Elective General Surgery

Introduction

General surgery is a wide ranging specialty with many subspecialties. As one of the largest surgical specialties in the UK, general surgery plays a key role in the provision of elective and emergency surgery. As such, a sustainable general surgical service is a key element of delivering both elective and emergency care in acute hospitals.

When we refer to elective care, we mean care that is planned in advance as opposed to emergency or unplanned treatment. Elective care is multifaceted and the patient journey can involve a number of different elements and interfaces; for example, GP referral, outpatient appointment, diagnostic tests, pre-operative assessment, inpatient/daycase admission, review etc.

This paper differentiates elective general surgery based on complexity. The distinction between complex and less complex surgery is not prescriptive; however the expertise required to carry out the surgery, the need for specialised equipment or teams, the volume of cases requiring surgery and the patient's individual circumstances will all determine if it is complex or less complex. A separate indicator of whether the surgery is complex or less complex is the length of stay for the patient with over 72 hours considered the former and less than 72 hours the latter. Examples of less complex elective general surgical procedures include the likes of inguinal hernia (normally a day procedure), and cholecystectomy (normally requiring a short stay in hospital. These procedures are currently provided by all Health and Social Care Trusts (HSCTs). Examples of complex elective general surgical procedures include oesophageal cancer, chronic pancreatitis and intestinal failure which may require specialised equipment or teams that are not available at every hospital.

Policy Context

In 2016, The Bengoa Report[1], *'Systems Not Structures'* recognised that there is clear and unambiguous evidence to show that specialised procedures concentrated on a smaller number of sites and dealing with a higher volume of patients, will improve outcomes. Continuing to invest large sums of money in trying to keep unsustainable services in place will only serve to delay their collapse and represents a significant opportunity cost to reforms elsewhere in the system. More importantly, it is also contributing to variation in terms of the quality of care received by those using services in different Trust areas.

In October 2016 the former Health Minister, Michelle O'Neill MLA, launched *'Health and Wellbeing 2026: Delivering Together'*, which seeks to radically reform the way health and social care services are designed and delivered in Northern Ireland, with a focus on person-centred care, rather than on buildings and structures. It is aligned with the aspirations set out within the Northern Ireland Executive's draft Programme for Government, and aims to improve the health of our people, improve the quality and experience of care, ensure the sustainability of our services, and to support and empower staff; but also recognises the challenges that need to be overcome if this is to be achieved.

Health and Wellbeing 2026: Delivering Together remains the overarching strategy by which the Department continues to reform. Decisions on the nature and approach to service changes and the wider rebuilding of services will be considered in adherence to the overarching principles of Delivering Together and will take place in the context of this broader strategic approach.

On 15 June 2021 the Minister for Health published the Elective Care Framework. It sets out firm, time bound proposals for how we will systematically tackle the backlog of patients waiting longer than Ministerial standards, and how we will invest in and transform services to allow us to meet the population's demands in future.

[1] Systems, Not Structures - Changing Health and Social Care - Full Report | Department of Health (health-ni.gov.uk)

The Framework also recognises that the Department of Health requires significant investment to deliver its short, medium and longer-term targets in this area of an additional £707.5m over the five-year period.

Methodology

Under the Review of General Surgery, a clinically led, managerially supported workstream was established to consider Elective General Surgery. This scope of this workstream included both complex and less complex surgery (defined above).

The focus of the Elective Care Workstream was to define a patient-centred, clinically sustainable, efficient and future proofed model to be adopted for the provision of elective general surgery in Northern Ireland.

In developing the following recommendations for elective general surgery, the workstream recognised the need to be cognisant of both the backlog of patients waiting for surgery and the need to transform the delivery of elective general surgery services in a new sustainable model for the future.

Delivery of Elective Care and the Impact of Emergency General Surgery

The nature of general surgery is that it encompasses both elective and emergency services provided by the same surgical care team. For the general surgery service to be provided safely and efficiently to the highest standard and with equal importance, both of the individual elements requires focus and attention at the same time. While complex elective surgery and / or surgery for patients with a high risk of morbidity and mortality cannot be separated entirely from unscheduled care services due to the co-reliance on the same clinical interdependencies and infrastructure, for the less complex surgery to be as efficient as possible it must be insulated from unscheduled care pressures. Before a surgical procedure can be carried out, a range of resources have to be brought together at the right time and the right place: surgical staff, nursing staff, anaesthetic staff, theatre time, beds. Remove any one of these components and the operation has to be cancelled. Where the same staff and

resources are required to be available for both emergency and elective care, emergency treatment will always come first and will inevitably result in cancellation of elective unless systems and processes are in place to keep them segregated either geographically on separate sites or sequestered on the same site.

Delivering Emergency General Surgery across multiple sites is becoming increasingly difficult in terms of rotas, succession planning, skill mix, supporting services and disciplines, best practice and maintaining equality of service. There are specific issues relating to the requirement to maintain multiple 24/7 rotas for emergency surgery for adults and children, and the difficulties this creates in terms of staffing and meeting professionally mandated standards of care. This is not unique to the smaller hospital sites and even larger sites are experiencing difficulties maintaining rotas. With trends towards increased specialisation and increased demand for services, it is expected that services will come under greater pressure and, as a result, variation in practice and outcome will continue.

The current approach is inefficient, and elective services often are a casualty of this as resources are channelled into responding to unscheduled demand resulting in an inefficient elective care service. As highlighted above, stretching staff resources to maintain emergency surgery on too many sites leads to an overreliance on locums, increased pressure on small teams, short term decision making, and services vulnerable to collapse at short notice (which puts further pressure on neighbouring services). Where elective and emergency surgery are delivered on the same site, particularly where a site does not have a sustainable service, elective services will continue to be subordinate to emergency requirements.

Therefore there can be minimal sustained improvement in elective care unless there is a change in how emergency general surgery is provided across the region, i.e. fewer sites providing inpatient emergency surgery and an elective/emergency split. This is the first principle of reform and creating and protecting more capacity for elective care.

Recommendation – there must be a reduction in sites providing emergency care – [link to emergency workstream recommendation].

Recommendation - All Trusts must adopt an elective and emergency split for general surgical services (both staff and infrastructure), both on a single site when clinically indicated and across sites where possible. Clinical teams will be required to develop / modernise pathways for elective and unscheduled patients that are separate and maximise use of all resources.

Recommendation – Hospitals where elective general surgery is provided (either single-site split model or on a site without inpatient emergency surgery) must have "ring-fenced" elective beds, theatre lists and staff to ensure this service is protected from the impact of unscheduled care.

Appropriate Care Settings

A key component of an efficient, cost effective, high quality, patient centred elective surgical service is the principle that the patient is treated in the most appropriate setting, at the right time, by the right person with as short a stay as possible. All elective care patients should therefore be cared for in a setting appropriate to their clinical needs. (Reference GIRFT)

We know that it is not sustainable for each hospital site to deliver the full spectrum of surgical services. There is clear and unambiguous evidence to show that specialised procedures concentrated on a smaller number of sites and dealing with a higher volume of patients, will improve outcomes for example:

- Patients are seen in the right place and by the right person as soon as possible;
- Staff have the necessary skills, knowledge, expertise, support and equipment to allow them to deliver the highest quality care to patients;
- It is possible to attract and recruit sufficient staff to deliver a safe, high quality, 24/7 service;

- The services are more stable and there is a better environment for patients and staff;
- There are the right conditions for professional development, quality improvement, leadership, teaching and other activities that are essential to a vibrant workforce expert in delivering care to acutely unwell patients;
- There is capacity for research and a greater ability to engage with academia and industry in generating new solutions and accelerating testing, adoption and introduction of existing solutions; and,
- This achieves the Triple Aim of better population health, better quality care and better use of resources[2]

No matter where they live in Northern Ireland, patients require equitable access to all levels of elective general surgery in a Trust facility that has the appropriate infrastructure to meet clinical need.

Across the region, this includes models for:

- Complex inpatient surgery and / or surgery for patients with a high risk of morbidity and mortality – where for example patients require a longer recovery period and a lengthier stay in hospital;
- Short stay inpatient surgery- where patients may be required to stay in hospital a small number of nights; and
- All levels of day surgery - which typically are for lower complexity procedures that do not require an overnight stay.

A reduction in the number of sites providing emergency general surgery will shape the provision of elective general surgery across Northern Ireland. In line with the emergency workstream, a series of standards for elective general surgery have been developed to inform planning and investment in general surgery.

[2] Systems, not structures - Changing health and social care - Full Report (health-ni.gov.uk)

Recommendation – the application of a series of standards for elective general surgery that must be used to inform planning and investment in elective general surgery.

Commissioning of General Surgery

The Elective Care Framework acknowledges that if the gap between demand for services and our capacity to deliver is not closed, then the backlog of patients waiting will continue to grow. Up until 2014, the gap was managed through in year funding injections to facilitate additional activity. Those monies have been in shorter supply since then and waiting times have climbed relentlessly as a result.

The Framework is clear that Investment and reform are now both required - targeted investment to get people treated as quickly as possible; reform to ensure the long-term problems of insufficient capacity to meet demand and productivity are properly addressed.

Historically, commissioning in Northern Ireland has generally focused on a combination of capitation and block contracts. Several reviews carried out in Northern Ireland have made comment on the methods of commissioning and have drawn out the benefits of a tariff model in transparently driving efficiency and productivity. The introduction of a tariff based funding model will make it simpler to monitor activity, tackle underperformance and reward productivity. Under a tariff model, organisations are only funded for the activity they deliver. Underperformance is therefore reflected in the overall investment in the service.

In line with an action in the Elective Care Framework, the Health and Social Care Board (now Strategic, Planning and Performance Group, Department of Health) is working to pilot a shadow tariff model in a number of high volume specialties, including cataracts and hernias. Following evaluation of this approach, consideration may be given to the expansion of tariffs into other aspects of elective care, including appropriate inpatient activity.

Any future funding model[3] for general surgery elective-care in Northern Ireland should also take learning from what is happening elsewhere in the UK. It should underpin the elective / emergency split and be used to drive best practice, efficiency and performance of all aspects of general surgery.

Work is also underway to develop a new Integrated Care System (ICS) for Northern Ireland. This system signals a new way of planning and managing our health and social care services based on the specific needs of the population. The ICS approach brings many partners together, building on the excellent partnership working encountered during the pandemic. Reaching out beyond traditional boundaries, the ICS will harness the strengths in our existing partnerships.

Recommendation – In line with the Elective Care Framework the commissioner must pilot a shadow tariff model in elective general surgical procedures such as hernias. Following evaluation of this approach, and informed by the Regional Elective General Surgery Network consideration must be given to the expansion of tariffs into other aspects of elective general surgery including appropriate inpatient activity.

Recommendation – the Commissioner must quantify the demand/capacity gap at Trust level for the delivery of general surgical services and must work with Trusts to understand the workforce and infrastructure position in the current service model with the aim of identifying any gaps in capacity against the new service model.

Recommendation - The Commissioner must take account of the outcome of the Review of General Surgery and ensure it is reflected in the new commissioning model in respect of funding backlog and recurrent investment.

Regional Networking and Collaboration

[3] The funding model for health and social care is currently being reviewed within the context of implementing a new Integrated Care System and an Outcomes Based Accountability approach to service delivery.

The development of the regional Day Procedure Centre (DPC) at Lagan Valley Hospital has demonstrated the benefits of Trusts working collaboratively to deliver benefits for patients across the region. In recent months, the site has delivered red flag and other high priority lists on behalf of the region where these could not be accommodated at the hospital of origin due to pandemic pressures. The DPC is hosted by the South Eastern Trust who work collaboratively with other Trusts to prioritise access to theatre lists. Similar day procedure centre initiatives exist across the region for varicose veins and cataracts.

During the pandemic the HSCB has also established the Regional Prioritisation Oversight Group (RPOG) to ensure a clinically led network approach to agreeing relative clinical prioritisation of cancer time critical/urgent cases across surgical specialties and Trusts. This approach offers a consistent and transparent means of ensuring the optimisation of all available theatre capacity (in-house and in the independent sector) during this period.

An Elective Care Centre Management Team has also been established to ensure strategic oversight of the implementation of actions in the Elective Care Framework relating to expansion of the elective care centre model. In practice the Team takes a directive and targeted approach to the development and management of elective care centres across the HSC for both adult and paediatric procedures. This means agreeing detailed specifications for new elective care centres and service models. In this work it will drive regional solutions taking account of best practice and professional standards/guidance.

Learning from these initiatives, it is clear that delivery of an equitable and sustainable model for elective general surgery across Northern Ireland will require a combination of intra and inter-Trust working. While regional collaboration will be essential, each Trust has a unique set of circumstance for change in terms of drivers, constraints, challenges and opportunities that are rightly dealt with at a local level.

Trust teams will be required to work within Trust boundaries maximising the workforce and all facilities, as well as working as part of a “Regional Elective General

Surgery Network" to develop surgical hubs for short stay inpatient and day surgery which will build on the work already in progress for Elective Care Centres.

The delivery of complex care would also benefit from regional oversight of the provision of these services to improve equity of access to services, to improve outcomes for patients and to drive efficiency. The Network will also work as a mechanism to ensure that pathways for new service developments are evidence based, fully encompassing and established in response to regional need.

Such regional approaches must be multidisciplinary, collaborative and involve the Commissioner/Department. Further work will be required to define the governance and accountability arrangements for these initiatives.

Recommendation – establishment of a Regional Elective General Surgery Network to drive forward a multifaceted transformation programme for elective general surgery at a regional level, incorporating best practice from other parts of the UK.

Recommendation – the establishment of Trust level general surgical transformation team within Trusts with regional oversight by the Regional Elective General Surgery Network to drive reform and improvements in service delivery.

Digital Solutions and Administrative processes

Throughout the pandemic we saw a range of digital technology being utilised by staff and service users. This included the development of Covid related Apps, online booking platforms for Covid tests/vaccination, information systems to support contact tracing and vaccination programmes as well as data dashboards updated daily. Within HSC Trusts, staff were enabled to work remotely and clinicians have been able to care for their patients virtually via telephone and video.

As we emerge from the pandemic we must maintain this momentum and proactively seek digital solutions and initiatives which will drive efficiency, free up clinical and

administrative capacity and will allow patients, clients and service users to communicate and interact with their care team.

Technology enabled patient care records, improved communications with patients and between multidisciplinary teams, regional booking solutions and regional pre-operative assessment will be key requirements for the successful and sustainable delivery of a regional networked approach to elective general surgery. These initiatives must also be underpinned by robust administrative processes, accurate coding, with appropriate senior management oversight and accountability.

Recommendation - The Regional Elective General Surgery Network must embrace digital solutions and information systems (aligned with the Encompass programme) to drive efficiency in the delivery of elective general surgery.

Elective Care Standards

	Complex Elective Inpatient Surgery (High Risk Patients)	**Short Stay Inpatient & Higher Complexity Day Surgery / Patients (to be adapted according to setting)**
Model of Care	• There must be a separate stream from emergency surgery provision in terms of working patterns, access to theatre, critical care and dedicated ring-fenced beds	• There must be a separate stream from emergency surgery provision in terms of working patterns, access to theatre and dedicated ring-fenced beds • There must be agreed protocols in place for transfer of patients who require a higher level of care
Clinical Infrastructure	• There must be access to a fully staffed theatre available 24/7. A scheduling process must be in place to maximise the utilisation and efficiency of this theatre. • There must be 24/7 access to an anaesthetic service • There must be a Post Anaesthetic Care Unit (PACU) • There must be access to critical care services including 24/7 access to level 3 and level 2 care beds and a critical care outreach team.	• There must be daytime and OOH access to an anaesthetic service • There must be access to emergency theatre with transfer protocols if required • There must appropriate facilities for day surgery and minor / intermediate inpatient surgery to ensure care is delivered in the appropriate setting
Clinical Interdependencies	• There must be 24 hours a day access to diagnostic services such as plain film x-ray, computerised tomography (CT) and timely access to MRI and ultrasound scanning on site.	• A hospital admitting paediatric elective inpatients must have a local and networked model of care in place that involves advice and input from paediatricians and paediatric surgeons as required

	• There must be onsite access to simple interventional radiological procedures such as drainage, ideally 7 days per week but a minimum of 5 (Mon-Fri). More complex IR procedures must be accessed either onsite or through a formalised network. • There must be access (on site where appropriate) to timely assessment / review from other clinical specialities such as cardiology, renal, diabetes, care of the elderly, etc. • A hospital admitting complex elective paediatric surgical patients must have a local and networked model of care in place that involves advice and input from paediatricians and/or paediatric surgeons as required.	
Workforce	• The must be surgical rotas at Consultant, Specialty Trainee and Core/Foundation Trainee level • There must be ward based nursing and Allied Healthcare Professionals (AHP) with knowledge and skills to care for higher acuity patients • Surgical trainees must have access to a sufficient volume and diversity of elective surgical practice necessary to meet required competences	• The must be surgical rotas at Consultant, Specialty Trainee and Core/Foundation Trainee level • There must be Nurse-led protocols where clinically appropriate • Surgical trainees must have access to a sufficient volume and diversity of elective surgical practice necessary to meet required competences

Process and protocols	• Clinical protocols must be in place that are in line with best practice for perioperative care for complex inpatient surgery and high risk patients • In hospitals where children are admitted for elective surgery they must be admitted to an age appropriate environment and care must reflect paediatric protocols and clinical guidelines	• Clinical protocols must be in place that are in line with best practice for perioperative care for day surgery and minor / intermediate inpatient surgery • In hospitals where children are admitted for elective surgery they must be admitted to an age appropriate environment and care must reflect paediatric protocols and clinical guidelines