office of Clinical Audit in Surgery (NOCAS) website. Anonymous peer review will examine all reports and determine whether there were any areas of concern in patient management. We expect 80% of all cases will be signed off as satisfactory at this early stage. Approximately 20% of cases may require a second more in depth review which will require a review of the medical records again by anonymous peer review.

Why should I take part in this process?

International best practice suggests that all surgeons and anaesthetists should reflect on their practice and in particular engage in morbidity and mortality reviews in an attempt to learn from previous experience. This process should be looked upon as educational, non judgemental but objective, hence the need for adequate peer review. While one will not be made engage with this process it will be structured so as to satisfy your audit requirements for professional assurance appraisal with the Medical Council.

What feed back will I get on any of my cases?

Surgeons and anaesthetists will be informed when cases are closed following initial assessment. If a secondary review is requested, surgeons and/or anaesthetists will be given the opportunity to respond to the report prior to 'signing off' and closure. The closure process, however, will also involve 'singing off' by the appropriate clinical director and confirmation that the case has been reviewed at a local morbidity and mortality conference.

Are there national benefits that can be gained from this exercise?

Yes. In Scotland clusters of cases have picked up risk factors for adverse events as well as identifying service inadequacies. So successful has it been that a similar audit is now being taken up across Australia and New Zealand.

If I disagree with the assessment what recourse do I have?

If a surgeon or anaesthetist does not accept a peer review report a second reviewer can be requested to examine the case.

What is the overall governance of IASM?

A management board will consist of administrative staff, a clinical director and representatives from the College of Anaesthetists of Ireland (COAI) and various surgical specialties from the Royal College of Surgeons in Ireland (RCSI). A governance board will comprise of representation from RCSI, COAI, HSE, Dept of Health and Children and lay representatives.

How much time will this process take?

This really depends on your specialty interest as some specialties have few deaths. For each death it should be possible to input details onto the system within 10 or 15 minutes, especially if done promptly while the clinical details are still fresh in ones memory.

Who will carry out the mortality assessments?

All participating surgeons and anaesthetists. Each, as a contribution to the overall system, might be expected to be asked to review about 10 initial or first line assessments per year. These should take approximately 10-15 minutes. Any secondary assessments will be more time consuming and will involve a medical chart review and could take two or three hours similar to a medico-legal report. Each surgeon and/or anaesthetist might be expected to be asked to undertake one or two of these each year. Because of the time involvement a fee will be payable for each secondary assessment and professional competence credits will be available.

Will I be indemnified for this work?

Yes. The NOCAS office will indemnify all reviewers.

Will the process be confidential?

Each surgeon will receive an annual report regarding their own cases. Relevant clinical directors will also see these reports. National and specialty annual reports will be published which will not identify any individual surgeon or institution.



MODEL OF CARE FOR ELECTIVE SURGERY

Improving the Patient Journey

Royal College of Surgeons in Ireland, Irish College of Anaesthetists and
Health Service Executive



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Summary for Patients and Carers

Introduction

There are two broad categories of patients who present for surgery, 1) elective patients who can have their admission and surgery at a predetermined and predictable time; and 2) acute patients whose presentations are unpredictable and often requires fast intervention either in the urgent or emergency setting.

This document sets out to address elective surgical practice and how it can be best delivered by surgeons and relevant health workers in **partnership with patients** so that it is safe, efficient and cost effective, but also delivered through a set of high quality and reproducible processes.

Patients are naturally anxious when they come into hospital and they want their stay to be as smooth and uncomplicated as possible. They and their families want to understand what will happen to them and what to expect. Results from patient surveys in Ireland, and in other developed countries, have identified eight key principles of healthcare that patients consider most important and which are applicable to the elective surgery model of care. (1) (See **APPENDIX 1**)

Patients too have responsibilities specifically in ways that they can help health workers deliver more effective and safer services. These responsibilities have also been described under eight principles. (See **APPENDIX 2**)

Those of us in the health care profession can help to deliver the kind of care patients require by designing explicit care pathways and team-working so that the same process is repeated time and again in the same way and with repeated checks. Better than this, we should aim to make the process similar for the same operation wherever it is carried out in the country. This has not always been the case.

Sometimes creating checks and protocols may seem overly complicated but it has to be remembered that, in modern medicine, there are an enormous range of investigations and treatments that can be carried out by many different personnel and teams, and at different stages of care. All these protocols and checks are designed, and have been shown, to reduce error and make the surgical journey safer.

Integrated care pathways

Integrated care pathways are designed to bring together different steps in the patient journey in a coherent and predictable manner. This can be done for planned or elective surgical operations whereas it is clearly not possible to apply this so readily to emergencies, occurring unpredictably as they do.

Hospitals in Ireland vary in their situation, their activity, their size and resources. Primary Care Services, equally, vary in their levels of availability and sophistication. For these reasons it is important that care pathways are developed locally to meet local circumstances and this involves close liaison with General Practitioners. For the care pathway to be efficient and effective it is important that each stage of the planning process is examined by all relevant team members so that each has input and is aware of how the processes link together.

The Model of Care is designed to help develop local care pathways so that a patient's elective surgical journey is planned, efficient and predictable from start to finish. It is aimed at the full range of hospital staff including management, doctors, nurses and ancillary staff and its priorities are to make the journey as expeditious and as safe as possible, and delivered to the highest clinical standards with the best possible outcome.

The model of care

This is set out in six Chapters.

Chapter 1 introduces the Elective Surgery Programme. Whilst the patient journey generally begins with the General Practitioner, for the purposes of this Programme, we are taking the patient journey from the Surgical Clinic when the decision has been made to operate. It defines what needs to be done at this stage and, in so doing, provides important information for the patient, and clarity for the teams involved at the next stage of the surgical journey,

Chapter 2 describes the next step which should be the Pre-admission Assessment Clinic. These have not been widely available up to now. However, their purpose is invaluable because it means that all investigations can be carried out before the patient comes into hospital. In particular, this applies to the important assessment that needs to be done before undergoing anaesthesia. It is logical that a patient be admitted for their surgical procedure for as short a time as possible beforehand but also within relative proximity to their attendance at both the surgical and pre-assessment clinics.

Chapter 3 is an operational guide for Day Surgery. Irish and international experience tells us that more and more substantive surgical procedures, usually requiring a general anaesthetic, can be carried out as a day case, coming into hospital in the morning and going home the same day. This has been shown to be a very efficient and safe way of delivering surgical care. Whilst we know that there is substantial activity in this area in Ireland we also know that there is room for considerable expansion.

Chapter 4 describes a relatively new concept, called Day of Surgery Admission. As its name implies it refers to the admission of a patient on the day of their operation. Where it differs from Day Surgery is that, because of the greater complexity of the surgical procedure (or the poorer condition of the patient) they will not be able to go home on the evening of their operation but rather will have to stay in hospital for a number of days. Up until now the tradition has been to admit patients into hospital one or two days before their operation. This is both unnecessary and wasteful and probably not good for patients. With Day of Surgery Admission all the preparation, information giving and counselling must be completed beforehand.

Chapter 5 describes Discharge Planning. We know that if medical teams are aware of issues that a patient may face when they leave hospital then these can be planned for from the beginning. Discharge planning should begin at the outset of the patient journey; when left to the end of hospital stay it leads to delays and inefficiencies that are, not only bad for the hospital, but also a source of understandable frustration and dissatisfaction for patients and their carers. Knowing what should happen after going home is another important step on the road to a full recovery and integration with Primary Care is crucial in this process.

Chapter six sets out the indicators of quality for each of the modalities described for elective surgery

Reference:

1. You and Your Health Service, what you can expect from your health service and what your health service expects from you-The National Patients Charter 2010

APPENDIX 1

The eight key principles of care that patients' expect when ever and where ever they receive care include:

- 1) **Access:** patients expect to receive care that is appropriate, timely and based on need and not the ability to pay; they expect that waiting times for elective surgical procedures are reasonable and do not put them at further risk by having to wait or by having their surgery cancelled at short notice
- 2) **Dignity and respect:** patients expect to be treated with dignity and respect and compassion
- 3) **Safe and effective services:** patients expect that their care will be delivered in a safe environment by competent, skilled and trusted professionals.
- 4) **Communication and information:** patients expect that they will be listened to carefully and be provided with clear, honest, comprehensive and understandable health information and advice throughout their care ; and especially when plans change, when their surgery is postponed or if something goes wrong. Patients need such information in order to:
 - understand what is wrong
 - gain a realistic idea of prognosis
 - make the most of their consultations with their surgeon prior to an operation and to help them make an informed decision
 - understand the processes and likely outcomes of possible tests, treatments and surgery
 - assist in self-care post discharge
 - learn about available services and sources of help within their community, if appropriate
 - be reassured and feel legitimized in seeking help in order to cope with their concerns
 - learn how to prevent further illness
 - identify the 'best' health care providers

Patients' information needs are highly diverse. They are shaped by demographic characteristics including age, gender and socio-economic status, as well as the patient's particular circumstances, beliefs, preferences and styles of coping. There are important differences in each individual's skills, abilities and capacity to understand, with particular needs arising from low literacy, auditory/visual impairment and minority languages. It is important to provide information that patients need and to involve patients in service user groups that will help to develop ways of improving those information needs. Health information should adhere to international standards of best practice on health literacy (1, 2)

Patients expect to know approximate length of stay in hospital for any given procedure, and that discharge arrangements are in place and in line with best practice and that this information is accurately communicated to their General Practitioners or Primary Care Professionals as appropriate.

- 5) **Participation:** patients expect that that they and their families and carers will be involved in and share in the decision making about their care
- 6) **Privacy:** patients expect that they will be provided with adequate personal space to ensure privacy and that their personal information will be treated in strict confidence
- 7) **Improving health:** patients expect that surgical services are designed to promote improved health and to prevent further illness or injury to the patient
- 8) **Accountability:** patients expect to be given feedback and to have their concerns dealt with promptly

References:

1. DISCERN Handbook - The Discern Tool: University of Oxford & the British Library in partnership with the NHS in 1998.
2. The Literacy Audit Tool Kit for Irish Healthcare Settings (2009) National Adult Literacy Agency and HSE.

APPENDIX 2

Patients can help by:

- 1) **Assuring access:** keeping appointments and using services appropriate
- 2) **Displaying dignity and respect:** treating healthcare professionals and other patients with respect, dignity and consideration
- 3) **Following advice and safety guidelines:** following medication safety advice, letting their carers know when something goes wrong or doesn't feel right and following fasting protocols prior to planned surgery
- 4) **Providing information and good communication:** providing adequate information about their condition, their medical and relevant social history ; and by seeking clarification about their care plan or surgical procedure
- 5) **Participating in their care:** preparing questions, concerns and symptoms to discuss with their surgeon or health care professional
- 6) **Respecting their own and the privacy of others:** safeguarding patient confidentiality by respecting the privacy of fellow patients'
- 7) **Optimising their own health and condition:** looking after their own health and taking measures to ensure that their health is optimal prior to a surgery
- 8) **Providing accountability for their own care:** providing us with honest and open communication when they have had a poor experience in their health care

CHAPTER 1

The Elective Surgery Programme

Introduction

Surgeons have two broad categories of patients – elective, that can have their admission and surgery at a predetermined and predictable time; and acute, that are unpredictable and require fast intervention either in the urgent or emergency setting. In this document we plan to address elective surgical practice and the aspiration of surgeons and all health workers to deliver surgery through safe, high quality, efficient, predictable and reproducible processes.

Taking forward the agenda to reduce waiting times and shortening hospital stay requires fundamental changes in practice to “do things differently”. There is considerable scope for treating more patients within the current system by managing the overall surgical pathway and current facilities better.

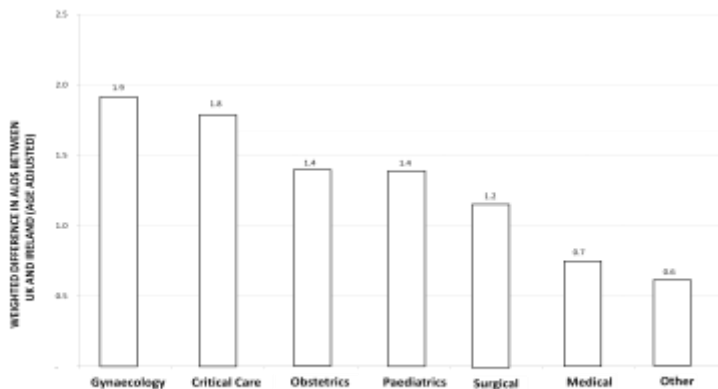
Patients want treatment that is safe, efficient and effective, and which provides the least possible disruption to their lives. Repeated patient surveys have demonstrated that the great majority of patients prefer to recover in their own homes rather than staying in hospital (1).

The aim of the first chapter is to outline the rationale for the Elective Surgery Programme and its elements. This and subsequent chapters will then provide a guide for developing Integrated Care Pathways for instituting the key elements that will underpin a modern, safe and efficient elective surgery system for patients, from the time that they leave the surgical clinic through the Pre-admission Assessment Clinic, ‘Day Surgery’ or ‘Day of Surgery’ Admission and Discharge Planning.

Finally, this document does not set out to prioritise elective over acute or emergency surgery. Emergency surgical patients should be prioritised according to their clinical need. How this is managed is an issue of organisational efficiency for providers who wish to maintain both services. Preferably there should be a separation of elective from emergency work at all levels. Thus, those scheduled to do elective work should not be also responsible for an emergency workload at the same time. Therefore, the case must be made for an on call rota that clearly protects elective time, but also that emergency theatre time is available to deal with those cases.

Background

Even though Ireland has a younger population, patients spend up to almost two days longer in hospital for the same procedures. Our Average length of stay is among the longest in OECD. This is concerning as our population ages and the demand for surgical procedures increases.



Source: HPE 2005 & UK Department of Health

In 2007, the Acute Hospital Bed Capacity Review identified that, of the elective surgery patients, 31% did not meet both the timeliness and location criteria, meaning that the patients were admitted to acute hospitals earlier than necessary in 75% of cases and that the surgery could have taken place in a non-acute in-patient setting in 37% of cases. (2)

The ability of surgeons to efficiently deliver elective surgery has become very difficult because of a perceived problem that hospitals are being overburdened with Emergency Department admissions of, in particular, patients with acute and chronic medical conditions. (3,4) Whilst this has led to a lack of capacity for elective surgery patients, elective surgery itself has become an inefficient user of available resources due to inconsistent and inefficient practices and pathways being carried out for patients who may be processed in an entirely different manner for the same procedure in different hospitals.

The most influential factor in determining appropriateness of bed utilization is how the care system manages the patient, rather than the characteristics of the individual patient. To date there seems to have been an over-emphasis on managing emergency services without addressing the 'whole hospital' system. Thus, the Acute Medical, Chronic Disease and Elective Surgery Programmes of the Clinical Strategy and Programmes Directorate of the Health Service

Executive are aiming to address these issues, not only to free up capacity, but also to provide better patient care, more efficiently.

Surgery absorbs a substantial amount of healthcare resource with the cost of a hospital bed approaching €1000/day (€ 160=variable); and an operating theatre €2.5 million per year (50%=variable). It is therefore imperative that these facilities are used to optimal advantage. To date, our health service funding mechanisms have relied on the 'block grant' system which, in turn, depends on the evaluation of diagnostic related groups (DRGs). This device is poorly understood by many of those working at the coal face but, most importantly, it does not incentivise performance or reward efficiencies but rather has acted as a disincentive. DRGs are calculated in part from Hospital In-patient Enquiry (HIPE) codes for surgical procedures and, as there is little engagement with this activity by clinicians, there have been well voiced concerns as to the accuracy of our national data and their precision as a source of funding.

The Clinical Strategy and Programmes Directorate

The Clinical Strategy and Programmes Directorate, has led the development of the Acute Medicine, Emergency Medicine, Primary Care, Chronic Disease Programmes, Elective Surgery and other Programmes and each has mutual dependencies for its success. The vision is to embed a cycle of continuous improvement in Access, Quality and Cost throughout healthcare through these programmes. Each programme, including Elective Surgery, has been charged with defining its priority areas and agreeing targets, adhering to guidelines and pathways, giving accountability to clinicians for both resources and decisions, providing transparent and objective data, and generating sustained improvement. Each programme is aimed at identifying the need for change in terms of efficiency, effectiveness and appropriate resource utilization. (2, 8-10) Put simply, the drivers are improvements in access, quality and cost.

What is the Elective Surgery Program aiming to achieve?

While the overriding motive behind the Elective Surgery Programme is to provide patients with a smoother, safer and more efficient journey, the secondary aims are to provide more accurate data by engaging surgeons in the HIPE process and incentivising them by providing better planned hospital resources for their use, mainly by ring-fencing beds, as a reward for achieving better performance goals.

In **The AVLOS sub-Programme** (average length of stay) we have agreed a list of the more common procedures carried out by surgeons in all specialties. We have identified their HIPE codes and we have agreed targets for Day Surgery and the average length of stay for 'stay' patients. In other words, for some procedures that should mostly be performed as Day Surgery we have agreed a Day Surgery rate. For those that require in-patient stay, better targets for average length of stay have been agreed. By agreeing and achieving these targets surgeons will be provided with protected beds.

There are a number of ways that these better targets can be achieved and these are the main subject matter of this guide - **The 'Elective Surgery Model of Care' sub-Programme**. Pre-admission Assessment Clinics are an understandable means of shortening length of stay because they facilitate the full pre-operative work-up of patients before hospital admission. Good Day Surgery process and activity should increase both the range and volume of cases that can be performed as a day procedure, thereby shortening hospital stay. Similarly, we now know that many 'stay' patients coming to elective surgery do not need to be admitted until the Day of Surgery, provided preparation is adequate. Finally, Discharge Planning as early as possible in the patient journey also has the potential to cut length of stay.

The third element of the Elective Surgery Programme is Audit - **The Audit sub-Programme**. Simply shortening hospital stay as a goal on its own is not appropriate without knowing some of the outcomes of that care. This programme is setting out to start simply by measuring some process outcomes such as length of stay and re-admission rates as well as some simple clinical outcomes. In addition, we will begin a National Audit of Surgical Mortality which will examine all deaths occurring during surgical care – both elective and emergency. Similar audits, such as the Scottish Audit of Surgical Mortality, suggest that deaths from adverse events could be reduced by as much as sixty percent.

The final element of the Elective Surgery Programme plans to introduce and disseminate a 'productive theatre' programme - **The Theatre sub-Programme**. The operating theatre is the common pathway for most surgical patients and for reasons of safety, efficiency and cost containment it is important that this resource is used effectively. The Productive Operating Theatre is a comprehensive package designed by NHS Innovation to improve the patient experience as well as outcomes by increasing the safety and reliability of care, improving team performance, adding value and improving efficiency. Part of this programme focuses on the use of World Health Organisation checklist and requires teams to carry out 'briefing' and 'debriefing' sessions. (5) These and other similar team working programmes and checklists have now been shown to significantly reduce patient morbidity and mortality rates. (6, 7)

In summary, the Elective Surgery Programme aims to improve the patient journey along the elective surgical pathway by delivering on Access, Quality and Cost.

Access, by:

- Reducing waiting times and abolishing cancellations
- Optimising rates of day surgery in line with best standards for day surgery
- Optimising average length of stay patients (AVLOS) for common elective in-patient surgical procedures.
- Reducing re-admissions rates as a result of standardised best practice care pathways

- Improving access to theatre resulting from an operational excellence program

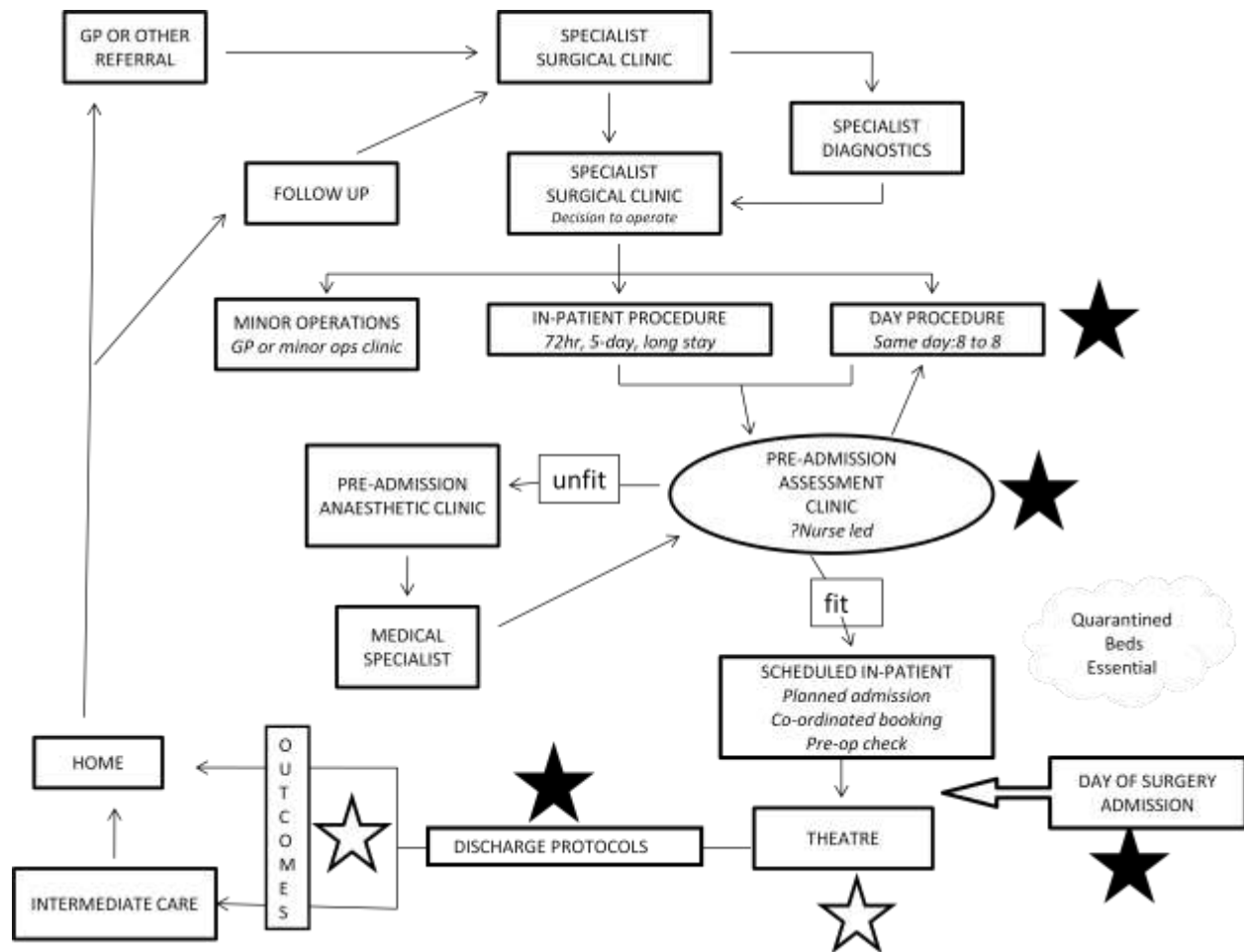
Quality, by:

- Improving access to elective surgery admission
- Shortening length of stay
- Standardising care pathway models and categories of admissions
- Auditing clinical and process outcomes, nationally
- Improving patient care through effective resource utilisation
- Benchmarking ourselves against best international standards
- Providing information to patients that is easily understood
- Improving communication with patients, their families and Primary Care

Cost, by:

- Reducing cost to patient of delays, cancellations and complications
- Reducing bed stay costs
- Improving unit cost of treatment
- Reducing National Treatment Purchase Fund (NTPF) referrals
- Optimising operating theatre resource

The Patient's Elective Surgery Journey



The ideal elective patient journey, as outlined, starts with a patient referral to a surgical clinic. At the surgical clinic a diagnosis will be made or confirmed and, maybe, after a series of investigations, assessment and multi disciplinary team discussions, the diagnosis will be confirmed including any other ramifications such as staging, adjuvant treatments etc. In order for the elective journey to be efficient and timely it is crucial that radiology, laboratory and other

tests are performed as expeditiously as possible, necessitating a minimum number of hospital visits for the patient. Hospital outpatient clinics should be coordinated where possible.

When the decision is made to operate, a process is then set in train depending on whether the patient requires a Minor procedure, a Day procedure or In-patient procedure. Minor procedures are not dealt with in this document – many can be performed under local anaesthetic by a General Practitioner or in an out-patient “minor ops” room. It is wasteful and unnecessary to perform these procedures in a substantive operating theatre.

Our aim in this manuscript will be to address the patient journey for Day and In-patient procedures, bearing in mind that the majority of all patients requiring In-patient procedures (75% according to international figures), need not, as traditionally was the case, be admitted the night before but should be admitted on the day of surgery – as, so called, Day-of-Surgery or DOSA admissions.

Ideally when the patient leaves their last attendance at the surgical clinic they should have a **SURGICAL CARE PLAN**, communicated to their General Practitioner. (See: **APPENDIX 1**):

The next port of call should be the Pre-admission Assessment Clinic, to which all elective surgery patients, excluding minor procedures, should ideally attend, and is described in Chapter 2.

From the Pre-admission Assessment Clinic the patient will then be admitted as a Day Procedure – the set up is described in Chapter 3 – or, as In-patient. For the latter, the patient should be admitted to hospital so that there is as short a time as possible before surgery, preferably on the morning of surgery. (See: Chapter 4 – Day of Surgery admissions) This means that all necessary information and preparation must be carried out and accurately documented beforehand so that the admission process is safe, well informed and slick.

An **absolute pre-requisite** for efficient, cost effective and a smooth patient flow through the elective process demands the provision of quarantined, protected or **ring-fenced beds** whether Day or In-patient. For this programme to work the provision of ring-fenced beds has been guaranteed provided surgeons both agree and aim to meet targets for length of stay.

After surgery and a reasonable recovery period, it is well documented that patients should stay in hospital for as short a time as possible. To this end Discharge Planning should begin at the outset of the patient’s elective surgical journey. (See Chapter 5 – Discharge Planning)

Enhanced recovery programmes have been shown to benefit patients undergoing colorectal, urological, gynaecological and orthopaedic surgery and they are starting to spread to other

major surgical pathways. Their benefits appear to be substantial but remain specialty specific at this point, should be implemented locally and are not covered in this document.

The dark stars in the pathway diagram highlight the areas around which the overall Model of Care which will impact and will be covered in the following chapters. The light stars highlight the other elements of the elective surgery programme, namely, the Theatre and the Audit Programmes.

The AVLOS programme should reflect the composite outcomes from all elements of the Elective Surgery Programme.

Overall Governance of the Elective Surgery Programme

The Elective Surgery Programme is not the sole prerogative of surgeons and anaesthetists and their patients. It requires whole teams working together including surgeons, anaesthetists, nurses, allied health professionals, hospital administration working in collaboration with primary care. Its overall governance within hospitals requires,

- The establishment of an Elective Surgery Programme Steering Group which should
 - Include leads for surgery, anaesthetics, nursing management, allied health professionals and hospital management and local General Practitioners.
 - Hold regular operational meetings (minimum quarterly) with Working Groups to review performance metrics
 - Report on measures, accountability, actions and completion dates for actions
 - Be accountable to the institutional executive management team
- The adoption of Elective Surgery Programmes of Care including Average Length of Stay (AvLOS), Audit and the Productive Theatre Programmes
- The establishment of a local level plan to achieve the agreed target on AvLOS and day case rates.
- Facilitating the elective patient journey by incorporating the requirements as outlined below

Integrated Care Pathways

One of the aims of this document is to provide information and support to encourage the development of **local** Integrated Care Pathways (ICP) for elective surgical patients.(11,12) A care pathway is intended as a guide to treatment and an aid to documenting a patient's progress. It is a tool, or systematic process, which is locally agreed by a multidisciplinary team

(MDT) and should outline the anticipated care aimed at helping a patient with a specific condition or set of symptoms move progressively through a clinical experience to positive outcomes and in a timely manner. It is based on guidelines and evidence, in this case, for patients undergoing elective surgery, such that as much as possible of the journey forms part of the clinical record, documenting the care given and allowing outcomes to be monitored and improved upon.

It should:

- Promote best practice from referral by Primary Care through the decision to operate and continuing into hospital discharge and beyond
- Be designed, implemented and monitored locally by an MDT which is integrated across primary and secondary care
- Allow evaluation of evidence based care in a more structured way
- Support efficiency and cost containment while minimising repetition, duplication and waste
- Support clinical governance while improving risk management, process design, clinical effectiveness and continuous quality improvement
- Help to reduce unnecessary variations in patient care whilst allowing variations from the pathway as may occur when clinical freedom is exercised to meet the needs of the individual patient
- Foster better communications between disciplines, teams, staff in general, and patients and their General Practitioners. (See, for example: <http://www.stjames.ie/Patients/PatientBooklets/waiting%20for%20heart%20surgery.pdf>)

A Cochrane review in 2009 showed that clinical pathways are associated with reduced in-hospital complications and improved documentation without negatively impacting on length of stay and hospital costs. (13)

Implementation of ICPs are best guided by a process map which will help to define the sequence of steps and activities performed during delivery of care, the specific responsibilities for these steps and activities, the relationships that exist between the different individuals and departments in the process, the potential problem areas and opportunities for improvements in current practice. Integral to the process of elective surgery planning requires a **Waiting List/ Admissions Coordinator/Bed Manager for Elective Surgery**. It also requires a GP liaison structure.

The guidelines and pathways outlined in the following chapters are generic and, as such, are not directed at any specific surgical specialty or hospital but rather are aimed at being a resource for all specialties and hospitals where elective surgery is performed.

Indicators of Quality for Patients leaving the Surgical Out-patient Clinic

- For each elective surgery patient, a surgical care plan and its components are documented and set in motion as set out in the Model of Care for Elective Surgery
- Patients receive verbal and, in most cases, written documentation about their procedure and its potential complications
- Patients receive an estimate length of stay
- There should be documentary evidence of a patients' consent if they are happy
- An appointment is made for attendance at a Pre-admission Assessment Clinic
- Details of planned surgery are conveyed to the Primary and Community Care Team
- Patients receive education on post-operative needs e.g. dietary, mobility aims
- There is a dedicated Waiting list/Admission Coordinator/Bed Manager for elective surgery patients

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APPENDIX 1 - THE SURGICAL CARE PLAN

Should include:

- The planned surgical procedure(s) and surgical site (crossed checked)
- Indication of how the procedure is to be performed – Day Case, In-patient 'Day of Surgery' or 'Day before'.
- Details about the diagnosis and any attendant known co-morbidities.
- Details regarding past history of colonisation with a multidrug resistant organisms (eg MRSA)
- The anticipated length of time of the procedure.
- The likely type of anaesthetic (Pending discussion with the anaesthetic team)
- A signed patient consent form. Patients should be given written details, often in the form of leaflets or web-based content, about their procedure and its potential complications. (10)
- Specific instructions about any necessary pre-operative preparations, for example, skin preparation, bowel preparation, stoma care, MRSA screening as per national guidelines, physiotherapy, occupational therapy etc
- Planned prophylaxis (Antibiotic or DVT) dictated by international guidelines
- Anticipated blood loss and requirements – Group, Group and hold, or Group and X-match
- Anticipated length of stay – the start of discharge planning (See Chapter 5)

CHAPTER 2

Pre-admission Assessment Clinics for Surgery

Introduction

Safe and efficient surgical and anaesthesia practice requires an optimized patient. This means that all patients undergoing elective surgery should undergo out-patient pre-admission assessment that is centred on preparing the patient and their family for the proposed surgery.

The primary goals of pre-operative evaluation and preparation are to:

- 1) Provide the patient with a hospital identity and records.
- 2) Assess the patient's health status, investigate medical risk factors and optimize their condition.
- 3) Integrate social, personal, laboratory and radiology information from primary care into hospital record, electronically if possible
- 4) Educate the patient about any planned surgical and anaesthetic procedures and their pre-admission and pre-operative care plan.
- 5) Perform pre-operative investigations and screening, as appropriate, and have a clear process for the management of abnormal results in advance of admission
- 6) Assess the patient's level of independence, home support and social circumstances
- 7) Begin the discharge process

Pre-admission anaesthetic services decrease cancellations on the day of surgery, reduce investigations and reduce patient anxiety (1-4). In addition the experience of most pre-admission assessment clinics (also known as pre-operative assessment clinics or pre-assessment clinics) suggests that indirect financial gains from a cost effective clinic can be significant when the benefit of reducing surgical delay or cancellation, unnecessary preoperative testing and length of hospital stay are considered (5-6). There is also evidence that pre-admission assessment clinics may improve outcomes (7).

Pre-admission assessment varies greatly between hospitals. Each hospital has its own method of pre-operative assessment based on the needs of its patients and the requirements of the anaesthetists and surgeons. Our aim is that all patients requiring elective surgery of a substantial nature and often requiring general or regional anaesthesia should be fully worked up prior to hospital admission. This will demand a significant expansion of pre-admission assessment clinics which, of itself, will require strong clinical leadership and commitment in order to set up the necessary infrastructure (including facilities, audit tools, computerised records etc) and staff recruitment and training (nursing, clerical/administrative and support staff). The administration and running of pre-admission assessment clinics must be part of the agreed

job plans of consultant anaesthetic staff and the importance of such clinics in the development of surgical services demands the attention of hospital management.

Role of a Pre-admission Assessment Clinic

The role of such a clinic should be to assess all patients for operation requiring general or regional anaesthesia in advance of admission, whether for **day surgery** or **in-patient surgery**. Internationally, it is now recognised that 75% of patients who require in-patient surgery are admitted on the **day of surgery** and this now is our national target. Pre-admission assessment clinics are an important element in achieving this target by ensuring that patients are prepared, investigated and optimised **before** admission to hospital.

The role of such a clinic is to:

- Organise and facilitate the admission of patients undergoing surgical procedures including day surgery and day of surgery admission for in-patients - those usually undergoing surgery of greater complexity.
- Ensure agreed communication and referral processes with General Practitioners
- Establish good communication with the patient, their carers, primary care team and all relevant personnel involved in the care of the patient.
- Gather patient information including history and examination.
- Provide immediate access to and assessment of appropriate patient investigations (including the need for screening for multidrug resistant organisms such as MRSA).
- Have a clear process in place for the management of positive and/or abnormal investigations, including the need for pre-operative MRSA decolonisation and nutritional screening as required.
- Have clear referral pathways with timely access to medical and nursing specialists and to acute or community based AHP services such as, clinical nutritional / dietetic services for assessment of significant weight loss, obese or malnourished patients, physiotherapy for falls management etc.
- Provide a comprehensive information package specific to each or any surgical procedure that takes into account the patient's social, cultural and ethical background.
- Provide specific information regarding anaesthesia related issues, for example, fasting and medication management guidelines. (See, for example, **APPENDIX 1 – Guidelines for pre-operative fasting and for the administration of medication peri-operatively**)

- Optimise the patient's condition prior to surgery by integrating with primary care - examples including weight optimisation, smoking cessation and exercise programmes, as necessary.
- Plan the management of a patient's medications prior to admission, such as surgical antibiotic prophylaxis, anticoagulant or diabetic treatment in agreement with Primary Care.
- Anticipate and plan for any specific type of post-operative care, for example high dependency or intensive care.
- Start planning the discharge process by providing advice and education with regard to post operative care and liaising with Primary and Community care. (see Chapter 5)
- Establish clear points of contact for the patient throughout the peri-operative period by closely liaising with Day Care Unit and wards.

Organisation of a Pre-admission Assessment Clinic

There are several models available for the organization of pre-admission assessment clinics. Mostly they are directed by a consultant anaesthetist and led by a specialist nurse(s). The form that a particular clinic may take will depend on such factors as hospital size, complexity of surgery, as well as the availability of facilities and personnel. The ideal working environment is a purpose-built pre-admission assessment unit with separate examination rooms.

Patients should be seen immediately after, or as close as possible to, their most recent surgical, pre-operative out-patient appointment. A 'one stop' clinic should ideally be the 'standard of care' as it offers significant advantages to the patient in terms of convenience. However, patients must understand that they may have to return for further pre-admission assessments if further investigations or consultations are required. These may be conducted by telephone or web, if available.

A **Working Group** should establish the governance structure and develop the service locally for each surgical service as appropriate. Such a team should include,

- An anaesthetic, pre-admission assessment consultant, as group leader
- A lead nurse
- Senior nurse manager
- A theatre manager
- A consultant surgeon
- Representation from senior management
- Representation from radiology, laboratory and representatives from allied healthcare services, as appropriate

- The Waiting list/Admission Coordinator/Bed Manager for elective surgery patients
- Primary Care Team/Network representative e.g. GP and PHN Liaison

Patient management where possible should be protocol driven. Protocols should be designed based on those nationally agreed, where these are available, but may require adaptation to suit local facilities and resources and should be regularly updated. Ongoing supervision, training and education should be provided to all staff who must have the necessary competencies.

Close links and communication should be established between the relevant surgical clinics as well as with the Admission Co-ordinators/Bed Managers and Admission Assessors who will check all documentation including patient consent, availability of tests (check listed), clinical notes and any specific instructions, whether the patient is due to undergo Day Surgery, In-patient or Day of Surgery admission. Explicit instructions should be provided to the patient including date and time of admission, fasting requirements, and preoperative medications, where to go on arrival at the hospital, what to expect on the day of surgery, an estimated length of stay and post operative expectations. It is imperative that patients are assessed in a timely manner to ensure that relevant investigations are up to date and to avoid unnecessary patient anxiety.

The Clinic itself - Pre-admission Assessment

Pre-admission assessment must be directed by, and may be led by, a Consultant Anaesthetist. However, Nurse led pre-anaesthesia evaluation is becoming the norm for many surgical disciplines and it is usually carried out within an algorithm as outlined in **APPENDIX 2**, under the supervision of, and with immediate access to consultant anaesthetic support. This extended role for nurses has been shown to be safe and cost effective. (8-9)

The nurse in charge of Pre-admission Assessment should be at the minimum of CNS (Clinical Nurse Specialist)/CNM2 level. According to service need, the role of Advanced Nurse Practitioners in pre-admission assessment may be explored. The role of the Pre-admission Assessment Nurse includes:

- Providing clinical leadership and leading nursing practice.
- Developing nursing protocols for the assessment and management of patients in the units.
- Evaluating patients through the use of pre-operative assessment forms (see below).
- Identifying high risk patients for referral to a senior anaesthetist.
- Ordering appropriate investigations as per protocol.
- Ensuring patients are screened for multidrug resistant organisms (e.g. MRSA) as recommended in national guidelines

- Ensuring patients are screened for nutrition status with onward referral to dietetic services as required
- Following up on results and communicating abnormalities to relevant Consultant/GP.
- Implementing and providing preoperative instructions.
- Liaising with the patient's surgical team, primary care doctor, medical team, specialist nursing or AHP's as necessary.
- Liaising with Waiting List/ Admissions Coordinator for Elective Surgery and Discharge Co-ordinator/ the Day Unit and wards through clearly developed protocols.
- Providing information and acting as a point of contact during the pre-operative period
- Making sure all relevant information is available for the 'attending' anaesthetist

The number of nurses required depends on the number, throughput and acuity/complexity of elective patients, for day surgery or day-of-admission surgery that need to be processed per week. The work of nursing staff in pre-admission assessment should conform to their scope of practice. They should be competent in areas such as: patient assessment, the principles of infection prevention and control, venepuncture/cannulation, ECG recording, basic observation, modified early warning scoring, nurse prescribing of medicinal products and radiology (ionising radiation) prescribing. (10) Whilst recognising the results of a 2010 survey which found an overall risk of malnutrition in 33% of patients admitted to Irish hospitals, training should include the use of a validated nutrition screening tool, such as, the Malnutrition Universal Screening Tool (MUST). (11, 12)

Please note that this is not an exhaustive list of competencies that the nursing staff may require but they should be trained to take a systematic approach ensuring that all patients receive a similar and equal pre-admission assessment. This systematic approach ensures that nurses undertake a review of the patient's medical history and patient information, a medicines review, and a nursing and social assessment.

The nursing documentation used is prepared in advance so that it guides the nurse through the pre-admission assessment process in the same way each time. This systematic approach also benefits the rest of the anaesthetic and surgical teams which is able to access the same type of information written in the same place for each patient, thus minimising confusion and improving reliability.

The assessment process can be divided into five stages:

- Stage one: medical and social history
- Stage two: physical examination
- Stage three: investigations and clinical scores

- Stage four: information collating
- Stage five: information giving

Stage one: medical and social history

On arrival at the clinic patients should have a GP referral letter which has been agreed with the GP liaison committee. Patients are then given a health questionnaire that is designed to address each system of the body. For booked appointments a health questionnaire can be completed in advance and sent out with the appointment. This is not a substitute for the pre-operative interview but acts as a source of additional information and reduces time spent asking basic questions. However, telephone and web-based interviews are being used more commonly as time-saving devices.

In the clinic, while the patient completes the questionnaire, the nurse reads through the patient's notes and surgical care plan sheet checking for any relevant information. Once the questionnaire has been completed the nurse validates the information given and questions further any areas of potential anaesthetic or surgical risk that have been identified. (See: **APPENDIX 3 – Sample history form for the pre-admission nurse assessor**; and, **APPENDIX 4 – Pre-admission questionnaire for children**) The ultimate questionnaire including a drug and allergy history is then filed in the patient's notes and forms part of the nursing documentation. This can then be accessed by all members of the team. Adequate training is essential to ensure that nursing staff are competent to elicit enough information about the patient's symptoms to allow the anaesthetist to begin to quantify risk. Of particular importance is the ability to assess a patient's exercise tolerance or functional capacity. Stair climbing capacity has pre-operative prognostic importance and may even predict the risk of complications post-operatively.

The nurse should also inquire concerning the infectious disease status of the patient and assess risk factors for colonisation with multidrug resistant organisms, such as MRSA, in order to decide if screening is indicated at this stage. National guidelines recommend that the following patients are screened for MRSA colonisation: (13,14)

- Patients previously MRSA colonised
- Patients being admitted from another health-care facility (e.g. long term care facility/hospital)
- Patients with non-intact skin, including wounds and ulcers
- Patients due to undergo elective, high-risk surgery (e.g. cardiothoracic or orthopaedic implant surgery)
- Patients requiring renal dialysis

Other patient groups may also be included in a pre-operative screening programme, as determined by local risk assessment.

The GP referral letter will be reviewed to document the current medication and allergies. A drug history will also be taken at this stage and documented on the patient's questionnaire. The information serves to inform the nurse of the patient's current health status and enables any alterations to medication regimens to be made pre-operatively. Hospitals need local policies written by anaesthetists that allow nurses to advise the patient to stop taking drugs such as aspirin, clopidogrel and metformin in the immediate pre-operative period. The policies should be specific regarding the circumstances in which members of the nursing team are allowed to provide such advice. For example, if the patient has a complex medical history the nurse must seek instruction from the anaesthetist, surgeon or cardiologist before altering any medication regimens. The risk of continuing to take the drug is carefully assessed against that of increased intra-operative risks.

The identification of patients' needs during pre-operative assessment means that most individuals can be discharged as soon as they are medically well and with the best possible support at home already in place. (see Chapter 5 Discharge Planning)

Stage two: physical examination

Pre-operative assessment will include the patient's baseline measurements including pulse, blood pressure, temperature, height, weight, body mass index, neck movement, airway assessment, auscultation of the heart and lungs and oxygen saturations on air as well as their normal capabilities. This is usually the first contact that nursing staff and the anaesthetist will have with the patient and is an ideal opportunity to observe the individual's normal physical function, for example, as he or she mobilises or gets changed for the ECG. Problems can be identified at this stage and AHP's may need to be involved with for example, physiotherapy to assess function mobility and exercise tolerance or occupational therapy to assess for assistive technology and or adaptations. This can be planned for in advance. Allied Health Professional assessment may include referral preoperatively to primary care services in order to optimise the patient's health function and mobility and to put in place systems to support their discharge. Pre-operative assessment should also include documentation of any potential source of infection, or underlying condition that might increase the risk of surgical site infection (e.g. colonised venous ulcers, exfoliative skin condition).

Stage three: investigations and clinical scores

Patients may require routine investigations such as ECG and blood tests according to local guidelines. However, evidence suggests that 60-70% of pre-operative testing is unnecessary, expensive, labour intensive and of questionable value if a proper history and physical examination are carried out. (15) Although pre-operative assessment is valuable, a thorough clinical assessment ensures that tests requested are based solely on clinical need.

Routine screening tests that should be performed on asymptomatic healthy patients scheduled to undergo surgical procedures with ASA grade 1-2 involving no major blood loss:

Age (years)	Test indicated for men	Tests indicated for women
Under 18	none	All of childbearing age - Pregnancy test
Over	none	All who state that there may be a possibility that they are pregnant - Pregnancy test.
50 & over	E.C.G.	E.C.G.

Sickle cell tests should be performed on families with ancestry that is African, Afro-Caribbean, Asian, Middle Eastern and East Mediterranean.

Additional investigations such as echocardiogram, spirometry, chest or cervical spine X-rays are usually ordered after discussion with the anaesthetist to ensure that they are necessary. All patients with a history of significant pre-existing medical disease should have their appropriate laboratory studies ordered to document the current status and stability of that disease process (e.g. a patient with history of hypertension should have an E.C.G.). Also, any patient with a changing medical status should be re-evaluated and laboratory studies should be re-ordered accordingly. All patients where screening for multidrug resistant organisms is indicated should be screened accordingly and decolonised as appropriate. Surgical antibiotic prophylaxis for patients colonised with multidrug resistant organisms may need to be altered to cover these organisms – this should be discussed with a Consultant Microbiologist in advance. All investigations, in particular abnormalities, should be the responsibility of the person ordering the tests or there should be a clear line of delegation.

In 2003, the National Institute for Health and Clinical Excellence (NICE) produced a guideline for the selection of pre-operative tests based on a review of the available evidence.(16) This suggested that abnormal test results led to only a small proportion of patients requiring altered clinical management, thereby questioning the value of pre-operative assessment. As a result a traffic light system was developed as a tool, indicating the necessity of testing according to the patient's physical status and co-morbidity. The tool has several sections according to the type of surgery, for example, minor, intermediate or major. Each section has different options depending on the age and specific co-morbidity of the patient. For example, a patient with cardiovascular disease aged 40-60 years would be identified on a grid and this would also

include an ECG and relevant blood tests. The information on the grid allows a colour guide to be identified indicating whether a test is required or not for that particular patient.

Diagnostic testing and obtaining test results often cause delays for patients waiting to access the service and could lead to a delay in scheduled operations. To prevent this, tests should be requested well in advance, with pre-operative assessment taking place at least one month before the operation date.

Clinical grading allows the anaesthetist to assess quickly the risk associated with a planned procedure. During stage three nursing staff are also required to score patients using tools such as the American Society of Anaesthetists Grading (ASA). (17) An airway assessment is carried out to identify which patients may be difficult to intubate. Patients found to have significant risk factors should be referred to the anaesthetist. The anaesthetist may then give written instructions for further investigations or referrals to other specialists such as the cardiologist or the patient's GP.

Stage four: information giving

Once the assessment is complete the patient is provided with written information (which must conform to National Adult Literacy Agency guidelines) detailing the details and risks of the operation and the anaesthesia planned or alternatives such as spinal anaesthesia. It is important that the patient is given the opportunity to ask questions, which should be answered clearly taking care to avoid medical jargon. If the patient is subsequently found to be colonised with a multidrug resistant organisms such as MRSA, the patient should be informed, given appropriate information (including a patient information leaflet) and the communication clearly documented in the medical records. If the patient has a question that only the surgeon or anaesthetist can answer, the pre-admission assessment nurse should try to contact him or her on the patient's behalf.

For patients and their families, anaesthesia and surgery can be a stressful and daunting prospect.

The pre-admission clinic can allay patients' fear and anxiety through clear explanation, written information and appropriate discussion. (10) Finally, patients should be advised to contact the clinic if there are any changes to their condition or he/she is unwell before surgery.

Stage five: information collating

A seamless patient journey along the elective surgical pathway requires information to be collected and passed along the surgical and anaesthetic teams at each step in the same format within the chart, so that checks can be carried out but repetition is avoided. The output from the pre-admission assessment clinic together with the surgical admission (and consent) form will inform the patients admission check, whether day case, day-of surgery or full admission; the

pre-operative checklist on the day that surgery is carried out; and will also start to inform the discharge planning process. (See: **APPENDIX 6 – Sample pre-operative assessment form**)

Role of Anaesthesia in Pre-admission Assessment

Hospital anaesthetic departments are responsible for providing both a Lead Consultant as well as overseeing senior staff (Anaesthetic Consultants and/or Specialist Registrars) to deliver, with hospital management, the service of pre-admission assessment clinics.

A Lead Consultant Anaesthetist with an interest in pre-operative assessment and optimisation should oversee the pre-admission assessment clinic. Their role should be to,

- Provide leadership in the governance of the pre-admission assessment clinics
- Develop and oversee the introduction of protocols and proforma
- Regularly review and update protocols
- Establish relationships with key stakeholders
- Monitor and audit clinic activities
- Supervise the education of specialist nurse practitioners
- Oversee clinics in rotation with colleagues

The Overseeing Anaesthetist, during the day to day workings of the clinic, should,

- Provide back up and support for the lead nurse
- Be familiar with all relevant protocols
- See all high risk patients
- See patients who require optimisation of co morbidities
- Communicate with patients and their carers, where necessary
- Communicate with anaesthetic colleagues and other specialists, where necessary
- Make sure all relevant information is available for the 'attending' anaesthetist
- Communication with other specialists including surgeons, physicians and primary care
- Use the clinic as an educational opportunity for undergraduate and post graduate students when appropriate

The 'attending' anaesthetist who administers the anaesthetic at surgery is ultimately responsible for the decision to proceed with anaesthesia and the type of anaesthesia that is undertaken. As such the attending anaesthetist must see the patient prior to surgery and ensure that all pre-operative checks have been performed, to check compliance with protocols and discuss additional aspects of anaesthetic care with the patient if required. (10) All preoperative investigations, results and documentation must be available to the attending anaesthetist. Good communication between the pre-admission assessment clinic and the attending anaesthetist is essential.

Risk Reduction and Service Monitoring

Pre-admission assessment clinics need to ensure that their patient selection and assessment criteria will adequately guide the preoperative screening and evaluation process. It is necessary that reliable processes are in place that allow for timely and adequate assessment of patients.

Pre-admission assessment clinics should be continuously audited and evaluated, looking at both process and clinical outcomes from the perspective of patients, medical and nursing staff and hospital management.

Outcome measures should examine such issues as unplanned admissions, day of surgery cancellations, failure of communications and patient satisfaction (18). Such outcomes should be reviewed and acted upon by the Working Group to continually improve the service provided.

Performance Metrics for Pre-admission Assessment Clinics

Should include:

- Patient numbers and non-attendance at clinics on a monthly basis
- Waiting times for clinic appointment
- Number of charts where all appropriate investigations are performed and results are in chart on the day of admission
- Number of surgery cancellation after Pre-admission Assessment
- Patient satisfaction score

Indicators of Quality of Pre-admission Assessment Clinics

- The Clinics assess all elective Day Surgery and Day of Surgery admissions
- A Working Group is established as set out in the Model of Care for Elective Surgery
- The Working Group is led by a Supervising/Lead Anaesthetic Consultant
- There are additional Overseeing Consultants Anaesthetists as may be necessary
- There is a Lead Nurse at CNS/CNM2 grade
- There are adequate support nurses and staff who have the necessary competencies
- Allied health professionals are included in the pre-assessment process, as appropriate
- The Clinic is assigned a discrete area that is in close proximity and concurrent with surgical clinics, where possible
- Investigations, where necessary, are carried out, reported and followed up in a timely manner according to protocol
- Patient elective surgery cancellations <5%
- Activity, patient satisfaction and audit is monitored through the Working Group at monthly or bimonthly meetings

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APPENDIX 1 - GUIDELINES FOR PREOPERATIVE FASTING

Before Surgery

In general, fasting should be undertaken to include:

- 6 hours for solid food, milk
- 2 hours for clear fluids (clear fluids should be non-particulate and non-carbonated e.g. water)
- 4 hours for babies on breast milk

Unless specified otherwise by the Anaesthetist, the following fasting times are recommended:

Patients for morning lists (starting @ 08.00)

- Food until midnight
- Clear fluids until 04.00

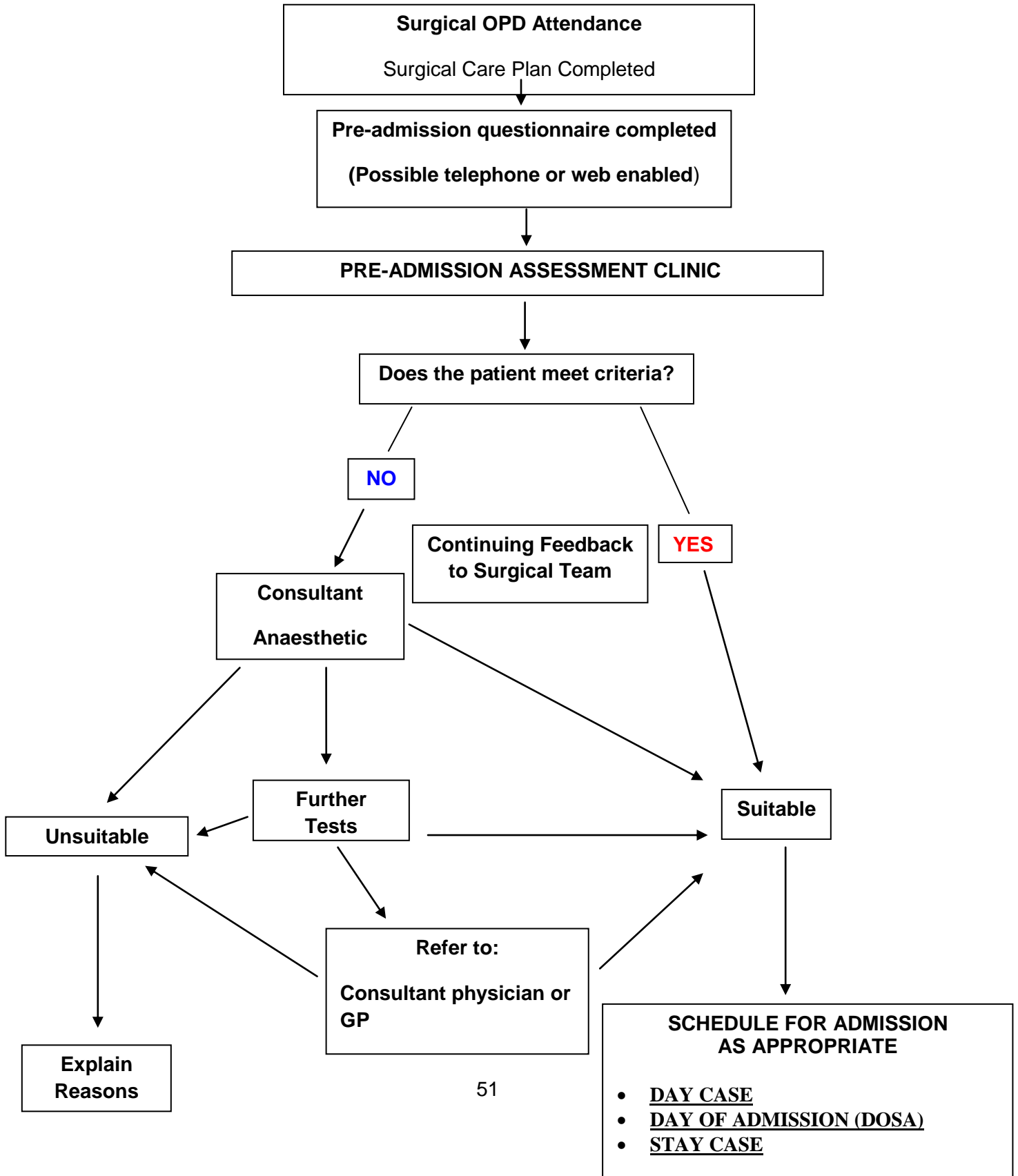
Patients for afternoon lists (starting @13.00)

- Food until 07.00
- Clear fluids until 11.00

GUIDELINES FOR THE ADMINISTRATION OF MEDICATIONS PERI-OPERATIVELY

- Unless otherwise specified by the Anaesthetists all regular Medications should be administered in the morning of the surgery except:
 1. Oral hypoglycaemic Medications
 2. Diuretics
 3. Anticoagulants
- Medications should be administered as charted with up to 30ml of water to aid swallowing up to two hours before surgery
- Postoperatively, oral medications can be given as charted when free oral intake is established
- The Anaesthetist should be contacted if there are any queries.

APPENDIX 2 - Pre-admission Assessment Algorithm



APPENDIX 3 - SAMPLE HISTORY FORM FOR PRE-ADMISSION NURSE ASSESSOR (17)

Does the patient, now or in the past, had any of the following?

If **YES** please comment

	YES	NO	Comment
Breathlessness: Walking/Climbing/Stairs/ Lying Flat			
Lung Problems: Asthma Bronchitis Hay Fever			
Hypertension			
Angina/Chest pains			
Chest Pain on exercise or at rest			
Heart Problems: Heart Attacks Heart Murmur Palpitations			
Epilepsy: Convulsions Fits Fainting Easily Blackouts			
Arthritis or Joint Restrictions			
Muscular Disease or Progressive Weakness			

Anaemia or Blood Disease			
Excessive Bleeding / Bruising / Clotting Disorder			
Jaundice or Hepatitis			
Diabetes or sugar in urine			
Hiatus Hernia/Heartburn/Indigestion/Ulcers			
A Blood Clot / Thrombosis or Embolus			
Thyroid Problems			
Kidney or Urine Problems			
Rheumatic Fever / TB			
Stroke / TIA			
Exfoliative skin conditions / skin ulcers / other wounds			
Do you see your GP for any other health problems			
Any other serious illness			

Questions for the patient:

	YES	NO	COMMENT
Do you have any body piercing?			
(If female) are you or could you be possibly pregnant?			
Have you ever had an operation or anaesthetic before?			
Have you or your family ever had a problem with an anaesthetic?			
When was your last General Anaesthetic?			
What operations have you had before, if any? (a) (b) (c)			
Is there anything else you think the Surgeon, Anaesthetist or Nurse should know?			
Do you smoke? If so, how much?			
Do you drink? If so, how much?			
Are you presently taking any medication? (tablets, patches, injections, inhalers, oral contraceptive pill, prescribed/non-prescribed including vitamins, herbal			

remedies or recreational drugs)			
Is there any history of drug abuse, especially intravenous/			
Does the patient have any allergies or reactions to drugs, plasters, latex, food (eggs, avocados, bananas, peanuts, etc?)			
Do you have any history of hospital infections or contacts? (eg MRSA or other multidrug resistant organisms such as VRE / ESBL)			
Do you have: False, capped or crowned teeth? Contact lens or hearing aid? A pacemaker or implant?			
For Day Cases: Does the patient have a responsible escort to take him/her home following the procedure?			Name: Contact No:
Does the patient have any physical assistance at home, if needed?			
Does the patient have supervision overnight following the procedure?			
How long will it take you to travel home?			
Does the patient have a contact number?			Contact No:

APPENDIX 4 - Pre-admission questionnaire for children (17)

- Has your child had good growth, development, and exercise tolerance?
- Has your child been admitted to or frequently attended hospital?
- Has your child attended a doctor in the past 4 weeks?
- Has your child had any of these symptoms in the past 4 weeks: high temperature, rash, cough, cold, sore throat?
- Has your child been in contact with an infectious disease in the past 4 weeks?
Does your child have any heart problems?
- Has your child ever been short of breath while exercising or been blue around the lips?
- Does your child's chest ever sound wheezy and whistling?
- Does your child have any kidney problems?
- Has your child ever been jaundiced?
- Does your child bruise easily?
- Has your child ever had any convulsions or seizures?
- Does your child, or does anyone in the family, have nerve or muscle problems?
- Have your child or family members ever had problems with anaesthesia?
- Does your child have any other medical conditions?
- For female children: has your child started her periods?
- If yes, what was the date of her last menstrual period?
- Is your child allergic to any drugs (including antibiotics) or materials?
- Has your child received a vaccination in the past 10 days? (Current recommendations are that surgery may take place 48 hours following routine vaccinations)
- Have you/ your child ever been told that your child had MRSA and, if so, when and where?
- Does your child have any wounds or ulcers?
- Has your child been in hospital abroad in the last six months?
- Has your child any special needs or suffer from psychological problems or autistic spectrum disorder

APPENDIX 5 - SAMPLE PRE-ADMISSION ASSESSMENT FORM

(For completion by pre-admission assessment nurse)

Date of Assessment

Weight: _____ Kgs	Pulse:(/min)
Height: (spinal anaesthetics only):	Glucometer (if relevant)
Blood Pressure:	
Peak Flow (if relevant):	Temp: SPO ² :
Urinalysis:	Smoker: Yes <input type="checkbox"/> No <input type="checkbox"/> Per /day: Referral to smoking Cessation Yes <input type="checkbox"/> No <input type="checkbox"/> Alcohol Intake _____ approx per week
LMP: N/A <input type="checkbox"/>	Dentures / Crowns / Loose Teeth / Own Top <input type="checkbox"/> Bottom <input type="checkbox"/>
Gravidex Sent Today: Yes <input type="checkbox"/> No <input type="checkbox"/>	

Language Barriers: Yes <input type="checkbox"/> No <input type="checkbox"/>	Special Dietary Requirements
Anxiety Scale: None / Mild / Moderate / Severe	Slight Impairment: Yes <input type="checkbox"/> No <input type="checkbox"/> Glasses: Yes <input type="checkbox"/> No <input type="checkbox"/> Contact Lenses: Yes <input type="checkbox"/> No <input type="checkbox"/>
Prosthesis: Yes <input type="checkbox"/> No <input type="checkbox"/>	Independent: Yes <input type="checkbox"/> No <input type="checkbox"/>
ASA Grade:	Waterlow Score:

Anaesthetic Opinion required: Yes No

If YES: Anaesthetist informed:

Comments including any referral:

Outcome:

- **Accepted for Day Case** **Yes** **No**
Date / /

- **Deferred** **Yes** **No**

- **Overnight Stay** **Yes** **No**

- **Admit Day Before** **Yes** **No**

- **Accept for Day-of-Surgery admission** **Yes** **No**

Date / /

Needs anaesthetic review on morning of surgery **YES** **NO** **N/A**

Patient Agreement:

Fasting Requirements explained (written & verbal) **YES** **NO** **N/A**

Patient understands pre & post operative anaesthetic instructions **YES** **NO** **N/A**

Patient understands pain scores & proposed pain management **YES** **NO** **N/A**

A responsible escort (age 18+) is arranged for after discharge **YES** **NO** **N/A**

Patient's Signature: _____

Nurse's Signature: _____

Anaesthetist's Signature: _____

Date : / /

CHAPTER 3

Day Surgery: an Operational Guide

Introduction

Day Surgery provides a means of helping us to treat more patients faster and is therefore a key strand in shortening lengths of hospital stay. This guide is designed to help those involved in planning and managing day surgical services.

In 2009, The Economic and Social Research Institute (ESRI) published the first national review of Day Surgery rates in public hospitals using data from the hospital in-patient enquiry (HIPE) scheme.(1) Between 1995 and 2006, the day patient discharge rate increased by over 248%. However, focusing on the provision of the Basket of 24 procedures (adapted for Ireland), it highlighted the wide variations in Day Surgery rates and length of stay across acute public hospitals. Few hospitals performed well for all of the procedures delivered and those that did perform well were generally not performing a wide range of procedures.

A recent study of the current provision of Day Surgery in Ireland confirmed significant variability in structure and organisation. (2) Bed numbers were variable and in no unit was a consultant in charge. Only half of the units studied offered pre-assessment and there was inconsistent recording of performance metrics such as DNAs and adverse events. They identified seven barriers to the implementation of Day Surgery:

1. Custom, practice and culture and lack of clinical governance.
2. Lack of, or need for equipment including Day Surgery theatres and capital investment.
3. Organizational including the need for pre-assessment clinics.
4. Patient factors including patient knowledge and education about Day Surgery.
5. For many patients, the distance from Day Surgery was too far.
6. Inadequate capacity for emergency admissions.
7. Lack of community back up and support.

They also recommended the development of nurse led pre-assessment and per-protocol discharge.

All acute hospitals in Ireland will have their Day Surgery activity monitored against agreed targets for a fixed number of procedures as part of the Elective Surgery Programme. This guide is therefore also aimed at assisting both clinical and management teams to achieve these

targets. It goes without saying that Day Surgery should not be restricted to these index procedures but has a far wider application.

Definition of Day Surgery

Day surgery is the admission of selected patients to hospital for a planned surgical procedure who return home on the same day.

By convention ‘true’ day surgery patients’ are patients whose procedure requires a full operating theatre facility and which is performed under general or regional anaesthetic; it does **not** include minor operations performed under local anaesthetic or endoscopies each of which should be performed within separate facilities.

The definition of a day case patient by the HSE on HealthStat is one “who is admitted to hospital on an elective basis for care and/or treatment which does not require the use of a hospital bed overnight and who is discharged as scheduled”.

Extended Day Surgery

Some hospitals use 23-hour stay facilities to support more major procedures. These may allow the transfer of some surgical procedures and patients from inpatient to day care, and extend the use of day surgery operating theatres beyond recovery times into the early evening. In such circumstances to plan to accommodate up to 10-20% of patients overnight would be regarded as reasonable.

Where a patient does require staying in hospital after a day surgery procedure and, if that hospital or unit concerned does not have full 24-hour emergency activity, then most patients after day surgery can be adequately covered by a ‘COMPASS’ certified (for recognition and treatment of the deteriorating patient) doctor or qualified nurse. In the event of significant clinical deterioration or complications then the patient should be transferred to an appropriate facility within the network.

However, greater usage of overnight accommodation especially if used badly, such as when clinicians and patients may elect for an overnight stay just because the option is available, is wasteful. This can be prevented by separating day and 23-hour beds, and identifying the patients care path clearly at pre-operative assessment.

The option of using local hotels to accommodate patients, especially those travelling longer distances, might also be explored to suit some circumstances.

Day surgery benefits

- Patients receive treatment that is suited to their needs and allows them to recover in their own home.
- Cancellations in a dedicated day surgery unit are unlikely.
- The risk of hospital acquired infection is reduced.
- Releases inpatient beds for more major cases.
- Improves throughput of patients, reducing waiting lists.
- Provides cost-effective healthcare.

The benefits of Day Surgery or a Day Surgery Unit will not be realised if there is:

- Inappropriate usage; for example, treating patients who could be cared for in a Minor Procedure Treatment room or Outpatients.
- Poor management and team working.
- Lack of buy in by surgeons and surgical teams.
- Lack of, or inadequate, Day Surgery beds/trolleys, staff or other facilities.
- Failure of institutions to recognise Day Surgery as a priority.

Suitable procedures for day surgery

It is possible for 75% of all elective operations to be carried out as a day case. A basket of 24 day surgery procedures is scrutinised by the Casemix Unit of the HSE, based on that developed by the UK Audit Commission, covering the most frequently performed procedures across all the major specialties (**APPENDIX 1**). The British Association of Day Surgery (BADs) has produced a wider list of procedures which may be suitable for day surgery in perhaps 50% of cases thus indicating an even greater scope (also **APPENDIX 1**). (3,4)

The historical standard: “Is this patient suitable for day surgery?” should be replaced by: “Is there any justification for admitting this case as an inpatient?”

Day surgery units should **not** be used for endoscopies or procedures that could be carried out either in primary care or outpatient treatment rooms (minor operations). Some of these procedures are listed in **APPENDIX 2**.

Suitable patients for day surgery

Selecting patients for day surgery can be facilitated through use of protocols. Suitability for same day discharge is dependent on patient factors, procedural factors and social factors. (3)

Patient Factors:

- Age – there is no upper age limit. Patient selection should be based on physiological status, not age, i.e. the patient should be mentally sound, reasonably independent and active or under appropriate care.(5)
There is a lower age limit for day surgery admission. The infant / child must be older than 56 weeks post-conception i.e. 16 weeks in an infant born at term.
- Good exercise tolerance – for example, a patient should be able to climb stairs without having to stop.
- BMI – Obesity is not an absolute contra-indication for day care. Patients with a BMI ≥ 30 should have an assessment by an anaesthetist.
- ASA grade – patients should be ASA grade 1 or 2 or selected ASA grade 3. Patients with conditions **NOT** suitable for day surgery are listed in **APPENDIX 3** and include, for example, those with severe ischaemic heart disease (i.e. ongoing angina, or recent MI with stents), diabetes with vascular complications, or stage 3 COPD. (6)
If medical co- morbidities exist, these should be well controlled, for example:
 - Diabetes (Hb1AC<8%) (see **APPENDIX 4 - Pre-admission checklist and management of diabetic Day Case patients**)
 - Cardiac conditions e.g. patients should have mild angina or if history of previous MI it should have been uncomplicated and have occurred more than 6 months previously
 - Epilepsy
 - Asthma

Procedural factors:

- The procedure should have a low complication rate, and be unlikely to cause loss of independence or incontinence.
- Abdominal and thoracic cavities should only be opened with minimally invasive techniques.
- There should be minimal blood loss expected and no routine requirement for fluid replacement post-operatively.
- The length of procedure should be expected to be less than two hours.
- The procedure should be unlikely to result in severe post-operative pain or nausea.
- The procedure should be unlikely to cause loss of independence or incontinence

Social factors:

- The patient must have transport organised to take them home, and be accompanied. They cannot drive themselves.
- A responsible adult must be available to be in the patients' home for 24–48 hours post-operatively.

- The patient must have access to a telephone in the initial 48 hours post operatively.
- The journey time from the hospital to the patient's home should not exceed 60 minutes.
- The patient should not have a major pre-existing disability.

The Day Surgery Process

The Day Surgery process spans from the time the patient is selected to post-discharge follow-up. There are five equally important elements to Day Surgery:

i. **Pre-admission Assessment** (See Chapter 2):

The pre-operative assessment protocol should include (7,8):

- Information about the day surgery experience to ensure that the patient understands the procedure to be undertaken and their likely post-operative course.
- Assessment of the patient's general medical status and fitness for anaesthesia.
- Assessment of the need for screening for multidrug resistant organisms such as MRSA and pre-operative decolonisation, if appropriate..
- Assessment of the patient's home circumstances and their ability to recruit a carer.
- Local hotel accommodation may help extend Day Surgery activity.
- Reassurance that in the unlikely event that they are not ready to go home on the day, they will be admitted overnight.

ii. **Booking**

Patients who require Day Surgery need to know when it will take place to allow them to make arrangements for other aspects of their lives. Ideally booking systems should allow patients to choose their admission date at a time that is convenient for them. A good booking system in day surgery units has been shown to substantially decrease cancellations.

iii. **The operation**

This is covered in detail in section 3 below.

iv. **Recovery**

The safe and comfortable recovery of patients from surgery and anaesthesia requires the use of routine of observation and nursing care. An important aspect of care includes the management of complications. Complications after day surgery vary according to the type of surgery that has been performed and the type of anaesthesia that has been used. They include:

- Pain and discomfort. This occurs in about 80% to a greater or lesser degree but can be severe in 5%.
- Post operative nausea and vomiting (PONV) which occurs in 7-28%.
- Headaches in 10-38% after general anaesthetics.
- Urinary retention which occurs in 5% of high risk patients and can re-occur in a quarter of these after discharge.
- Acute insomnia on the night after discharge occurs in 50%.
- Fever in 16%.

Pain management (9)

Pain management after surgery is a specialty in its own right and is beyond the scope of this document. As more complex surgery is performed on a day case basis, an improved quality of postoperative analgesia is required to ensure that patient discharge is not delayed and that pain control remains effective once the patient is at home.

Effective day case surgery analgesia includes the use of appropriate surgical techniques, such as minimally invasive surgery, and the use of appropriate anaesthetic techniques – avoiding the use of long acting opioids and using regional anaesthesia techniques where possible. It also requires locally agreed, formal, postoperative assessment, documentation and analgesia prescription guidelines both for nurses and doctors and includes the management of pain following discharge.

Management of PONV (10, 11)

Postoperative nausea and vomiting remains a common complication of surgery and anaesthesia and can be extremely distressing for patients. It can delay discharge and lead to unanticipated overnight admission in about 1% of day surgery patients. Its management requires,

- The identification of at-risk patients,
- An awareness of the emetogenic potency of anaesthetic techniques and drugs,
- The administration of appropriate prophylactic anti-emetics, or cocktails thereof,
- The recognition and treatment of established PONV.

As with pain, the subject is too big to be dealt with adequately in this text but local management guidelines should be established

v. Discharge

- The Discharge Process should be nurse led against a clear discharge protocol which should assess the patient's fitness for discharge. (See: APPENDIX 5 - Sample Post Anaesthesia Discharge Scoring System)
- Ensure that patients and their carers understand any constraints on activity.
- Include written information about potential side effects, complications and medication to be taken.
- Include an adequate supply of post-operative analgesia by prescription with written information on how to take it.
- Include written arrangements and appointments for additional treatments, eg physiotherapy
- Include written arrangements for outpatient, GP, or Community Care follow-up, as appropriate.
- Provide an emergency contact telephone number in the hospital as well as advice about 'out of hours care' (hospital and/or Primary Care) so that the patient clearly understands what to do should a problem arise.

vi. Post-operative support:

Support should be provided from the Hospital/Day Surgery Unit for 24-hours after surgery with support from primary care. This should include the issuing of contact telephone numbers to patients at the time of discharge including out-of-hours. Patients needing urgent assessment or readmission should be provided with a fast track care plan. This should also be communicated to their GP.

Arrangements for children

Day surgery is ideal for children, as overnight admission is often the most distressing part of visiting hospital for them. Children should be treated on dedicated lists or, at the very least, the first part of lists and separated from adults. They should be nursed in paediatric areas, with play facilities available. Operations should be performed by surgeons and anaesthetists with appropriate experience in the care of children. Registered children's nurses should be available to care for children in day surgery.

Consent – a significant problem is that of children attending on the day of surgery with an accompanying adult who cannot legally sign their consent form e.g. grandparent, stepfather or foster carer. It would increase efficiency if consent could be completed at the surgical outpatient clinic and pre-assessment.

Accommodation required for day surgery

Different models:

1. A self-contained day surgery unit, with its own admission suite, wards, theatre and recovery area, together with administrative facilities. This is ideal but not widely available. It is also the most cost effective option (12).
2. A day-case ward with patients going to the main operating theatre where lists may be made up entirely of day cases. Although less satisfactory this arrangement is quite commonly used.
3. A day-case ward with patients going to the main operating theatre where mixed lists of day cases and inpatients are operated on. Although less successful this is currently probably the most common situation in Ireland. In these circumstances Day cases must be performed first on the list to ensure that they go home on that day.
4. Day surgery performed using inpatient wards and inpatient operating theatres is the least successful model and is not 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 .(13)

In smaller centres there may be some advantages to housing day surgery and endoscopy in adjacent areas and sharing some facilities, such as recovery. For larger units separate premises for endoscopy are desirable.

Accommodation for day surgery should contain an isolation room for infection prevention and control purposes (e.g., for isolation of patients colonised with MRSA).

Additional facilities for day surgery

Facilities will vary according to the needs of different hospitals.

- i. **Car parking:** Day surgery patients need access to car parking, and at least a short-stay drop off and pick up point immediately adjacent to the unit or ward.
- ii. **Reception:** Patients and relatives need adequate sitting accommodation while waiting

for admission and discharge. Receptionists need facilities to admit and discharge patients.

iii. **Pre-admission assessment:** See Pre-admission Assessment Clinics

iv. **Administration Office:** Day surgery administration is most efficient when carried out in the day surgery unit rather than a central admissions unit. Dedicated administrative staff helps to maximise access, booking and choice for patients. Administrative process should begin at least one hour before the commencement of the first surgery

v. **Pre and post-operative ward areas:** Day surgery patients are best managed using operating trolleys designed for day surgery. These are increasingly sophisticated, combining operating theatre table fittings with a multi-purpose trolley. Transfer of unconscious patients is avoided, and patients remain on one trolley throughout their stay. Some units prefer to separate pre-operative and post-operative patients, and ward accommodation is designed accordingly but staffing levels are inevitably higher. Recommended closure time should be no earlier than 8pm in order to facilitate afternoon procedures.

vi. **Operating theatres and recovery:** Operating theatres are required to be of the same specification as inpatient theatres – 40 sq metres with clean and dirty utilities, full lighting, X-ray compatible, piped gases, scavenging etc. First stage recovery adjacent to the theatres needs at least one bay per theatre, and one-to-one staffing.

vii. **Equipment:** Theatre equipment should be equivalent to inpatient theatres so that the full range of appropriate surgery can be performed as a day case. This includes the provision of resuscitation and defibrillation equipment.

viii. **Seating requirements:** Reclining chairs (or adjustable height chairs for patients with hip or back problems) provide sitting accommodation for patients who do not need trolleys e.g. cataract patients. They also provide step-down facilities for other patients prior to discharge. Use of reclining chairs for later stages of recovery can help to increase turnaround of trolleys and may be more comfortable for patients requiring longer recovery periods.

Management of a Day Surgery Unit

Strong management of day surgery is vital at both the clinical and managerial levels. (8) Day surgery units require a Clinical Director of Day Surgery, a Nurse Manager (CNM2 or higher grade), an Administrator and an Operational Group.

- The Clinical Director, commonly a Consultant Surgeon or Anaesthetist, should be given dedicated sessional time to provide clinical leadership for the development of day surgery services, ensuring that consistent policies and guidelines are adopted across all surgical specialties. He or she should lead on clinical governance with particular emphasis on clinical risk management and audit and regular review of day surgery performance metrics.
- The Nurse Manager should support the Clinical Director in developing clinical protocols and guidelines and provide clinical leadership in nursing practice to ensure that the nursing staff has the necessary skills and competencies. He or she should be responsible for the day to day management of the unit and contribute to the strategic development of the service.
- The Administrator should support the Clinical Director and Manager and should be responsible for the efficient management of admissions and waiting lists. The administrator should also be responsible for database management with respect to monitoring of day surgery performance and produce regular reports for review by the operational group as outlined in this document.
- A **Working Group** should establish the governance structure and develop the service locally for each surgical service as appropriate. Such a team should include,
 - The Clinical Director
 - A consultant anaesthetist and surgeon.
 - The Nurse Manager
 - The Theatre Manager
 - Representation from senior management
 - Representation from radiology, laboratory, allied healthcare services
 - The Waiting list/Admission Coordinator for elective surgery patients
 - Representation from community service
 - Patient advocacy
 - General Practitioner
- Day surgery should be represented at the Hospital and Medical Board.

Policies & protocols

Clear policies and protocols should be in place (for example, see **APPENDIX 1 (Chapter 2) – guidelines for pre-operative fasting and peri-operative administration of drugs**) to help ensure the smooth running of the unit. These should include policies to ensure:

- The selection of patients is optimal.
- The operating theatre and wards are used efficiently and effectively.
- Start and finish times are clear.
- Clear arrangements for staff leave of both medical and nursing staff and the re-allocation of lists should be made well in advance.
- The management of post-operative complications
- Smooth discharge planning
- The monitoring of day surgery performance. This should be agreed and carried out through a day surgery management information system. (see metrics below)

Day Unit performance metrics

Audits of relevant day-case management and practice should be used to analyse the quality of the services to benchmark against other units

Quality measures include (14):

- DNA rate
- Cancelled on arrival rate
- Numbers of patients treated
- Nature of procedures undertaken
- Day case patients who have to stay overnight – ‘Stay- in’ rate
- In-patient/emergencies using day surgery facilities
- Complication and infection rates
- Re-admission rate within one month
- Patient satisfaction

Staffing needed for a day surgery unit

A wide range of staff are involved in day surgery and it is recognised that they may need to be supported in changing some of their working practices to allow day surgery rates to increase.

A Team usually includes:

- Consultant surgeons.
- Consultant anaesthetists.
- Nursing staff for pre-assessment, for peri- and post-operative care, and for discharge.
- Theatre and recovery staff.
- Allied health professionals
- Administrative staff
- Healthcare assistants, housekeeping and other members of the team.

The clinical team should be developed to provide a multi-skilled workforce who can rotate within the areas of day surgery. This provides a well trained, flexible, highly efficient and effective workforce.

Assisting surgeons to develop day care surgical practices

Day case surgery is now pertinent and should be mandatory for most surgical disciplines. Hospitals should assist surgeons with the move to day surgery and should provide, where required, an option to change operating list scheduling to promote day surgery, the possibility of day surgery lists to replace inpatient lists and incentives to encourage clinicians to work in day surgery units.

Anaesthetic requirements

High quality anaesthesia is pivotal to successful day surgery and it has been the recent improvements in anaesthetic drugs and techniques that have allowed more operations to be completed as day surgery cases. Poorly controlled pain and nausea are common reasons for unplanned admission after day surgery. As stated above, protocols should be developed for suitable peri- and post-operative analgesia and PONV, and their effectiveness should be audited.

Careful selection of patients appropriate for day surgery is also vital. Blanket, routine investigations are inefficient, expensive and unnecessary - only necessary investigations should be performed. The need for pre-operative investigations should be determined at pre-operative assessment (see Chapter 3) and the results reviewed prior to surgery. Abnormal results should be communicated to the surgical team/anaesthetist before surgery so that appropriate action can be taken in advance of surgery if required.

Impact on nursing staff and Allied Health Professionals

Nursing staff play an essential role in the day surgery unit. Staff should receive appropriate induction on appointment to the day surgery unit and continuing professional development through competency-based education and training. The nursing staff will need to gain generic competencies in all areas of day surgery, as well as core specialist competencies to assure appropriate skill mix.

Pharmacists play an important role in day surgery units. Their expertise should be sought regarding the development of protocols for discharge medication and pain relieving regimes to ensure that patients are discharged with effective and adequate medication supplies.

Physiotherapists may come to see patients in the day surgery unit. They should advise day unit staff, patients and their carers about mobilisation techniques e.g. stairs practice, use of crutches. Their input is required when producing written information sheets for patients and carers, and exercise regimes for patients e.g. post arthroscopy procedures.

Occupational Therapists e.g. for splinting after Dupuytren's surgery.

Clinical Nutritionists/Dieticians maybe required to develop dietary guidelines/patient information sheets (e.g. soft diet after laparoscopic Nissens fundoplication, healthy eating after cholecystectomy, high fibre post surgical management of anal fissure). Some patients will require individualised nutrition intervention and dietary advice rather than a general information sheet.

Other support workers are essential members of the team. They include healthcare assistants, who should have completed the 'FETAC Level 5 Theatre Module', housekeepers, porters, administrative and clerical staff.

Close communication with consultants in charge of the laboratories (e.g. microbiology, chemical pathology etc) is essential to ensure that the turnaround time of preoperative investigations is appropriate to facilitate day surgery to take place in a streamlined fashion.

Primary and Community Care

Generally good quality day surgery, performed well, should not impact significantly on primary or community care (15, 16, 17). However, as case-mix for day surgery changes to include more complex procedures then care pathways for patients must be developed in partnership with primary and community care. General Practitioners can play a key role in the preparation of patients for day surgery. They should be involved in liaison committees to agree on protocols regarding referrals and effective communication.

Generally post-operative support and follow-up of patients should occur by telephone by day surgery staff in the first 24-48 hours. (see **APPENDIX 6 – Sample discharge advice for patients**) However, GP's and Community Care Nurses should, where necessary, help with the delivery of pain control or other medications, dressing etc. Close liaison (by protocol) is therefore important. (Community Intervention Teams (CIT) are available in some areas and are made up of a nurse lead supported by a variety of other health professionals and services,

which provide enhanced services/acute interventions in a rapid and integrated manner to a patient with an acute episode of illness appropriate for care in the home/community. Services provided include symptom management or Home IV therapies for short period of time, ideally <72hours)

Patients must be given emergency contact numbers for expert nursing advice on discharge from the day surgery unit. There should be a clear process to ensure that surgical site infection post discharge is communicated to the Day Unit team for inclusion in performance metrics and the infection is appropriately managed.

Training and the move to day surgery

Due to the practical nature of day surgery, beneficial training might consist of secondment of doctors and nurses to existing day surgery units performing high volumes of day surgery procedures. Day surgery staff may also need to rotate to main theatre units to increase/update their skills.

Junior surgeons and anaesthetists can experience valuable training during day surgery. Timely and efficient execution of procedures, however, necessitates that senior staff should be involved at all stages whether carrying out or assisting procedures.

Indicators of Quality in a Day Unit

- Day Surgery is a separate and discrete department/activity within the hospital
- A Working Group is established as set out in the Model of Care for Elective Surgery
- There is clear Integrated Care Pathway for patients undergoing Day Surgery from the Surgical Outpatient Clinic to Discharge (See **APPENDIX 7 – Suggested components of an ICP for Day Surgery**)
- There are appropriate staffing levels by dedicated staff as set out in the Model of Care for Elective Surgery
- There are agreed protocols and referral pathways to GPs and allied health professionals
- There is full compliance with WHO Safety Checklist
- There is an appropriate discharge protocol with follow-up, outreach and readmission where necessary
- There is liaison and effective communication with the Primary Care Team at the point of discharge
- Patients and their GPs have access to a hospital point of communication after discharge, in case of an emergency, and a clear pathway for re-admission, if necessary
- Day Surgery units or wards are should not be used to support inpatient care

- Activity, patient experience and audit is monitored through the Working Group at monthly or bimonthly meetings

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APPENDIX 1 - Basket of 24 Day Procedures

It is possible for 75% of all elective operations to be carried out as a day case surgery. The following procedures represent the majority of these day case surgical procedures and are suitable:

1. Orchidopexy
2. Circumcision
3. Inguinal Hernia Repair
4. Excision of Breast Lump
5. Anal Fissure Dilatation or Excision
6. Haemorrhoidectomy
7. Laparoscopic Cholecystectomy
8. Varicose Vein Stripping or Ligation
9. Transurethral Resection of Bladder Tumour (<2cm)
10. Excision of Dupuytren's Contracture
11. Carpal Tunnel Decompression
12. Excision of Ganglion
13. Arthroscopy
14. Bunion Operations
15. Removal of Metal-ware
16. Extraction of Cataract with/without Implant
17. Correction of Squint
18. Myringotomy
19. Tonsillectomy
20. Sub Mucous Resection
21. Reduction of Nasal Fracture
22. Operation for Bat Ears
23. Dilatation and Curettage/Hysteroscopy
24. Laparoscopy

APPENDIX 2 - Procedures that are suitable for Day Surgery in some cases

The British Association of Day Surgery (BADs) has produced a wider list of procedures which may be suitable for day surgery in up to 50% of cases and these cases may be suitable in hospitals with an appropriate infrastructure and expertise with protocols to be determined locally.

1. Laparoscopic hernia repair
2. Thoracoscopic sympathectomy
3. Submandibular gland excision
4. Partial thyroidectomy
5. Superficial parotidectomy
6. Wide excision of breast lump with axillary clearance
7. Urethrotomy
8. Bladder neck incision
9. Laser prostatectomy
10. Trans cervical resection of endometrium (TCRE)
11. Eyelid surgery
12. Arthroscopic meniscectomy
13. Arthroscopic shoulder decompression
14. Subcutaneous mastectomy
15. Rhinoplasty
16. Dentoalveolar surgery
17. Tympanoplasty

APPENDIX 3 - Unsuitable procedures for Day Surgery units.

These can most commonly be performed in endoscopy, outpatients, minor surgery units or primary care*

Endoscopy

Bronchoscopy
Colonoscopy
Cystoscopy
Oesophagogastroduodenoscopy
Sigmoidoscopy

Outpatients

Blood transfusion
Chemotherapy
Colposcopy
Hysteroscopy
Local anaesthetic minor operations
Sigmoidoscopy
Pain management procedures and nerve blocks
Urodynamic tests

General Practice or Minor operations unit

Local anaesthetic minor operations
Most of the procedures on the above two lists with appropriate facilities and support

***Please Note:** A number of minor procedures and investigations which in adults would generally be carried out in a minor ops room or outpatient department cannot be performed on children because of the child's requirement for sedation or general anaesthetic e.g. oesophago-gastroscopy, colonoscopy, suturing of lacerations, dental extractions.

APPENDIX 4 - Patient conditions unsuitable for day surgery

Anaesthetic

- Difficult airway – i.e. large goitre / tumour causing deviation or compression of airway, restricted neck movement or mouth opening.
- Personal or family history of malignant hyperpyrexia.
- Previous personal history of previous reaction to anaesthesia – type of reaction should be assessed and flagged with anaesthetist.
- Details of any unexplained, significant morbidity during or after anaesthesia in the patient or his/her relatives should be noted and discussed with anaesthetist.

Cardiovascular

- Poorly controlled blood pressure (BP>170/100)
- Congestive cardiac failure
- Unstable angina
- MI within previous 6 months
- Symptomatic valvular heart disease
- Patients who have a pacemaker or automotive implantable cardiac defibrillator
- Poor exercise tolerance

Respiratory

- Poorly controlled asthma needing oral steroids, frequently or within last 3 months, frequent hospital admission or home oxygen
- Poorly controlled COPD
- Sleep apnoea

Neurological

- Poorly controlled epilepsy
- CVA/TIA within the last 1 year

Endocrine

- Poorly controlled thyroid disease
- Poorly controlled diabetes

Haematological

- Coagulopathies, INR>1.5, Platelets <100 (Innohep may be prescribed to bridge the patient while off warfarin)
- Cancer metastasis
- Recent chemotherapy or radiotherapy

Musculoskeletal

- Rheumatoid arthritis – not a contra-indication per se but should discuss with anaesthetist
- SLE
- Myopathies

Gastrointestinal

- Risk of regurgitation is not a contra-indication for day surgery, but clear documentation of the risk is required, with appropriate management on the day of surgery

Miscellaneous

- MRSA infection
- Latex allergy

Medications

- History of drug abuse
- OCP within 6 weeks
- MAOIs

APPENDIX 5 - Diabetic Day Case Patients Pre-admission Checklist

1. All usual selection criteria for Day Surgery should be met
2. The patient should not have a history of repeated hypoglycaemic episodes or recurrent admissions to the hospital with complications related to diabetes
3. The aim should be clear to the patient that as soon as possible they should return to their usual diet and routine medications
4. The patient or carer should be able to measure blood glucose at home
5. The patient and carer must understand about hypoglycaemia and its treatment
6. Diabetic medications should be omitted on the morning of surgery
7. The procedure should be scheduled as early as possible on the list, preferably first.

Management on the Day Ward

For surgery which should be in the morning

- Omit morning Insulin and/or tablets
- On arrival in ward,
 - if blood glucose < 5mmol/l
 - Notify Anaesthetist
 - Consider infusion of glucose 5 % at 100ml/hour
 - Monitor blood glucose
 - if blood glucose 5-13mmol/l
 - Monitor blood glucose only
 - if blood glucose > 13 mmol/l
 - Check for intercurrent infection
 - Notify Anaesthetist and Surgical team
 - Consider postponing surgery
- **After surgery**
 - give delayed breakfast with usual morning insulin or tablets
 - blood glucose should be in the range of 5-13mmol/l prior to discharge.

APPENDIX 6 - Sample Post Anaesthesia Discharge Scoring System

				Score/ Time (1)	Score/ Time (2)	Score/ Time (3)
Vital Signs: Must be stable and consistent with age and pre-operative baseline	2. B/P and pulse within 20% of pre-operative baseline	1. B/P and pulse within 20-40% of pre-operative baseline.	0. B/P and pulse within >40% of pre-operative baseline			
Activity: Must be able to ambulate at pre-op level	2. Steady gait, no dizziness	1. Requires assistance	0. Unable to ambulate			
Nausea & Vomiting Should have minimal nausea & vomiting	2. Minimal	1. Moderate	0. Severe			
Pain Minimal or no pain	2. - Level of pain should be acceptable to patient -Controlled by oral meds -Consistent with anticipated post op comfort		0. Level of pain not acceptable >3 on pain score scale			
Surgical Bleeding Should be consistent with expected blood loss for the procedure	2. Minimal (does not require dressing change)	1. Moderate (up to 2 dressing changes required)	0. Severe more than 3 dressings required			

Patients must score 9 or >9 to be fit for discharge. If <9, action taken.

Total Score @ _____ (1)

Nurse signature: _____

Total Score @ _____ (2)

Nurse Signature _____

Total Score @ _____ (3)

Nurse Signature _____

Prior to Discharge:

Taken Foods and or fluids Yes No

Passed Urine Yes No

Fully awake & orientated Yes No

Cannulas Removed Yes No

Wound Checked: _____

Discharge Date: _____ Time: _____

Discharged into the care of: _____

Has someone to stay with them overnight: Yes No

Comments:

Discharge Summary

24 hr follow up call

Signature of Nurse in charge _____

APPENDIX 7 - Sample discharge advice for patients after day surgery

- Please arrange for a responsible adult to collect you from the unit (either in a car, or taxi - public transport should not be used).
- Please ensure that you have someone responsible to stay with you for 24 hours after your procedure.
- During the 24 hours post procedure you may feel tired and it is advisable to rest as much as possible.
- It is recommended that you take your analgesic as prescribed.
- Please refer to information leaflets provided for you (e.g. mobility, exercise, diet)
- Do not drive, operate machinery equipment or consume alcohol for the next 24 hours.
- If you have any queries or develop a problem while at home you can contact the hospital Day Surgery Unit During the day from 09:00am to 6:00pm Monday to Friday at phone no.....

Or, the hospital, out of hours, at phone no.....

Or, your General Practitioner. at phone no.....

APPENDIX 8 - Suggested documentation for an Integrated Care Plan for Day Surgery

Shall include:

1. A face-sheet to include Patient's label, Name of Surgeon, Planned Procedure, Planned date of operation
2. A sheet to document a column of names of persons completing components of ICP
3. A list of abbreviations used in the care plan
4. The Surgeon's Care Plan and patient consent (See Chapter 1)
5. Pre-admission assessment documentation.(See Chapter 2)
6. Day of surgery pre-operative record and check list
7. Anaesthesia form
8. Intra-operative nursing documentation
9. Operation note with post-operative instructions
10. Recovery room record including observation sheet, post-operative care proforma and overnight admission form, to be used when necessary
11. Discharge protocol
12. Record sheet of any variance, be it patient related, medical, wound, nursing, theatre, allied health care or outcome related
13. A generic drug cardex

CHAPTER 4

Principles for Day of Surgery Admission (DOSA)

Introduction

A Day of surgery admission or DOSA refers to an elective, stay-case, surgical patient who is admitted on the day of their intermediate or major surgical procedure, all necessary work-up having been carried out prior to admission. It does not include day cases or minor operations. The ability of an institution to provide DOSA for multi-day stay elective surgery patients is dependent upon maximising quality and efficiency in **pre-operative patient management** and **hospital bed management**. (1,2)

The traditional culture of admitting patients a day or days before their intended surgical procedure was originally instigated in order to carry out pre-operative work-up before surgery. However with increasing pressure of modernisation and costs, as outlined in Chapter 1, more efficient resource optimisation is necessary.

Current practices of uncoordinated pre-operative admissions result in:

- High cancellation rates of elective cases
- Ineffective theatre utilisation.
- Prolonged patient length of stay.
- Patients being admitted in late afternoon or evening, often by non-team members with investigations and consent delayed until the morning of surgery.
- Decreased patient satisfaction and psychological stress.
- Loss of training opportunity

The goals of DOSA therefore are to improve resource utilisation resulting in:

- Elimination of elective surgery cancellation.
- Optimal theatre utilisation.
- Improvement in throughput and case-mix.
- Reduced patient length of stay and disruption.
- Reduced surgical bed requirement.
- Reduced running costs of surgical wards.
- Reduced waiting time for elective surgery.

The optimal situation is when a patient arrives in hospital on the morning of planned surgery having attended a pre-admission assessment clinic (Chapter 2) and is admitted promptly by a nurse or doctor followed by an anaesthetic assessment. Their consent is confirmed, their operative site marked by a member of the surgical team and they are then taken to theatre for their procedure. (3-8)

The DOSA Unit

Patients arriving in hospital on the morning of their operation should have been fully pre-assessed within the last month and be fully armed with all the information they require. It is essential that their admission bed is safeguarded or 'ring-fenced'.

Bed protection can be instituted on regular in-patient wards but in an environment of unpredictable emergency admissions this is unreliable and it is better to earmark a dedicated area for DOSA admissions. This can be multidisciplinary between surgical specialties and need not be a fully staffed and equipped surgical ward. It requires a waiting area, male and female changing rooms and toilet facilities, secure lockers for patient property and patient medications and adequately screened trolleys for patients comfort and to ensure confidentiality. An ophthalmology/ENT examination area and couch may also be required.

After surgery when patients have completed their initial recovery they would then be transferred to their designated bed on the 'stay' ward post-operatively.

Whilst this is an ideal model, the challenges might include patient fatigue, particularly for those who arrive at 7.30 in the morning and do not have their operation until the afternoon, patient privacy, infection control (especially MRSA for orthopaedic patients) requirements necessitating patient isolation and delayed ward discharges.

The Clerical Process

On the scheduled day of surgery, patients should attend at 07:30 when they will be registered (this may be the Admissions Office in some hospitals) and then, accompanied by their hospital record, they will go to the "same day admissions unit". There they should have a consultation with a staff nurse where personal details, documentation and consent are checked. If the patient is scheduled early on in the operating list, they are prepared for surgery. A doctor should then

review the planned operation and consent, check the investigations (any radiology should have been performed at pre-assessment) and mark the patient. This should then be followed by an anaesthetic assessment.

When theatre indicates their readiness for the selected patient the patient walks to the holding bay in the theatre suite, where the receiving nurse cross-checks the personal and other details following which the patient can be transferred on a trolley to the anaesthetic room.

Medical Assessment of DOSA patients

DOSA patients should follow an Integrated Care Pathway similar in many ways to that outlined in **APPENDIX 2 (Chapter 1)**. However, DOSA patients or procedures are, by definition, more complex than their Day Surgery equivalents. Checks may therefore need to involve more detail and while repetition will reduce the possibility of error, some repetition is inefficient, wasteful and tiresome for the patient.

Nutritional assessment should be performed on all patients in order to pick up malnutrition which would adversely affect clinical outcomes. (9, 10) Similarly Pregnancy Testing should be performed where appropriate. MRSA screening will have been performed at pre-assessment.

In the Surgical Clinic, the patient will have had a focussed and documented history and physical examination. At the Pre-admission Assessment Clinic, a further history will have been taken and, at least, a nurse led general physical assessment will have been performed as well as appropriate pre-operative investigations with appropriate follow-up of abnormal/positive results in advance of DOSA.

In this context the value of the traditional intern admission note has to be questioned. Rather it should be a proformatised check including a review of the planned operation and consent, a check that all systems have been examined, all necessary investigations have been performed as required by that surgical specialty or procedure and that the operation site has been marked and cross-checked with the patients records and x-rays, as appropriate and the patients themselves.

Blood Transfusion requirements in DOSA patients

A specific difference between DOSA patients and Day surgery patients is in their increased likelihood of requiring transfusion of blood or blood products.

Most patients going to surgery only need a Group and Hold but the sample cannot be used for issuing Group specific blood or for cross-matching unless it has been taken in accordance with strict identification procedures, that is the patient asked to identify themselves and the details checked against patient wristband.

If patients only give a Group and Hold sample on the morning of surgery, they may be in theatre without a blood group and antibody screen result available and, if they need blood in an emergency, they may have to be given O Negative blood.

In order to be sure that the blood group and antibody screen are available at surgery, blood can be taken in the pre-admission assessment clinic but absolute precautions must be taken to exclude 'Wrong Blood in Tube' errors. This may be done **but any process that is agreed must conform to locally developed practices and guidelines drawn up with laboratory and transfusion services.**

A protocol currently employed in units in some hospitals is outlined as follows:

At the pre-admission assessment clinics, the patient is correctly identified and an Identity (ID) Band is put on and the patient's sample for transfusion is then taken.

When the patient leaves the pre-admission assessment clinic the ID Band is then stored in the patient's chart until admission.

When the patient is admitted, a new ID Band is issued. The information on the new ID Band must match the information on the patient's ID Band written at the time of sampling in the pre-admission clinic. This preserves the link and makes it possible to use the sample taken at the pre-admission clinic for cross-matching.

Indicators of Quality for DOSA patients

- There is a clear Integrated Care Pathway for patients undergoing Day of Surgery Admission from the Surgical Out-patient Clinic to Discharge
- DOSA patients' beds are "ring fenced", preferably within a discrete unit based on predicted demand
- There is a designated person responsible for Waiting list and Admission Coordination for elective surgery patients
- Pre-admission assessment is undertaken on all DOSA patients
- 75%, or more, of elective surgical procedures are performed as DOSAs
- DOSA activity is monitored through the Surgery Programme Steering Group

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CHAPTER 5

Discharge Planning

Introduction

Discharge planning is the development of an individualised discharge plan for a patient prior to their leaving hospital, with the aim of containing costs and improving patient outcomes. Discharge planning should ensure that patients are discharged from hospital at an appropriate time in their care.

Cost containment is a feature of all healthcare systems, especially for acute hospital services. In this document we are encouraging the increasing use of day surgery, decreasing the length of stay for inpatient care by the use of day of surgery admissions and discharge planning, so as to contain costs and improve patient outcomes. For example, discharge planning may influence both the length of hospital stay and the pattern of care within the community by bridging the gap between hospital and home.

Medical or non-medical reasons may delay a patient's discharge from hospital. It has been estimated that 30% of all hospital discharges are delayed for non-medical reasons. (1) But three factors remain common causes of delayed discharge from hospital. (2)

- Inadequate patient assessment by health professionals resulting in problems such as poor knowledge of the patient's social circumstances
- Poor organisation, for example, late booking of transport services to take a patient home, preventing timely discharge from hospital
- Poor communication between the hospital and community service providers.

In some areas discharge planning combined with additional post-discharge support can reduce unplanned readmission to hospital. A reduction in readmissions will decrease inpatient costs; however, this reduction in costs may be offset by an increase in the provision of community services as a result of planning.

A Cochrane Systematic Review has indicated that a structured discharge plan tailored to the individual patient probably brings about a small reduction in hospital length of stay and readmission rates, and an increase in patient satisfaction, but the impact on health outcomes is uncertain. (3) However, the review did not separate out elective surgical practice and nor did it

look at it within the context of an integrated care pathways, both of which might be expected to derive greater benefits from discharge planning.

In 2008, the HSE published, 'A Code of Practice for Integrated Discharge Planning'. (4) In it they endorsed

- Integrated discharge planning – and as part of an overall Integrated Care Plan (See Chapter 1)
- Pre-admission assessment for all patients
- The starting of discharge planning as soon as possible in the patient journey
- Discharge planning being the responsibility of healthcare providers in partnership with the patient, their family or carers
- The need for a **Discharge Co-ordinator**
- Nurse (or other healthcare professional) facilitated discharge
- The need for close liaison between the hospital and primary and community care

In 2009, the Offices of the Nursing Services Director of the HSE published, The Guideline for Nurse/Midwife Facilitated Discharge Planning. (5) This excellent document highlights many of the points set out in the process outlined below and includes Discharge Tracking Form (**APPENDIX 1**), a helpful Patient Information Leaflet (**APPENDIX 2**), a Discharge Checklist (**APPENDIX 3**), and a Discharge Transfer Communication Record (**APPENDIX 4**) which have, by kind permission, been reproduced here.

The Discharge Process

Before admission

- As part of the Surgical Care Plan See (Chapter1 – APPENDIX 1) the length of hospital stay should be estimated, discussed and agreed with the patient and family and documented.
- At the Pre-admission assessment clinic the discharge plan should be confirmed taking into account the patient's pre-admission abilities in relation to their post discharge issues so as to optimise health status with the support of primary care and all relevant AHP services (Medical Social Worker, Occupational Therapy, Physiotherapy, Dietitian) before planned admissions.
- The surgical team and the pre-admission assessment clinic should keep each other, and the bed management department, informed if patients are highlighted as potentially complicated discharges so that a discharge destination can be identified, where possible, and also to avoid multiple complex discharges occurring on the same day.

- The patients' general practitioner should be kept informed of the expected admission, the procedure and the discharge plan for the patient via a letter written at the time of booking the procedure or during pre-admission assessment. Where possible this should move to electronic communication directly with the GP.

During admission

- Communication of the expected discharge date should be given to the patient and relevant healthcare staff and documented in the nursing care plans within 24 hours of admission and reviewed on a daily basis. (See: APPENDIX 2: Discharge Tracking Form)
- Communication between different in-hospital service providers to enable continuity of care (i.e. timely requesting of appropriate laboratory or radiological tests). This will be improved through an effective information technology (IT) system.
- Clear protocols should be made available for referral to all relevant AHP services where indicated. These should in turn liaise with their colleagues within primary and community care
- Early involvement of the multidisciplinary team where discharges are likely to be more complex (i.e. due to difficult patient social circumstances)
- The discharge coordinator, as a member of the multidisciplinary team, will collate predicted discharge data on a daily basis to inform bed capacity planning.

At discharge

- The patient should be issued with a (See: APPENDIX 1: Patient Information Leaflet) early in their admission.
- All discharges should take place by 11.00. Patients can be transferred to a discharge lounge to await collection
- There should be a (See: APPENDIX 3: Discharge Checklist). There should be timely provision of medical prescriptions, aids and appliances on the patient's day of discharge
- Transport arrangements should be made in time to facilitate the needs of patients, their carers and/or family members.
- An immediate Discharge Note (See: APPENDIX 4: Discharge/Transfer Communication Record) should be issued. (6)
 1. This Record is of relevance to all hospital medical and nursing staff, allied health professionals, general practitioners (General Practitioners), community nurses and pharmacists.
 2. It is evident that the quality of many discharge documents used fall short of the ideal.

3. There are important implications for all clinical parties and for patients, their representatives and carers in the expeditious and accurate production of discharge documents.
4. After issue subsequent information may become available and this should be delivered as quickly as possible.
5. The Discharge/Transfer Communication Record is a confidential document containing personal information and is subject to data protection
6. This record should be communicated speedily to the patient's GP and Primary Care Team as appropriate.

After discharge

- There should be early notification of the patient's in-hospital journey to their general practitioner using the Discharge/Transfer Communication Record by letter, Fax or encrypted e-mail, approved by a senior member of the surgical team.
- The record should be agreed with GPs to ensure medication changes and instructions for care are clearly highlighted.
- Clear arrangements should be formalized regarding liaison between hospitals, general practitioners, public health nursing and patients/carers with regard to expected patient recovery and outpatient follow-up or treatment where deemed appropriate by the surgical team.
- Unexpected readmissions should be direct and streamlined through an admission process, avoiding the traditional emergency department route.

Indicators of Quality in Discharge Planning

- Discharge planning is part of the elective surgical Integrated Care Plan at each stage of the patient's journey
- There is a dedicated Discharge Coordinator
- All patients are provided with an estimated length of stay
- There is a policy to discharge patients before 11.00 on the day of discharge
- The discharge is nurse facilitated
- All patients receive a uniform and agreed immediate Discharge Document forwarded to primary care.
- Discharge activity and patient experience is monitored through the Surgery Programme Steering Group using appropriate metrics

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APPENDIX 1 – Sample Patient Leaflet on Discharge

Patient Information Leaflet on Going Home from Hospital

THINGS TO DO BEFORE YOU GO HOME



Speak to at least one hospital member about how long it might be before you will be feeling better and an expert to resume usual activities.

If your physical abilities have changed as a result of your illness, make sure you understand about what you can and can't do when you go home.

Ask staff questions about what has happened to you, and what changes you can expect in your health and daily activities when you return home.

If you have any questions after you leave hospital, you may wish to contact your GP or Public Health Nurse (PHN).

MULTIDISCIPLINARY TEAM

The staff involved in your care are known as the multidisciplinary team and may include the following:

- Medical Staff (Consultant, Registrar)
- Nursing Team
- Discharge Co-ordinator
- Community Services Discharge Liaison Officer
- Dietician
- Physiotherapist
- Occupational Therapist
- Speech & Language Therapist
- Pharmacist
- Social Worker
- Public Health Liaison Nurse
- Chaplain / Spiritual Advisor



Hospital/Local Health Office (LHO) Name: Here

Phone: 555 555 5555

Fax: 555 555 5555

Email: someone@example.co

PATIENT INFORMATION BROCHURE



Hospital/Local Health Office (LHO) Name: Here

PLANNING YOUR TRANSITION FROM HOSPITAL TO HOME

INTRODUCTION

- Many people require no special services after they have been discharged home.
- If you require some extra assistance then hospital staff, your GP and primary care community and continuing care (PCCC) staff will help you to plan ahead so that the appropriate arrangements can be made before you are discharged.
- The brochure is to prompt you (the patient) and your carer, family and friends to consider a range of practical aspects about your return home from hospital.

YOUR DISCHARGE PLAN

- From the day you are admitted to hospital, a number of different staff involved in your care (the multidisciplinary team) will work with you, your relatives and carers to plan your discharge.
- Your length of stay will depend on your condition. The date of your discharge will be agreed and discussed with you by the consultant and the multidisciplinary team.
- Please advise your carer, as early as possible in your stay, if you think you will have any problems with going home.
- On the day of your discharge please make arrangements to be collected no later than 12 midday. This is necessary to make way for other patients who are being admitted to hospital.

QUESTIONS YOU NEED TO ASK ABOUT YOUR CARE

- How long will I be in hospital?
- What can I expect to happen to me during my time in hospital?
- When I leave hospital, will I be able to go straight home?
- How soon should I feel better after leaving the hospital?
- If I need help and/or care at home after I leave hospital, who will help me to arrange it?
- Are there any special instructions for daily activities?
- Will I need any special equipment at home? Who will help me to arrange that? Is the equipment covered by my insurance or will it cost?
- Will I need to have other treatment following my time in hospital, e.g. physiotherapy. Are there any exercises that I need to do? If so, at the correct times?
- Will there be any follow up appointments?
- Do I need to have follow up visits? Who should I follow up with to get the best results?
- Do I need to schedule any follow up visits with my doctor?
- When can I expect to return to work?
- Will I be able to walk, climb stairs, go to the bathroom, prepare meals, dress, etc.
- Who can I call if I have any problems after leaving the hospital?



QUESTIONS YOU NEED TO ASK ABOUT YOUR MEDICINES

- What medicines will I need to take at home? Is a complete list of your medicines, at discharge, including any drugs that will not be used in hospital, given to you when you leave hospital?
- Can I get written instructions about my medicines? Will my pharmacist, carer or family help?
- Are there any drugs including over the counter drugs or vitamins that I should be careful with my medicines?
- Are there any food or drink that I should avoid while taking my medicines?

AFTER YOU LEAVE THE HOSPITAL

- The hospital staff will let your GP (Public Health Nurse (PHN) knows when you are leaving hospital.
- When you leave the hospital, hospital staff will prepare a discharge communication to summary of medical information about your treatment in hospital and ongoing services that have been arranged for you. This communication will be given to you and a copy will be sent to your GP.
- You may wish to make an appointment to see your GP following discharge.
- If you feel that you are not well and/or are not managing at home, contact your GP and/or PHN.

APPENDIX 2 – Sample Patient Discharge Tracking Form

Sample Patient Discharge Tracking Form

Sample Patient Discharge Tracking Form

Name: _____ **Hospital No.:** _____

This sample form aims to assist the implementation of the discharge plan, track the patient's ELOS against the patient's treatment plan and support communication of the patient discharge plan at handover.

Action	Status	Date and Time	Signature (Print name & title if not on ward signature bank)
Assessment of the Patient's Discharge Needs			
Discharge Plan Commenced			
Discharge Plan Completed			
Patient's ELOS Documented			
Please document actual ELOS	ELOS (dd/mm/yy)		
Discharge Arrangements Confirmed with Patient/Family/Carer/Other			
Transport Arrangements Confirmed			
Discharge Checklist Completed			
Discharge/Transfer Summary Record Completed			
Medication Management Discussed			
Patient Education (Other) Completed			
Medical (Sick) Certificate			
Information Pack Provided			
Communication with PCCC services patient discharge (see referrals section also)			
Follow-up Arrangements Confirmed			

APPENDIX 3 – Sample Discharge Checklist

Discharge Checklist

Discharge checklist

Please note that this is not an exhaustive list

<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">General *</div> <div style="text-align: right; font-size: small;">Yes (Y)/No (N)/Not Applicable (NA)</div> <input type="checkbox"/> A discussion with the patient has taken place regarding their treatment plan <input type="checkbox"/> Observations within normal limits <input type="checkbox"/> Pain control satisfactory <input type="checkbox"/> Adequate nutrition and fluid intake <input type="checkbox"/> Passed urine <input type="checkbox"/> All dressings checked <p style="font-size: x-small; margin-top: 10px;">*A medical review of the patient prior to discharge is required if the answer to any of the above questions is 'No'</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Personal items returned to patient</div> <div style="text-align: right; font-size: x-small;">Yes (Y)/No (N)/Not Applicable (NA)</div> <input type="checkbox"/> Own medications (once reviewed) <input type="checkbox"/> Own equipment <input type="checkbox"/> Own X-Rays <input type="checkbox"/> Valuables <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">PCCC Services Referred to/Arranged</div> <div style="text-align: right; font-size: x-small;">Yes (Y)/No (N)/Not Applicable (NA)</div> <input type="checkbox"/> Contact made with Public Health Nurse <input type="checkbox"/> Home Help <input type="checkbox"/> Meals on Wheels <input type="checkbox"/> Occupational Therapist <input type="checkbox"/> Physiotherapist <input type="checkbox"/> Speech & Language Therapist <input type="checkbox"/> Community Pharmacist <input type="checkbox"/> Carer identified <input type="checkbox"/> Other (please specify)	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Items arranged for/provided to patient</div> <div style="text-align: right; font-size: small;">Yes (Y)/No (N)/Not Applicable (NA)</div> <input type="checkbox"/> Transfer/Discharge communication <input type="checkbox"/> Medications and medication list—explained to patient/carer, as appropriate <input type="checkbox"/> Follow-up appointment <input type="checkbox"/> Information pack <input type="checkbox"/> Aids and appliances <input type="checkbox"/> Wound care information <input type="checkbox"/> Common Summary Assessment Record (CSAR) completed <input type="checkbox"/> Home oxygen <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Transport</div> <div style="text-align: right; font-size: x-small;">Time Booked (24 hour)</div> <input type="checkbox"/> Relative/friend <input type="checkbox"/> Taxi <input type="checkbox"/> Ambulance <input type="checkbox"/> Community transport provider <input type="checkbox"/> Other (please specify) <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Follow up appointments</div> <div style="text-align: right; font-size: x-small;">Yes (Y)/No (N)/Not Applicable (NA)</div> <input type="checkbox"/> General Practitioner (GP) <input type="checkbox"/> OPD (please specify) <input type="checkbox"/> Medical specialist/other hospital (please specify) <input type="checkbox"/> Other (please specify)
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Signature/Printed Name
Date
Time (24 hour)

Discharge/Transfer Communication Record

NAME OF HOSPITAL		Please affix patient label here Labels should contain the following information: <ul style="list-style-type: none"> • Name • Address • Date of Birth • Healthcare Record Number 	
ADDRESS: _____			
TEL: _____	FAX: _____		
PROCEDURES & INVESTIGATIONS	RESULTS OF INVESTIGATIONS		
RELEVANT FINDINGS ON SYSTEMS REVIEW / EXAMINATION FINDINGS AND SUMMARY OF MANAGEMENT CARE PLAN			
FUNCTIONAL STATE ON DISCHARGE (Self-care / baseline mobility / walking aids & appliances)			
MEDICATIONS AND DIETS (including nutritional supplements and relevant information on administration of medicines)			
TRANSFER / DISCHARGE COMMUNICATION SIGNED BY: <i>(Name / Signature / Grade / Contact Details)</i>			
DISCHARGE PLAN (Please complete / tick relevant sections)			
DEPARTURE FROM WARD Ward contact details: _____ Nurse (or HSCP / other) contact details: _____ Date: _____ Time: _____ Tick relevant sections: <input type="checkbox"/> Accompanied <input type="checkbox"/> Alone <input type="checkbox"/> Own Transport <input type="checkbox"/> Public Transport <input type="checkbox"/> Hospital Taxi <input type="checkbox"/> HSE Ambulance <input type="checkbox"/> Private Ambulance <input type="checkbox"/> N Lines: Removed <input type="checkbox"/> SOG: Received <input type="checkbox"/> HSCP Arranged <input type="checkbox"/> Patients Informed <input type="checkbox"/> CSAR completed (map attached)	<input type="checkbox"/> HOME Follow Up <input type="checkbox"/> Nil Required <input type="checkbox"/> By GP in _____ Day <input type="checkbox"/> By PHN in _____ Day <input type="checkbox"/> By HSCP <input type="checkbox"/> (PFI) Date: _____ <input type="checkbox"/> Other: _____	<input type="checkbox"/> TRANSFER Transfer to: _____ Date: _____ Time: _____ TRANSFER CHECKLIST <input type="checkbox"/> Medication review/transfer control transfer form <input type="checkbox"/> Property / Valuables with patient <input type="checkbox"/> Property / Valuables in store <input type="checkbox"/> Identity Band / Barcode applied <input type="checkbox"/> Own Medication with patient if exchanged <input type="checkbox"/> Patient's Healthcare record <input type="checkbox"/> Patient's X-Rays <input type="checkbox"/> Investigation Results <input type="checkbox"/> Transfer / Discharge communication	INFORMATION GIVEN TO PATIENT <input type="checkbox"/> Transfer / Discharge communication <input type="checkbox"/> Medication Information <input type="checkbox"/> Details about follow-up appointments <input type="checkbox"/> Information packs <input type="checkbox"/> Discharge information <input type="checkbox"/> Information regarding aids and appliances <input type="checkbox"/> Advice booklet <input type="checkbox"/> Other: _____
DISCHARGE PLAN COMPLETED BY: <i>(Name / Signature / Grade / Contact Details)</i>		RECEIVING CLINICIAN (in the case of a transfer): <i>(Name / Title)</i>	
Page 2 of 2			

CHAPTER 6

Elective Surgery Indicators of Quality

Outlined below are the Indicators of Quality that have been defined in the previous chapters. Titles of working or steering groups, teams or other groupings need not be regarded as immutable as long as there is a body doing the appropriate work. Nor should it be regarded that every group should be stand alone. A group or committee that shares roles may be suitable, for example, a Theatre User Committee and a Day Surgery Group but each activity must have equal emphasis such that the governance and oversight is appropriate to each and one is not subservient to the other.

For the Overall Governance of Elective Surgery Provision

- An Elective Surgery Programme Steering Group should be set up to
 - Include leads for surgery, anaesthetics, nursing management, allied health professionals and hospital management and local GP liaison
 - Hold regular operational meetings (minimum quarterly) with Working Groups to review performance metrics
 - Report on measures, accountability, actions and completion dates for actions
 - Be accountable to the institutional executive management team
- Adopt Elective Surgery Programmes of Care including Average Length of Stay (AvLOS), Audit and the Productive Theatre Programmes
- Establish local level plan to achieve the agreed target on AvLOS and day case rates.
- Facilitate the elective patient journey by incorporating the requirements as outlined below

For Patients leaving the Surgical Outpatient Clinic

- For each elective surgery patient, a surgical care plan and its components are documented and set in motion as set out in the Model of Care for Elective Surgery
- Patients receive verbal and, in most cases, written documentation about their procedure and its potential complications and side effects
- Patients receive an estimate length of stay
- There should be documentary evidence of patients' consent if they are happy
- An appointment is made for attendance at a Pre-admission Assessment Clinic
- Details of planned surgery are conveyed to the Primary and Community Care Team
- Patients receive education on post-operative needs e.g. dietary, mobility aims
- There is a dedicated Waiting list/Admission Coordinator/Bed Manager for elective surgery patients

For Pre-admission Assessment Clinics

- The Clinics assess all elective Day Surgery and Day of Surgery admissions
- A Working Group is established as set out in the Model of Care for Elective Surgery
- The Working Group is led by a Supervising/Lead Anaesthetic Consultant
- There are additional Overseeing Consultants Anaesthetists as may be necessary
- There is a Lead Nurse at CNS/CNM2 grade
- There are adequate support nurses and staff who have the necessary competencies
- Allied health professionals are included in the pre-assessment process, as appropriate
- The Clinic is assigned a discrete area that is in close proximity and concurrent with surgical clinics, where possible
- Investigations, where necessary, are carried out, reported and followed up in a timely manner according to protocol
- Patient elective surgery cancellations should be less than 5%
- Activity, patient experience and audit is monitored through the Working Group at monthly or bimonthly meetings

For Day Units

- Day Surgery is a separate and discrete department/activity within the hospital
- A Working Group is established as set out in the Model of Care for Elective Surgery
- There is clear Integrated Care Pathway for patients undergoing Day Surgery from the Surgical Outpatient Clinic to Discharge
- There are appropriate staffing levels by dedicated staff as set out in the Model of Care for Elective Surgery
- There are agreed protocols and referral pathways to allied health professionals
- There is full compliance with WHO Safety Checklist
- There is an appropriate discharge protocol with follow-up, outreach and readmission where necessary
- There is liaison with the Primary and Community Care Team at the point of discharge
- Patients have access to a hospital point of communication after discharge, in case of an emergency, and a clear pathway for re-admission, if necessary
- Day Surgery units or wards are not be used to support inpatient care
- Activity, patient experience and audit is monitored through the Working Group at monthly or bimonthly meetings

For DOSA (Day of Surgery Admission) patients

- There is a clear Integrated Care Pathway for patients undergoing Day of Surgery Admission from the Surgical Out-patient Clinic to Discharge
- DOSA patients' beds are "ring fenced", preferably within a discrete unit based on predicted demand
- There is a designated person responsible for Waiting list and Admission Coordination for elective surgery patients

- Pre-admission assessment is undertaken on all DOSA patients
- 75%, or more, of elective surgical procedures are performed as DOSAs
- DOSA activity is monitored through the Surgery Programme Steering Group

For Discharge Planning

- Discharge planning is part of the elective surgical Integrated Care Plan at each stage of the patient's journey
- There is a dedicated Discharge Coordinator
- All patients are provided with an estimated length of stay
- There is a policy to discharge patients before 11.00 on the day of discharge
- The discharge is nurse facilitated
- All patients receive a uniform and agreed immediate Discharge Document forwarded to primary care.
- Discharge activity and patient experience is monitored through the Surgery Programme Steering Group

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Reference Groups

Clinical Advisory Group (RCSI & Irish College of Anaesthetists)
Patient Consultative Forum
Directors of Nursing/Midwifery Reference Group (National Clinical Programmes)
Therapy Reference Group (National Clinical Programmes)
Surgical Nursing Special Interest Group

1 CARDIO THORACIC TARGETS

ICD-10-AM	Procedure Code & Description	AvLOS Target
38448-01	Mediastinoscopy	1
38497-00	Coronary Artery Bypass, using 1 saphenous graft	8
38497-01	Coronary Artery Bypass, using 2 saphenous grafts	8
38497-02	Coronary Artery Bypass, using 3 saphenous grafts	8
38497-03	Coronary Artery Bypass, using ≥ 4 saphenous grafts	8
38500-00	Coronary Artery Bypass, using 1 LIMA graft	8
38503-00	Coronary Artery Bypass, using ≥ 2 LIMA grafts	8
38500-02	Coronary Artery Bypass, using 1 Radial graft	8
38503-02	Coronary Artery Bypass, using ≥ 2 Radial grafts	8
38488-02	Replacement of Mitral Valve with Mechanical Prosthesis	9
90201-00	Coronary Artery Bypass, using 1 Other Material graft	8
38742-02	Closure of Atrial Septal Defect	6
38488-00	Replacement of Aortic Valve with Mechanical Prosthesis	9

** No Day Procedures

2 GENERAL/UNSPECIFIED TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
30445-00	Laparoscopic Cholecystectomy	40
30609-02	Laparoscopic Repair of Inguinal Hernia, Unilateral	95
30614-02	Repair of Inguinal Hernia, Unilateral	90
30390-00	Laparoscopy	90
30617-00	Repair of Umbilical Hernia	95
30676-01	Excision of Pilonidal Sinus or Cyst	95
30393-00	Laparoscopic Division of Abdominal Adhesions	95
46494-00	Excision of Ganglion of Hand	95
		AvLOS Target
30306-00	Total Thyroid Lobectomy, Unilateral	2

3 GENERAL/BREAST TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
30300-00	Sentinel Lymph Node Biopsy	95
30335-00	Regional Excision of Lymph Nodes of Axilla	95
31554-00	Microdochotomy of Breast	95
45524-00	Augmentation Mammoplasty, Unilateral	95
30332-00	Excision of Lymph Node of Axilla	95
31500-00	Excision of Lesion of Breast	95
31500-01	Open Biopsy of Breast	95
31557-00	Excision of Duct (Central) of Breast	95
31560-00	Excision of Accessory Breast Tissue	95
31563-00	Surgical Eversion of Inverted Tissue	95
31515-00	Re-Excision of Lesion of Breast	95
		AvLOS Target
31518-00	Simple Mastectomy, Unilateral	2.5
31518-01	Simple Mastectomy, Bilateral	3
45522-00	Reduction Mammoplasty, Unilateral	2
30336-00	Radical Excision of Lymph Node of Axilla	2
45522-01	Reduction Mammoplasty, Bilateral	2
45539-00	Reconstruction of Breast with Insertion of Tissue Expander	1.5
45556-00	Mastopexy	1.5
45530-00	Reconstruction of Breast using Myocutaneous Flap	4

4 GENERAL COLORECTAL TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
32138-00	Haemorrhoidectomy (includes excision skin tags)	60
32138-02	Stapled haemorrhoidectomy	60
		AvLOS Target
32003-01	Right Hemicolectomy with Anastomosis	6.5
32003-00	Limited Excision of Large Intestine with Anastomosis	7
32039-00	Abdominoperineal proctectomy	14
32006-00	Left hemicolectomy with anastomosis	9
32024-00	High anterior resection of rectum	8
32025-00	Low anterior resection of rectum	8
32026-00	Ultra low anterior resection of rectum	8
32028-00	Ultra low anterior resection of rectum with hand sutured coloanal anastomosis	12
30562-00	Closure of loop ileostomy	5

5 GENERAL/UPPER GI TARGETS

ICD-10-AM	Procedure Code & Description	AvLOS Target
30541-01	Trans-Hiatal Oesophagectomy by Adbominal and Cervical Mobilisation, with Oesophogojunal Anastomosis	16
30521-00	Total Gastrectomy	13
30512-00	Gastric Bypass	4
30511-01	Laparoscopic Gastric Reduction	3
30532-00	Oesophagogastric Myotomy, Laparoscopic Approach	2
30527-00	Fundoplasty, Laparoscopic Approach	2
30527-01	Diaphragmatic Hiatus	2
30541-00	Trans-Hiatal Oesophagectomy by Adbominal and Cervical Mobilisation, with Oesophogastric Anastomosis	16

** No Day Procedures

6 GENERAL/VASCULAR TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
32508-00	Interruption of Sapheno-Femoral Junction Varicose Veins	95
		AvLOS Target
33080-00	Repair of Intra-Abdominal Aneurysm	9
33115-00	Replacement of Infrarenal Abdomino-Aortic Aneurysm with Tube graft	9
33116-00	Endovascular Repair of Aneurysm	4
33500-00	Carotid Endarterectomy	4
33118-00	Replacement of Infrarenal Abdomino-Aortic Aneurysm with	9
33121-00	Replacement of Infrarenal Abdomino-Aortic Aneurysm with Bifurcation Graft to Femoral Arteries	9
33124-00	Replacement of Iliac Artery Aneurysm with Graft, Unilateral	9

7 GYNAECOLOGY TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
35647-00	Large Loop Excision of Transformation Zone	95
30390-00	Laparoscopy (also incl in General Surgery)	90
35608-02	Biopsy of Cervix	95
35630-00	Diagnostic Hysteroscopy	95
35614-00	Colposcopy	95
35503-00	Insertion of IUD	95
35640-00	D & C of Uterus	95
35688-00	Laparoscopic Sterilisation	90
35633-01	Polypectomy of Uterus via Hysteroscopy	95
35638-04	Laparoscopic Ovarian Cystectomy, Unilateral	40
		AvLOS Target
35653-01	Total Abdominal Hysterectomy	6.5
35599-00	Sling Procedure for Stress Incontinence	2
35653-04	Total Abdominal Hysterectomy with Removal of Adnexa	6.5
35657-00	Vaginal Hysterectomy	5

8 NEUROSURGERY TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
39331-01	Release of Carpal Tunnel	95
		AvLOS Target
40300-00	Discectomy, 1 Level	2
35321-02 to 35321-	Transcatheter Embolisation of Blood Vessel the transition to	2
40333-00	Cervical Discectomy, 1 Level	3
90024-00	Decompression of Lumbar Spinal Canal, 1 Level	3
39715-01	Partial Excision of Pituitary Gland, Transphenoidal Approach	3
39709-00	Removal of Lesion of Cerebrum	7
39800-00	Clipping of Cerebral Aneurysm	7

9 OPHTHALMIC TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
42702-04	Extracapsular extraction of crystalline lens by	95
42740-03	Administration of therapeutic agent into posterior chamber	95
42503-00	Ophthalmological examination	95
42809-00	Destruction of retina by photocoagulation	95
31230-00	Excision of lesion of skin and subcutaneous tissue of eyelid	95
42702-10	Other extraction of crystalline lens with insertion of foldable	95
42575-00	Excision of cyst of tarsal plate	95
42788-00	Capsulotomy of lens by laser	95
42833-00	Strabismus procedure involving 1 or 2 muscles, 1 eye	90
42615-01	Probing of lacrimal passages, bilateral	95
42719-02	Mechanical fragmentation of secondary membrane	95
42833-01	Strabismus procedure involving 1 or 2 muscles, both eyes	60

10 ORAL MAXILLO FACIAL TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
97311-01	Non Surgical Removal of 1 Tooth or Part Thereof	90
97322-00	Surgical Removal of 1 Tooth, not requiring removal of bone or	90
97311-02	Non Surgical Removal of 2 Teeth or Part Thereof	90
97323-01	Surgical Removal of 1 Tooth, requiring removal of bone	90
45665-00	Full thickness Wedge Excision of Lip	80
30256-00	Excision of Submandibular Gland	90
45729-01	Osteotomy of Maxilla with Internal Fixation, Bilateral	90
45729-00	Osteotomy of Mandible with Internal Fixation, Bilateral	90
90135-00	Excision of Lesion of Tongue	90
45726-01	Osteotomy of Maxilla, Bilateral	90
		AvLOS Target
30253-00	Partial Excision of Parotid Gland	1.5
30247-00	Total Excision of Parotid Gland	1.5
30272-00	Partial Excision of Tongue	5

11 OTOLARYNGOLOGY TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
41671-02	Septoplasty	60
41530-00	Myringoplasty, Postaural or Endaural Approach (Tympanoplasty)	40
41632-01	Myringotomy with Insertion of Tube, Bilateral (Grommets)	95
41632-00	Myringotomy with Insertion of Tube, Unilateral	95
41855-00	Microlaryngoscopy	95
41801-00	Adenoidectomy without Tonsillectomy	90
41626-00	Myringotomy, Unilateral	95
41626-01	Myringotomy, Bilateral	95
41674-00	Cauterisation or Diathermy of Nasal Turbinates	85
41674-01	Cauterisation or Diathermy of Nasal Septum	90
47738-00	Closed Reduction of Fracture of Nasal Bone	95
45638-00	Rhinoplasty	50
		AvLOS Target
41789-00	Tonsillectomy without Adenoidectomy - Adult (Age≥16)	1
41789-00	Tonsillectomy without Adenoidectomy - Children (Age<16)	1
41789-01	Tonsillectomy with Adenoidectomy	1
41737-03	Ethmoidectomy, Bilateral	1
30306-00	Total Thyroid Lobectomy, Unilateral	2
41737-02	Ethmoidectomy, Unilateral	2
30296-00	Total Thyroidectomy	3

12 PLASTIC TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
45659-00	Correction of Bat Ear	95
45665-00	Full thickness Wedge Excision of Lip (also incl in OMF)	80
45638-00	Rhinoplasty (also incl in ENT)	50
39331-01	Release of Carpal Tunnel	95
46494-00	Excision of Ganglion of Hand	95
		AvLOS Target
46372-00	Palmar Fasciectomy for Dupuytren's Contracture involving 1 digit (ray)	1
45522-01	Reduction Mammoplasty, Bilateral	2
45530-00	Reconstruction of Breast using Myocutaneous Flap	4
45539-00	Reconstruction of Breast with Insertion of Tissue Expander	1.5

13 TRAUMA & ORTHOPAEDIC TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
49558-00	Arthroscopic Debridement of Knee	85
49557-00	Arthroscopy of Knee	95
47930-00	Removal of Plate, Rod or Nail, NEC	95
39331-01	Release of Carpal Tunnel	95
48951-00	Arthroscopic Decompression of Subacromial Space	95
49560-03	Arthroscopic Meniscectomy of Knee	95
46369-00	Palmar Fasciectomy for Dupuytren's Contracture	80
30107-00	Excision of Ganglion, not elsewhere classified	90
47927-00	Removal of Pin, Screw or Wire, NEC	95
49561-01	Arthroscopic Meniscectomy of Knee with Debridement, Osteoplasty or Chondroplasty	95
49833-00	Correction of Hallux Valgus by Osteotomy of First Metatarsal, Unilateral	40
		AvLOS Target
49324-00	Revision of Total Arthroplasty of Hip	10
49318-00	Total Arthroplasty of Hip, Unilateral	7
49518-00	Total Arthroplasty of knee, Unilateral	7
90024-00	Decompression of Lumbar Spinal Canal, 1 Level	3
49821-00	Correction of Hallux Valgus or Rigidus by Arthroplasty, Unilateral	2
40300-00	Discectomy, 1 Level	2
46372-00	Palmar Fasciectomy for Dupuytren's Contracture involving 1 digit (ray)	1

14 UROLOGY TARGETS

ICD-10-AM	Procedure Code & Description	% Day Case Target
37327-00	Optical Urethrotomy	50
36840-00	Endoscopic Destruction of a Single Lesion of Bladder ≤2cm or Tissue of Bladder	75
30653-00	Male Circumcision	90
		AvLOS Target
37209-00	Radical Prostatectomy	7
37203-00	Transurethral Prostatectomy	4
36528-00	Laparoscopic Radical Nephrectomy	7
36528-01	Radical Nephrectomy	10
36531-01	Nephroureterectomy	12
36845-04	Endoscopic Resection of a Single Lesion of Bladder >2cm in diameter	5
36564-01	Pyeloplasty	5
36564-00	Laparoscopic Pyeloplasty	3.5
30641-00	Orchidectomy, Unilateral	2
36840-02	Endoscopic Resection of a Single Lesion of Bladder ≤2cm or Tissue of Bladder	4
36845-01	Endoscopic Destruction of Multiple Lesions of Bladder	3

PERFORMANCE QUESTIONNAIRE FOR ELECTIVE SURGERY PROGRAMME

Hospital Name: _____

Date of Survey: _____

1. Overall Governance of Elective Surgery Provision	
	<i>Yes, No, Comment</i>
Has an Elective Surgery Programme Steering Group been set up?	
Does it include leads for surgery, anaesthetics, nursing management, allied health professionals and hospital management and local GP liaison?	
Does it hold regular operational meetings (minimum quarterly) with Working Groups to review performance metrics?	
Does it report on measures, accountability, actions and completion dates for actions?	
Is it accountable to the institutional executive management team and hospital board?	
Has it adopted all elements of the Elective Surgery Programmes of Care including Average Length of Stay (AvLOS), Mortality audit and the Productive Theatre Programmes?	
Is there is a dedicated Waiting list/Admission Coordinator/Bed	

Manager for elective surgery patients?	
Are patient elective surgery cancellations less than 5%	
2. AVLOS Programme	
	<i>Yes, No, Comment</i>
Has local level planning been established to achieve the agreed target of average length of stay and day case rates?	
Have ring fenced beds been assigned?	
Has the relevant staff been informed of these targets and reporting tool including the executive management team surgeons, nurses, bed managers and HIPE Coders?	
Have surgeons agreed a mechanism for accurate coding in conjunction with the HIPE Coders?	
3. For Patients leaving the Surgical Outpatient Clinic	
	<i>Yes, No, Comment</i>
Are surgical care plans and their components being documented as set out in the Model of Care for Elective Surgery?	
Do patients receive verbal and, in most cases, written documentation about their procedure and its potential complications and side effects?	

Do patients receive an estimate length of stay?	
Is there documentary evidence of patients' consent?	
Are appointments being made for attendance at a Pre-admission Assessment Clinic	
Are details of planned surgery being conveyed to Primary and Community Care Teams	
Does the surgery waiting list conform to the National Treatment Purchase Fund's National Policy of Waiting Lists?	
4. For Pre-admission Assessment Clinics	
	<i>Yes, No, Comment</i>
Is there a Clinic to assess all elective Day Surgery and Day of Surgery admissions?	
Has a Working Group been established?	
Is the Working Group led by a Supervising/Lead Anaesthetic Consultant?	
Are there additional overseeing Consultants Anaesthetists?	
Is there is a Lead Nurse at CNS/CNM2 grade?	
Are there adequate support nurses and staff who have the necessary competencies?	

Are allied health professionals included in the pre-assessment process?	
Is the Clinic assigned a discrete area that is in close proximity and concurrent with surgical clinics, where possible?	
Are investigations, where necessary, carried out, reported and followed up in a timely manner according to protocol?	
Is activity, patient experience and audit monitored through the Working Group at monthly or bimonthly meetings?	
5. For Day Units	
	<i>Yes, No, Comment</i>
Is Day Surgery is a separate and discrete department/activity within the hospital?	
Has Working Group been established as set out in the Model of Care for Elective Surgery?	
Is there a clear Integrated Care Pathway for patients undergoing Day Surgery from the Surgical Outpatient Clinic to Discharge? Are there appropriate staffing levels by dedicated staff as set out in the Model of Care for Elective Surgery?	
Are there agreed protocols and referral pathways to allied health	

professionals?	
Is there full compliance with WHO Safety Checklist?	
Is there is an appropriate discharge protocol with follow-up, outreach and readmission where necessary?	
Is there liaison with the Primary and Community Care Team at the point of discharge?	
Do patients have access to a point of communication in the hospital after discharge, in case of an emergency, and a clear pathway for re-admission, if necessary?	
Are Day Surgery units or wards ring fenced from being used to support inpatient care?	
Is activity, patient experience and audit monitored through the Working Group at monthly or bimonthly meetings?	
6. For DOSA (Day of Surgery Admission) patients	
	<i>Yes, No, Comment</i>
Is there is a clear Integrated Care Pathway for patients undergoing DOSA from the Surgical Out-patient Clinic to Discharge?	
Is there is a clear Integrated Care Pathway for patients undergoing DOSA from the Surgical Out-patient Clinic to Discharge?	

Are DOSA patients' beds ring fenced, preferably within a discrete unit?	
Is there is a designated person responsible for Waiting list and Admission Coordination for elective surgery patients?	
Is pre-admission assessment is undertaken on all DOSA patients?	
Are 75%, or more, of elective surgical procedures performed as DOSAs?	
Is DOSA activity is monitored through the Surgery Programme Steering Group?	
7. For Discharge Planning	
	<i>Yes, No, Comment</i>
Is discharge planning part of the elective surgical Integrated Care Plan at each stage of the patient's journey?	
Is there a dedicated Discharge Coordinator?	
Are all patients provided with an estimated length of stay?	
Is there is a policy to discharge patients before 11.00 on the day of discharge?	

Is the discharge nurse facilitated?	
Do all patients receive a uniform and agreed immediate Discharge Document forwarded to primary care?	
Is discharge activity and patient experience monitored through the Surgery Programme Steering Group?	

National Clinical Programme in Surgery

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