



***"A year like no other"***

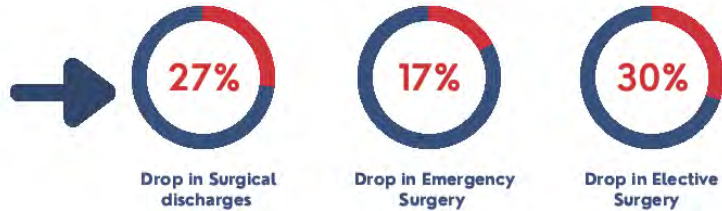
The impact of the SARS-COV-2 pandemic on surgical activity in Ireland

RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE

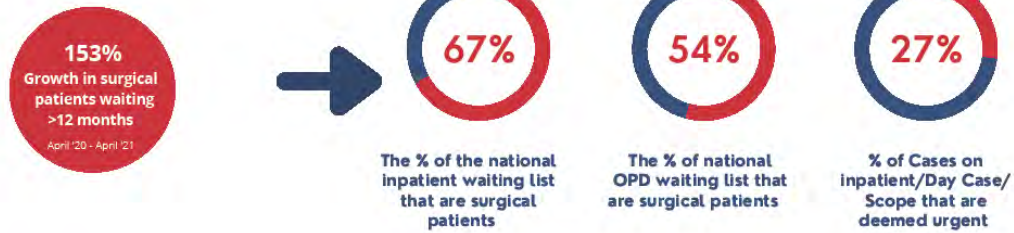


# The Impact of COVID-19 on Surgical Activity in Ireland

Surgical Discharges  
(2020)



Waiting Lists  
as of April 2021



## NCPS / NCPTOS / RCSI Guidance



Critical Risk & Scenario Planning



Prioritisation of Surgery



Maintaining Capacity



Unscheduled & scheduled care



Taking Consent



Resumption of Services

## INITIATIVES



For more information, contact [surgeryprogramme@rcsi.ie](mailto:surgeryprogramme@rcsi.ie)

## Revision History

Version No	Date	Updates to document
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## Contents

<b>Acknowledgements .....</b>	<b>4</b>
<b>1. Introduction .....</b>	<b>5</b>
<b>2. Purpose .....</b>	<b>6</b>
<b>3. Authorship .....</b>	<b>6</b>
<b>4. Introduction .....</b>	<b>7</b>
<b>5. Surgical Activity 2020.....</b>	<b>8</b>
<b>6. Waiting lists.....</b>	<b>12</b>
<b>7. Referrals.....</b>	<b>16</b>
<b>8. Innovations to mitigate the impact of COVID-19 on surgical activity throughout the pandemic .....</b>	<b>18</b>
<b>9. Long Term impact of the pandemic on Surgical Activity .....</b>	<b>26</b>
<b>References .....</b>	<b>28</b>
<b>NCPS Publications.....</b>	<b>28</b>

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- the teams in both the HPO & NTPF who coordinate and consolidate the HIPE data and waiting list data nationally
- Gerry Kelliher (Business Intelligence) for coordinating and presenting the data for this report.

We are also grateful to all our multidisciplinary colleagues who took the time to write to tell us about their initiatives that allowed the continuation of patient care in the most difficult of circumstances.

## 1. Introduction

The events surrounding the COVID-19 outbreak have been challenging with public health bodies placing the safety of patients, staff and communities first in all decisions. Experience around the world demonstrated that delivering surgical services in a safe manner in an environment where COVID-19 is endemic proved difficult. Surgery has many vital benefits: alleviation of pain and other symptoms; treatment of injury; improvement of quality of life; curing disease and prolonging life. In the prevailing environment where large numbers of patients required COVID-related care and where staffing was depleted by both illness and contact precautions, of necessity, the delivery of emergency surgery was prioritized.

Ireland to date, has suffered a number of waves of the pandemic. A national vaccination strategy is underway, and the public have supported extraordinary public health measures in an attempt to contain the pandemic. Surgeons have responded to the challenges posed by the pandemic with collegiality, innovation and a relentless commitment to delivering safe care.

It is now timely to reflect on the sequelae of restricted services on patients and on those individuals who have been unable to access the surgical services that they require. The impact of the pandemic on surgery is starkly illustrated in activity data and in national waiting lists for diagnostic tests, out-patient and in-patient care. Everything possible must be done to ensure that patients have access to the surgical care they need in a timely fashion.

*At the time of publication, the HSE had recently been subjected to a ransomware cyberattack which resulted in the shut-down of most communication systems within and between hospitals including access to patient information and appointment systems. The reporting of results to General Practitioners was also severely impacted. Access to health services and patient care have been significantly disrupted by this criminal attack with only some hospitals and health services open and many appointments postponed. The HSE have been working to get priority health services back up and running including: radiology and diagnostic systems, maternity and infant care, patient administration systems, chemotherapy and radiation oncology*

*In addition to the impact of COVID-19, this attack will further delay the recovery of scheduled care and will negatively impact on the quality assurance with the yet to be determined body of work that will be required to reconcile series of records, especially for endoscopy with patients medical records.*

## 2. Purpose

This document outlines the impact that the coronavirus pandemic has had on surgical activity in Ireland in 2020 and 2021 to date.

## 3. Authorship

This document is published by the RCSI National Clinical Programme in Surgery (NCPS) and has been developed by the Co Leads and Specialty Advisors and is supported by the National Clinical Programme for Trauma and Orthopaedic Surgery. Please contact [surgeryprogramme@rcsi.ie](mailto:surgeryprogramme@rcsi.ie) with any comments or feedback.

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## 4. Introduction

On March 11<sup>th</sup> 2020, the World Health Organisation (WHO) declared the novel coronavirus (COVID-19) outbreak a global pandemic. As such, 2020 was a year like no other year in the recent history of the Irish Health Service and with a second wave of the pandemic in early 2021, the impact on both surgical activity and screening has been significant with hospitals being requested to cease non-urgent surgery and screening to increase available capacity for the treatment of patients with COVID-19. This document details the impact on surgical activity including the different specialties, the impact on waiting lists and screening and highlights some of the initiatives taken to mitigate the effects of the pandemic.

### DELIVERY OF URGENT ENT CARE THROUGH THE INTEGRATION OF CLINICAL ENVIRONMENTS DURING THE COVID-19 PANDEMIC

**Professor Camilla MA Carroll**  
**Professor Michael Walsh**

*Consultant Otolaryngology Head and Neck Surgeon RVEEH*  
*National Clinical Advisor NCPS Otolaryngology Head and Neck Surgeon*

Patient access to tertiary ENT care has been detrimentally impacted by the ongoing Covid19 pandemic. The current ENT scheduled care waiting list is now in excess of 100,000 patients waiting for their first specialist visit. Future service demand will continue to increase, as a result of the forecasted rise in the ageing population and the associated burden of chronic disease.

The Urgent Care ENT Department (UCED) at the RVEEH is a dedicated National Specialist Referral Centre providing timely access for patients with clearly defined ENT conditions (7 to 30 days), which have the potential to deteriorate quickly, with significant consequences for health and quality of life, if not managed promptly. Annually, over 10,000 adult patients are seen, 70% are new referrals including presentations with Head and Neck Malignancy and 20,000 ENT minor procedures are performed. At the onset of the Covid19 pandemic, in order to continue to provide much needed Urgent Care ENT services, significant changes had to be implemented at the UCED to comply with public health guidelines. Financial support was provided by the HSE and the NCPS to introduce an Urgent Care ENT Telehealth Service linked to E-health technology for direct patient referral by primary care services. A dedicated telehealth centre was established and the multidisciplinary team, consisting of medical, nursing and clerical staff underwent communication skills training appropriate to their role in the team.

Clinical procedural rooms were retrofitted to facilitate the delivery of aerosol generating procedures and integrated endoscopy systems were procured for safe upper airway diagnostic evaluation. This “novel” service delivery is tailored to the patients’ needs and includes timely access to urgent care ENT procedures, diagnostic evaluation including audiology, vestibular assessment and rehabilitation and diagnostic imaging. Patient access to urgent specialist ENT care has been streamlined, with an overall improvement in efficiency and patient experience.

This initiative has now been in place for approximately 16 months. Our data demonstrates that we continue to engage with similar patient numbers, however approximately 50 % of clinical engagements can be completed via the telehealth platform. Patient waiting times and access to diagnostic services have been reduced, as a result of streamlining patient care through incorporation of digital technology.

We believe that patient care can be further refined through the establishment of a “National Urgent ENT e-referral Form” enabling integration of clinical pathways between primary and tertiary care. Commencing in July 2021 the NDTP Aspire ENT Fellow at the RVEEH will begin working on the design of a National e-referral form for Urgent ENT conditions. Continued implementation of telehealth services requires access to real-time secure and accurate data, which is currently under significant threat.





## 5. Surgical Activity 2020

### 5.1 Total Surgical Discharges

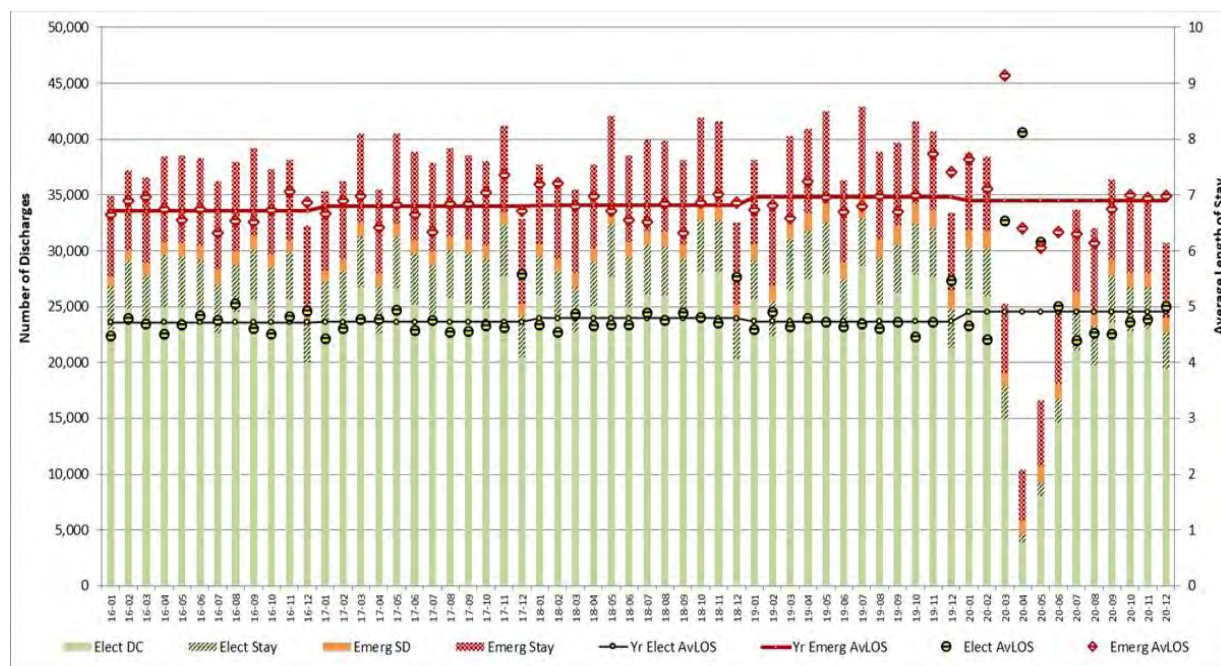
Figure 1 illustrates a detailed analysis of surgical activity for both Elective and Emergency Surgical Specialty discharges from January 2016 – December 2020. Specialty discharge growth in 2018 and 2019 was less than demographic expectation but 2017 exceeded expectation giving a combined growth below expectation (-0.6%) for 2016 to 2019. Demographic trend predicts annual growth in discharges of 1.92% - 1.98%. What is notable is the how the trend changed precipitously in 2020 with average monthly discharges dropping 24.0% compared to 2019. The most significant constraint in discharges occurred in April and May 2020, dropping to 34.7% of 2019 average monthly volumes.

Compared to 2019 monthly averages, Surgical Emergency activity discharges dropped to 72.1% in April and May 2020, rising to 91.4% from July to December. The decrease in elective activity was even more significant, running at 23.3% in April and May, increasing to 84.5% for July to December 2020.

**Figure 1. Monthly Elective & Emergency Surgical Specialty Discharges (Jan 2016 – Dec 2020)**

*NQAIS Clinical using HIPE discharge data*

*Acute hospital division information supplied by the HPO and as coded in HIPE by 30<sup>th</sup> April'21*



### 5.2 Average Length of Stay (AvLOS)

The average length of stay dropped each year between 2017 and 2019 while Central Statistics Office demographics predicted an AvLOS growth. There was a net drop of -5.3% below predicted AvLOS from 2016 to 2019. In 2020, as well as discharges dropping 24.0%, combined AvLOS increased by 8.7%.



### 5.3 Emergency Discharges

While the 2020 national decline in overall emergency activity was 11.0%, surgery specialties declined by 12.5%. The differences in emergency activity of the 30 highest volume specialties are illustrated in Figure 2, and compare emergency activity between 2019 and 2020. Only urology and gastrointestinal surgery increased compared with 2019 activity, reflecting the heavy burden of cancer services provided by these disciplines. Neurosurgery had parity with 2019 volumes and Trauma & Orthopaedics was 95.2% of 2019 emergency activity, reflecting a less pronounced drop in emergency activity compared to other surgical specialties.

#### MAINTAINING DELIVERY OF OESOPHAGEAL CANCER SURGERY AND SURGICAL TRAINING DURING COVID-19 PANDEMIC

*Mr Jarlath Bolger FRCSI – Higher Surgical Trainee in Upper GI and General Surgery*

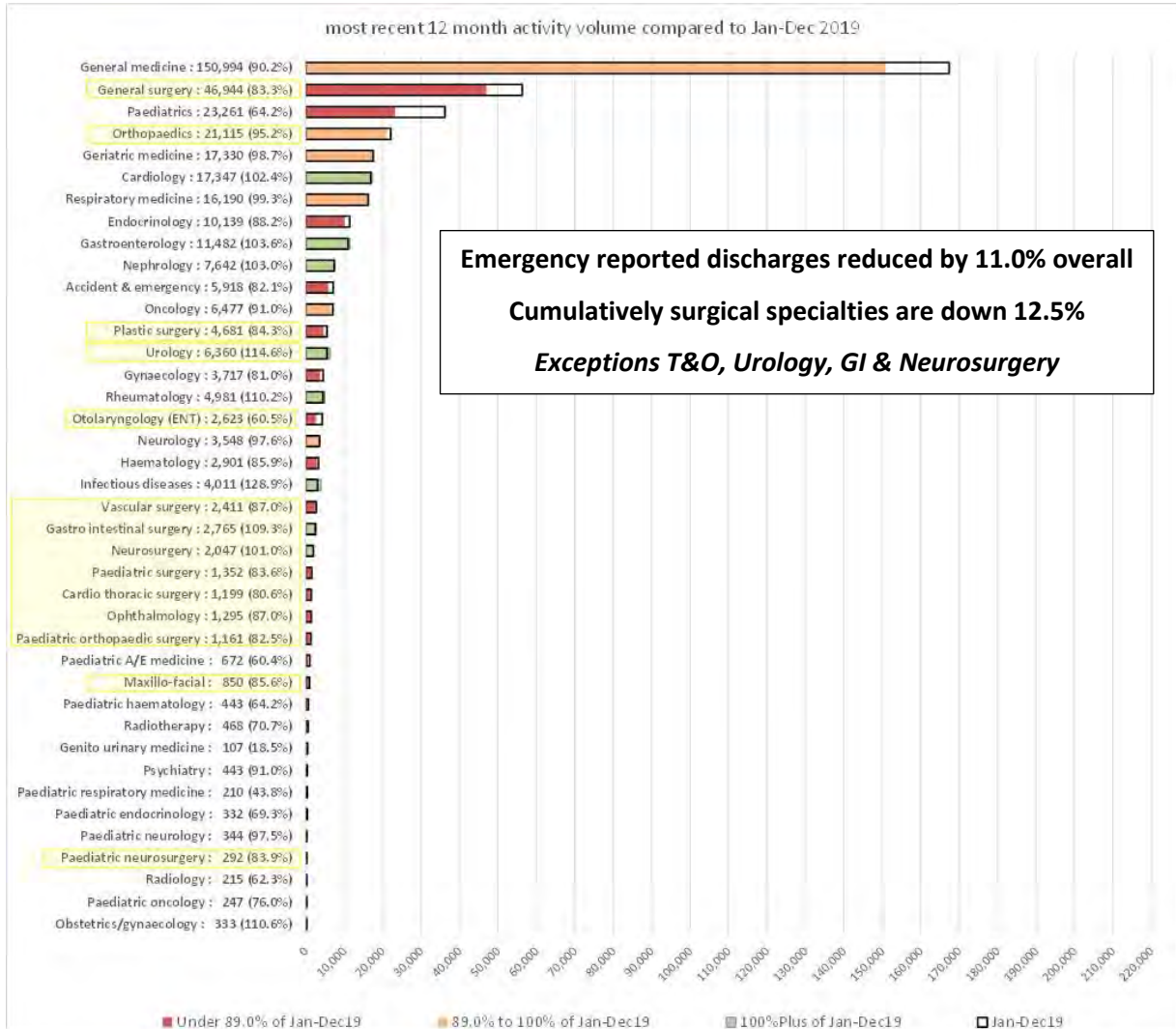
In spite of improvements in neoadjuvant and perioperative chemotherapy and chemoradiotherapy, surgery remains the cornerstone of curative treatment of oesophageal cancer. There are justified fears about the impact of perioperative COVID-19 infection<sup>1</sup> particularly in oesophageal cancer given the high rate of post-operative pulmonary complications. During the first wave, operative care from St James's Hospital and Beaumont Hospital was transferred in whole or in part to the Beacon Hospital and to Blackrock Clinic. Operative volume was similar to the same period in the previous year, with similar perioperative morbidity<sup>2</sup>. The flexibility demonstrated in the system protected patient access



**Figure 2. Emergency Specialty Discharges for January '20 to December '20 compared to January - December '19**

NQAIS Clinical use HIPE discharge data

Acute hospital divisions supplied by the HPO and as coded in HIPE by 30<sup>th</sup> April'21



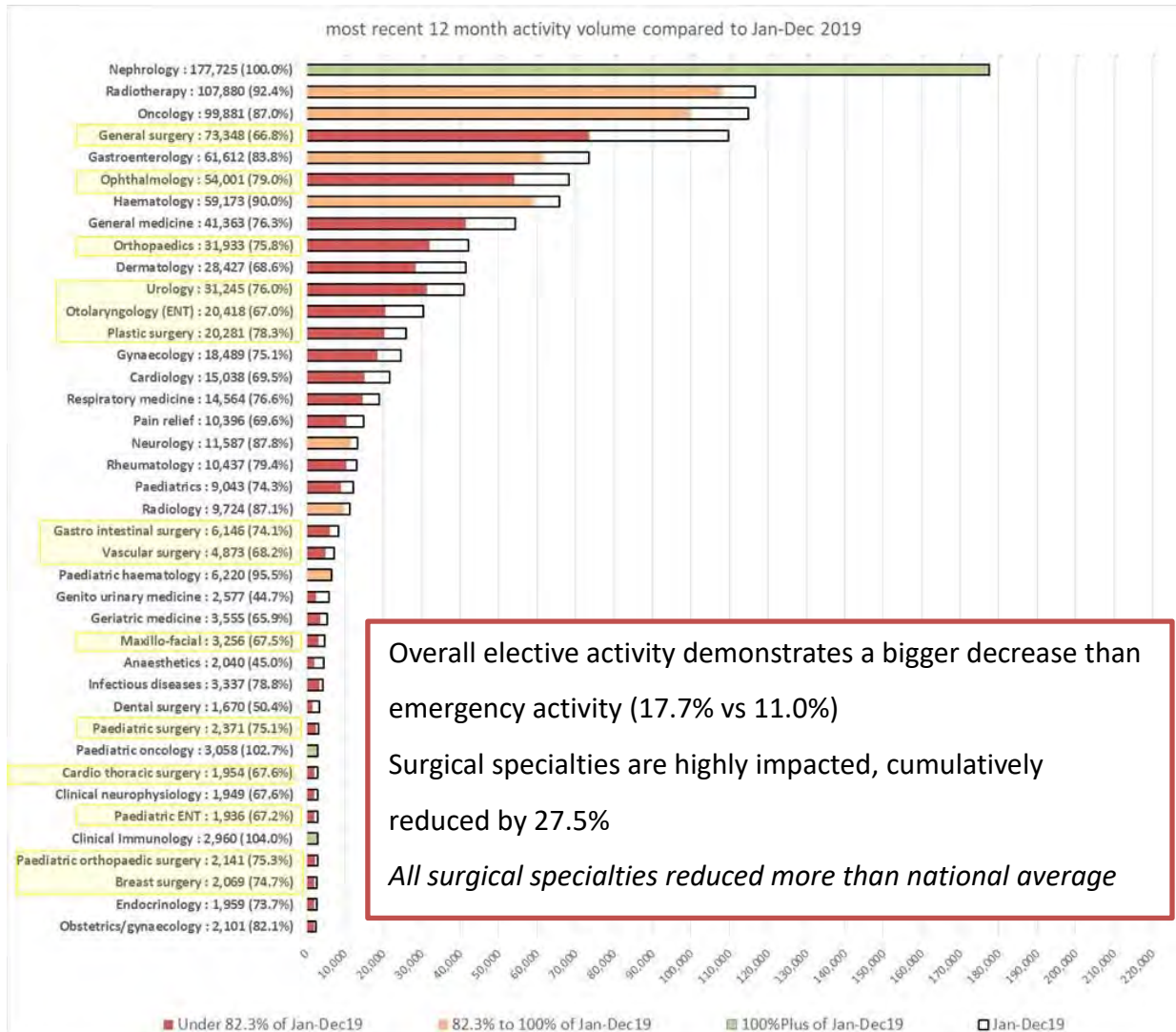
#### 5.4 Elective Discharges

For elective (scheduled) discharges, there was an average decrease nationally of 17.7% for all specialties compared to a decrease of 27.5% for surgical specialties. This gap is considerably wider than that observed for emergency discharges among surgical disciplines with no surgical discipline increasing activity above 2019 levels. It is noteworthy that year on year increases in scheduled surgical activity are required to meet demographic pressures.

**Figure 3. Elective Specialty Discharges for Jan'20 to Dec'20 compared to Jan-Dec'19**

NQAIS Clinical use HIPE discharge data

From hospitals in Acute hospital divisions hospital group supplied by the HPO and as coded in HIPE by 30<sup>th</sup> April'21



## 6. Waiting lists

### 6.1 Inpatient, Day Case and Endoscopy

The pandemic had an immediate negative impact on waiting times for surgical patients. Patients on surgical waiting lists account for 67.3 % of inpatient/day case and GI scope waiters as of February 2021. (Figure 3)

**Figure 3.**  
Inpatient, day case  
and GI scope waiters  
Feb 2020 – Feb 2021

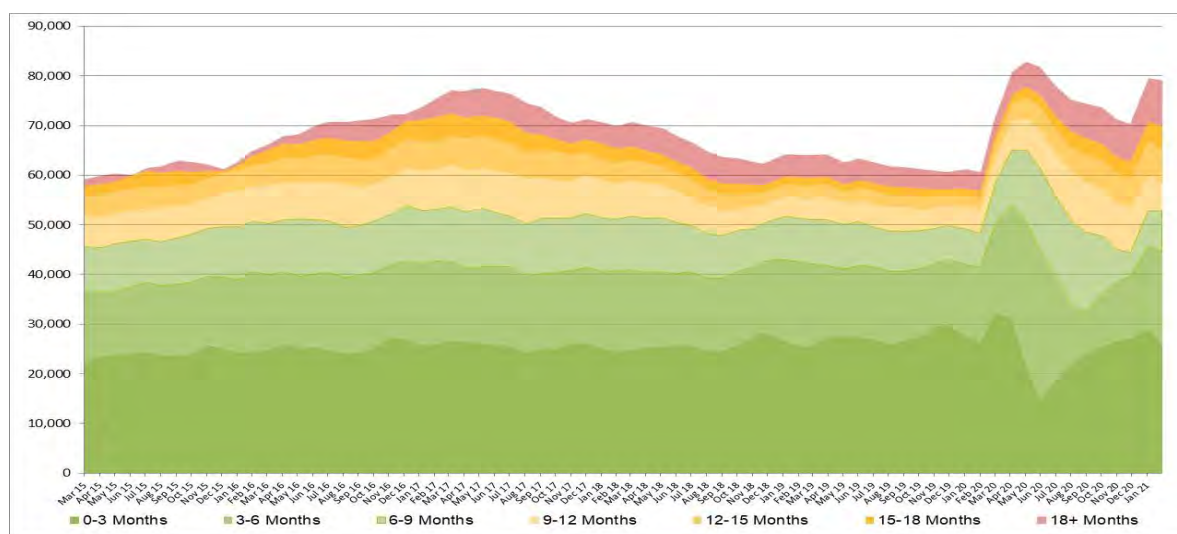
#### Surgery accounts for 67.3% of IP/DC/GI-Scope waiters

One year comparison - 27<sup>th</sup> Feb 2020 compared to 25<sup>th</sup> Feb 2021

All waiters	27 <sup>th</sup> Feb'20	25 <sup>th</sup> Feb'21	Change	Surgery 2020 % of Total
All Specialties	89,410	117,756	+31.7%	67.3%
>9 months waiters	18,338 (21%)	38,707 (33%)	+111.1%	
IP				80.3%
DC				71.4%
GI Scopes				52.6%
<b>N.B. Slaintecare waiting time guarantee = 12 weeks</b>				

When the surgical specialty waiting lists for inpatient, day case and scopes were reviewed from April 2020 to April 2021, the trend observed growth was 2.0% with a 153.8% growth in those waiting >12 months. This trend is illustrated in Figure 4. The aspiration of Slaintecare is that no patient will wait more than 12 weeks for treatment.

**Figure 4. Surgical Specialty IP/DC/Scope Waiting List Trends April 2020 to April 2021.**



1 year comparison of Inpats & day cases awaiting a procedure											
Day Case & Inpat Wait	0-3 Mths	3-6 Mths	6-9 Mths	9-12 Mths	12-15 Mths	15-18 Mths	18-24 Mths	24-36 Mths	36-48 Mths	48+ Mths	Grand Total
2021-04-01	23,965	18,277	9,416	3,861	7,047	4,577	5,015	3,295	1,046	450	76,949
2020-04-02	35,121	17,562	8,942	5,055	3,012	1,585	1,862	1,684	495	99	75,417
% 1 Yr change	-31.8%	4.1%	5.3%	-23.6%	134.0%	188.8%	169.3%	95.7%	111.3%	354.5%	2.0%
<b>Note: increase in people waiting 9+ Months is</b>					<b>83.4%</b>	from	<b>13,792</b>	to	<b>25,291</b>		
<b>increase in 12+ months</b>					<b>145.3%</b>	from	<b>8,737</b>	to	<b>21,430</b>		

NTPF waiting list data



## 6.2 Outpatient Waiting Lists

Patients waiting to attend a surgical outpatient appointment account for 54% of total outpatient waiters as of February 2021. (Figure 5)

**Figure 5. Outpatient Composition and Comparison from February 2020 to February 2021**

**Surgery accounts for 54% of total Outpatient waiters**  
**One year comparison - 27<sup>th</sup> Feb 2020 compared to 25<sup>th</sup> Feb 2021**

All waiters	27 <sup>th</sup> Feb'20	25 <sup>th</sup> Feb'21	Change	Surgery 2020
All Specialties Acute Med, Surgery, ...	558,554	626,895	+12.2%	54.0% of Total
> 9 months waiters	229,739 (41%)	323,362 (52%)	+40.8%	

**N.B. Slaintecare waiting time guarantee = 10weeks**

When surgical outpatient waiting list trends comparing April 2020 and April 2021 are reviewed, it is clear that while the total number waiting has increased by 15%. Those waiting for more than 12 months are most severely affected, increasing by 56%. There was a reduction in the number of new referrals between March and July 2020 suggesting a change in the referral pattern from primary to secondary care during this time

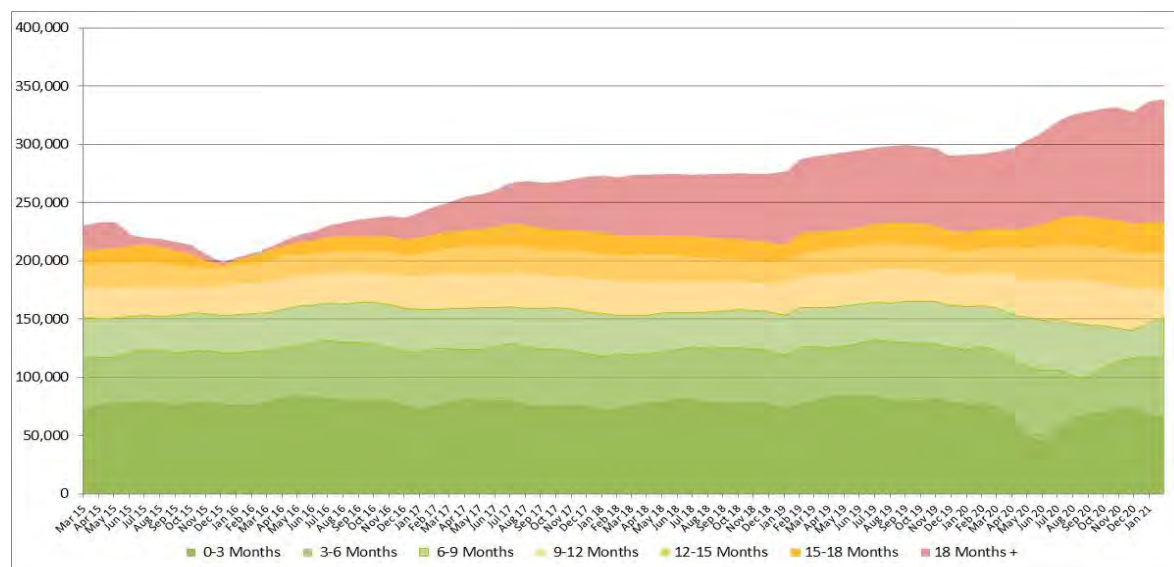
### UHL tissue viability team innovation in response to COVID-19 Restrictions

The Tissue Viability service in University Hospital Limerick adapted at pace in response to the pandemic introducing virtual clinics to triage and risk assess patients. This included liaison virtually with Public health services to ensure patients were receiving the appropriate level of care within their own home.

Designated unscheduled reviews were facilitated to reduce hospital admissions in a hospital avoidance model. Early discharge was promoted with appropriate virtual and face to face follow up as required. Provision of outreach services to offsite locations minimised risk and avoided unnecessary transferring between hospitals whilst maintaining patient safety.



**Figure 6. Surgical Outpatient Waiting List Trends April 20 – April 2021**



Outpatient - Awaiting consultation - One year comparison												
Outpatient Waits	0-3 Months	3-6 Months	6-9 Months	9-12 Months	12-15 Months	15-18 Months	18-21 Months	21-24 Months	24-36 Months	36-48 Months	48+ Months	Grand Total
01/04/2021	67,790	49,669	37,192	19,660	32,161	24,820	22,572	19,015	40,339	16,549	8,107	337,874
02/04/2020	77,755	44,593	36,574	29,987	22,875	15,409	14,171	12,147	27,055	10,627	2,606	293,799
% 1 Yr change	-12.8%	11.4%	1.7%	-34.4%	40.6%	61.1%	59.3%	56.5%	49.1%	55.7%	211.1%	15.0%
<b>Note: increase in people waiting 9+ Months is</b>						<b>35.8%</b>	from	<b>134,877</b>	to	<b>183,223</b>		
<b>12+ months increase</b>						<b>55.9%</b>	from	<b>104,890</b>	to	<b>163,563</b>		

*NTPF waiting list data (excludes suspended waiters)*

### 6.3 Waiting List by Specialty

General surgery is the specialty that accounts for the highest number of patients on waiting lists among surgical specialties, followed by orthopaedics and urology.

**Figure 7. NTPF supplied waiting list information by Specialty**

NTPF supplied waiting List by Specialty	Total Waiting list volume	Max % urgency by hospital	Min % urgency by hospital	Average % Urgent
General Surgery ( 31,517 )	31,517	59.1%	0.0%	15.7%
Orthopaedics ( 10,393 )	10,393	67.0%	0.0%	31.1%
Urology ( 9,797 )	9,797	98.3%	0.0%	53.7%
Ophthalmology ( 8,091 )	8,091	72.1%	0.0%	27.1%
Plastic Surgery ( 4,401 )	4,401	96.7%	0.0%	35.2%
Otolaryngology (ENT) ( 4,325 )	4,325	61.6%	0.0%	29.8%
Vascular Surgery ( 1,513 )	1,513	66.7%	0.0%	27.7%
Paed Orthopaedic ( 1,177 )	1,177	31.0%	22.3%	26.2%
Gastro-Intestinal Surgery ( 1,104 )	1,104	30.9%	0.0%	10.8%
Paediatric ENT ( 746 )	746	21.5%	0.0%	9.8%
Maxillo-Facial ( 742 )	742	100.0%	0.0%	44.5%
Neurosurgery ( 580 )	580	74.1%	7.7%	65.2%
Paediatric Surgery ( 519 )	519	13.5%	5.3%	11.6%
Cardio-Thoracic Surgery ( 512 )	512	91.3%	2.3%	47.3%
Oral Surgery ( 448 )	448	73.3%	51.9%	56.0%
Paediatric Urology ( 410 )	410	11.0%	2.4%	8.3%
Dental Surgery ( 346 )	346	15.2%	0.0%	8.4%
Hepato-Biliary Surgery ( 145 )	145	18.6%	18.6%	18.6%
Breast Surgery ( 142 )	142	71.4%	18.1%	44.4%
Paediatric Neurosurgery ( 41 )	41	48.8%	48.8%	48.8%

#### 6.4 Waiting list by urgency

As of April 21, 27.1% of 76,949 cases on the waiting list for IP/DC/Scope were deemed urgent. There is significant variation in the percentage of patients triaged 'urgent' by each specialty, and among hospitals. (Figures 7 & 8)

**Figure 8. Surgical specialties IP/DC/Scope waiting list 1<sup>st</sup> Apr'21**

Urgent	SemiUrgent	Routine	% urgent	Total
20,846	9,675	46,428	27.1%	76,949

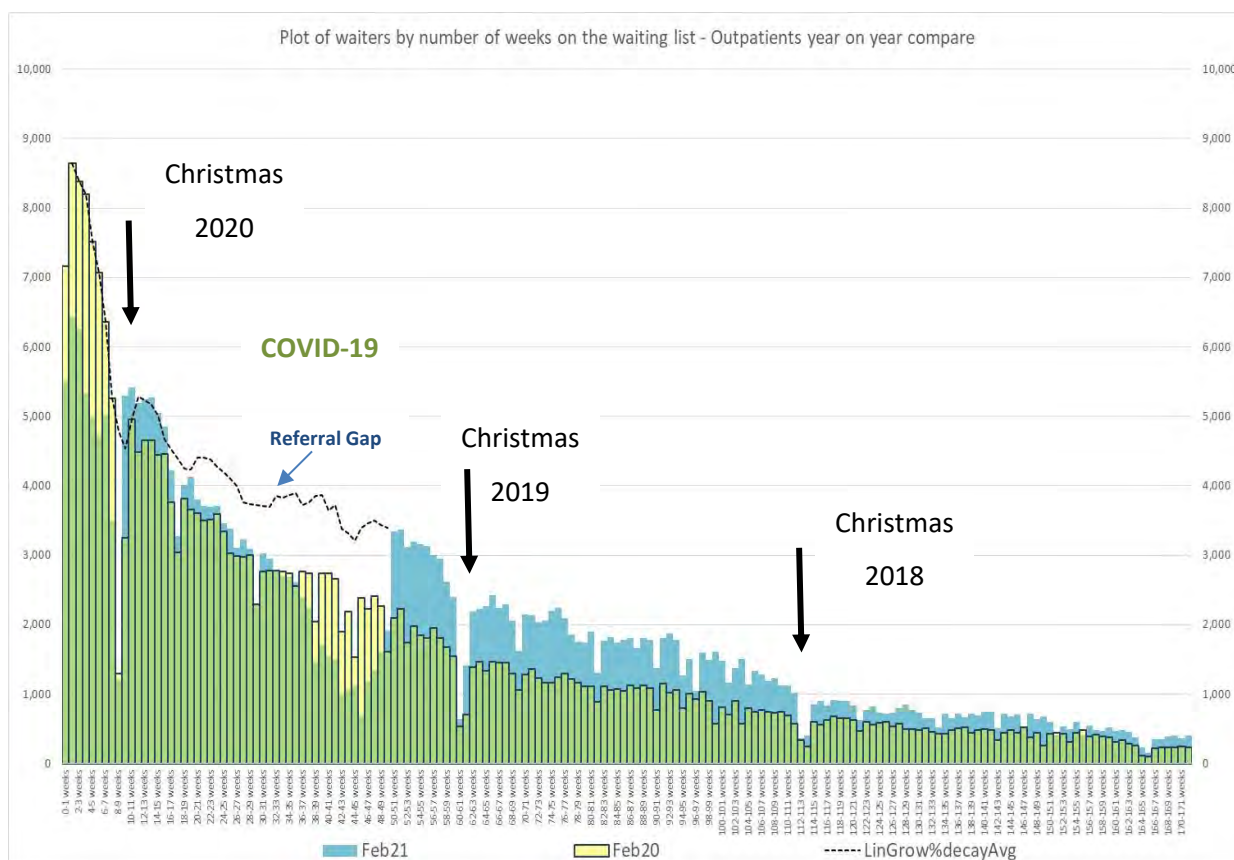
**Data note:** Although the HPO closed the 2020 file for updates on the 30<sup>th</sup> April'21 with 98.9% of discharges fully coded which compares to 99.5% for 2019, the 2020 figures are marginally low. That accepted, the message is clear: activity is down, especially in elective surgical specialties and waiting lists have grown.



## 7. Referrals

During the period February 2020 to 2021, there was a significant decrease in numbers of patients waiting for less than 3 months. This should be interpreted as a change in referral patterns, reflecting fewer referrals from primary care to secondary care, as opposed to fewer patients being treated. The reasons for this are a matter of speculation but it is likely that COVID-19 has led to some symptomatic patients delaying presentation to a healthcare professional. Reductions in access to diagnostic tests and the non-availability of screening programmes are also contributing factors. The long-term impact of this referral gap on individual and population level health is yet to be determined, but it is likely indicative of an unmet need in the community and may result in a dramatic expansion in waiting lists as services return to normal. (Figure 9)

**Figure 9. Surgical specialties Outpatient waiting list 25<sup>th</sup> Feb'21 compared to 27<sup>th</sup> Feb'20**



## PHYSICIAN ASSOCIATES SUPPORTING THE HSE DURING THE PANDEMIC

*Ms Alex Troy – Physician Associate & Board Director, Irish Society of Physician Associates*

**“When we long for a life without difficulties, remember that oaks grow strong in contrary winds and diamonds are made under pressure.”**

The devastation caused by COVID19 is something none of us expected or will ever forget. Like other healthcare professionals, physician associates (PA) have been put to the test during 2020/2021.

During this pandemic, we've seen PAs practicing as critical members of healthcare teams—serving on the frontline and wherever they were needed to ensure access and continuity of high-quality patient care. Some PAs were re-deployed and were integral in setting-up and running the Covid-19 testing unit and patient flow management system through virtual clinics among other duties.

Virtual appointments became a vital option to accessing care of patients who were unable to attend in-person appointments. Thus, virtual clinics became a significant part of PA practice during the pandemic. To highlight just one department, a PA-led outpatient clinic reduced hospital footfall by 90%. This minimised the risk of viral transmission in the outpatient setting. Many PAs took this opportunity to utilise their skills and expertise in general medicine to provide care for those in need. PA have been transformative at this time as they have been seen as multipurpose and multifunctional healthcare professionals.



## 8. Innovations to mitigate the impact of COVID-19 on surgical activity throughout the pandemic

In March and April 2020, there was a great deal of uncertainty about what lay ahead. High mortality rates were reported among patients and healthcare workers in Wuhan. Optimal safety precautions were unknown and access to personal protective equipment was at a premium. Italian hospitals were overrun, with inadequate ventilators and ITU beds to meet the needs of the population, especially in Northern Italy. Reports from abroad indicated high postoperative mortality among surgical patients who acquired COVID-19 and raised significant concerns about potential harms.

As a result, in the initial months of the pandemic, deferral of non-essential surgery was uniformly advised. At the same time, Irish public health measures mandated closure of schools, businesses and restriction of travel, household mixing and other activities leading to upheaval in the family lives of healthcare staff. Many were at risk of being exposed to COVID-19 in the course of their work, and reports of deaths among surgeons including Mr. Amged El-Hawrani, a UK ENT surgeon who trained at RCSI in the 1990s, led to a climate of fear and uncertainty.

### 8.1 Maintaining Access to Surgery in the Early Phases of the Pandemic

In March and April 2020, it was unclear whether any functioning surgical activity would be possible during the height of the pandemic and the duration of the emergency was unknown. NCPS developed a document to assist in planning the system-wide response to the pandemic in an attempt to maintain surgical services during the COVID-19 (Coronavirus) emergency. Key aspects of the document are outlined further in section 8.

#### Surgical Assessment Unit converted to a Surgical ED service 24/7 at UHL

The Surgical Short Stay Unit and Acute Surgical Assessment unit joined together to deal with unscheduled surgical patients attending UHL during the COVID-19 pandemic. The unit extended their referral criteria to accept all surgical specialties including urology, OMFS, orthopaedic and gynaecology being accepted within the unit.

All patients were streamlined from ED to the unit. Pathways were drawn up and approved through the Crisis Management Team overnight and altered along the way pending the patient categories that emerged throughout the pandemic. Patients were very positive in their feedback through social media and your service your say.

The patient journey was significantly reduced as patients were seen directly by the sub-specialty registrar, which reduced the patient experience time by avoiding the ED referral process.



### **8.1.1 Critical Risks and Scenario Planning**

1. The capacity to deliver emergency surgery must be preserved. This requires preservation of emergency theatres and ring-fenced surgical beds in model 4 hospitals.
2. Surgeons, anaesthetists and nurses must be available to safely deliver surgical services. Technical support staff and the theatre supply chain must be maintained.
3. If a model 4 hospital is severely affected, it may require a system that allows transfer of cases to another similar hospital.
4. Highly specialised surgical services (e.g. sub-specialists in neurosurgery, among others) will be vulnerable to illness among critical staff. As a result, there may not be availability of every service and some specialist operations may not be available. Some patients may receive suboptimal care as a result.
5. Difficult decisions about prioritisation of surgery may be necessary if theatre resources are used to manage patients with viral pneumonia.
6. Some patients have conditions in which they are markedly vulnerable to delays in their care. Many examples of this exist including: patients who have already commenced a programme of treatment with preoperative chemo/radiotherapy; vascular disease with risk of limb loss; transplantation; critical cardiac conditions; rapidly growing tumours; space occupying brain lesions; spinal surgery causing neurologic compromise; open fractures; among many others.
7. Admitting patients to hospital during a severe outbreak may increase the risk of exposure to the infection. Some such patients will come to harm as those who most urgently need treatment may also be among those who are most at risk of adverse effects of the viral infection. The risk / benefit of delay versus admission needs to be carefully assessed.
8. As the outbreak extends and the majority of patients have infection, uninfected urgent surgical cases should be protected by isolation or cohorting.
9. There will be a marked impact on surgical waiting lists.
10. Maintaining a parallel stream of urgent elective activity can only be operationalised if infection can be robustly excluded; the ability to test preoperative patients and staff for asymptomatic carriage is required for the capacity to remain open.

## **The introduction of a weekly Multidisciplinary Surgical Meeting in Our Lady of Lourdes Hospital (OLOLH), Drogheda to facilitate safe discharge and improve bed capacity**

*Ms Eleanor Faul, Clinical Lead in Surgery OLOLH, Jillian Smith (Senior Physiotherapist), Claire Treanor (Occupational Therapist), Stacey Collins (Dietitian), Susan Smyth (CNM2 Newgrange), Ros Cheshire (CNS in Stoma Care), Wendy Rock (Colorectal CNS)*

The Sars-COV-2 pandemic has impacted surgical waitlists in Our Lady of Lourdes Hospital Drogheda. This, in conjunction with increased transfers of acute surgical patients from Our Lady's Hospital Navan has resulted in increased demand on designated surgical beds. Our Clinical Lead in Surgery, Ms Faul commenced a weekly multidisciplinary meeting for all surgical patients to be discussed. Each member of the MDT attends including Surgical Registrars, NCHDs, the ward CNM2, Clinical Nurse Specialist in Colorectal Cancer, Stoma Nurse Specialist, Occupational Therapist, Dietitian and Physiotherapists. Patients' progress and goals required for a safe discharge are discussed. This allows for the team to prioritise interventions for patients to be safely discharged and to plan and estimated date for discharge. Overall, this aims to provide a high-quality service by achieving a safe, effective and person-centred surgical service whilst also facilitating discharge and improving patient flow.



### **8.1.2 Recommended Immediate Actions to Maintain Surgical Capacity:**

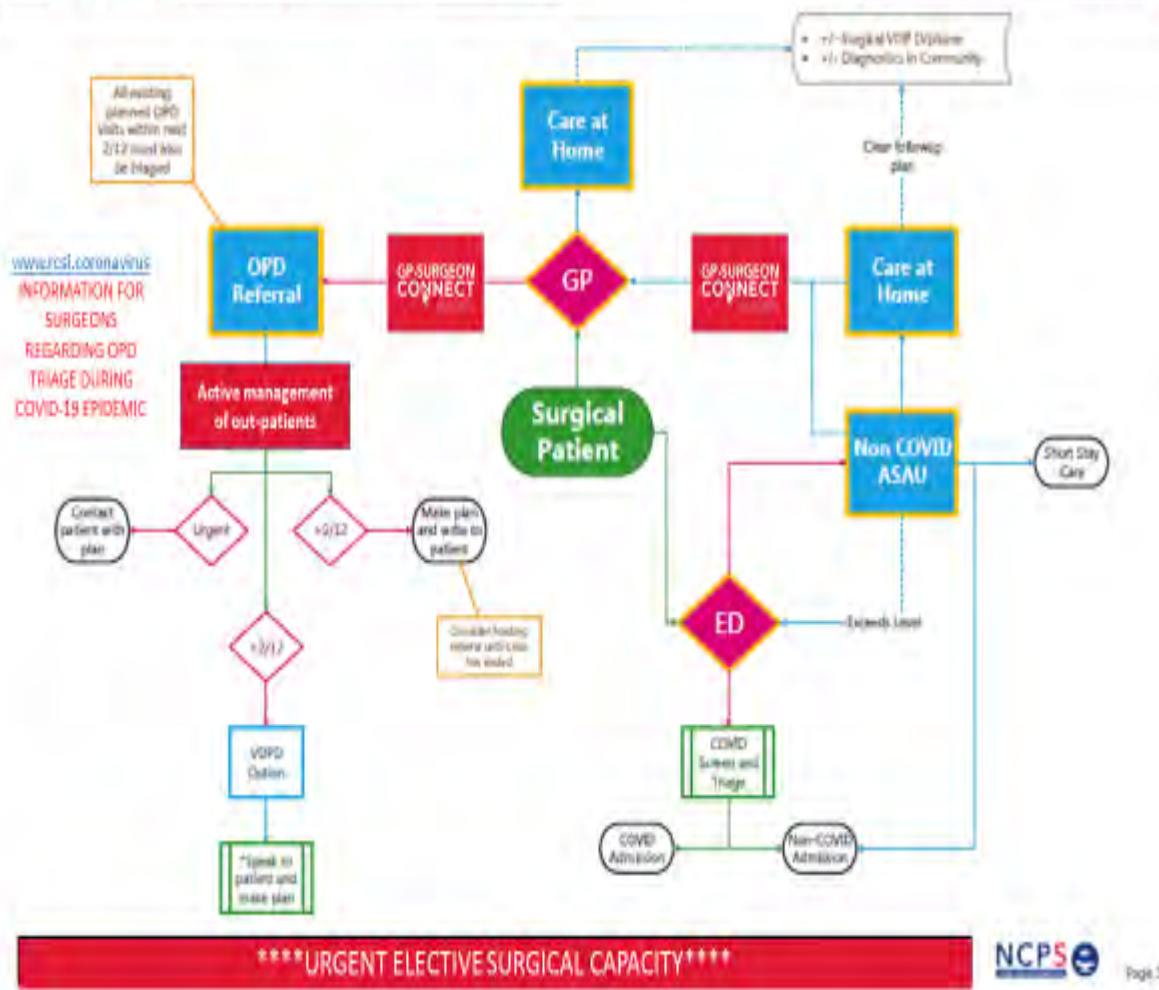
1. Instruct hospitals to preserve at least one ward (or wards) in every model 4 hospital for urgent elective surgery (NQAIS modelling of likely numbers needed in model 4 hospitals is possible). This ward should have no emergency admissions and should be ring-fenced despite operational pressures. Staff should use all recommended precautions. If it is technically possible to identify asymptomatic carriers, then this should be a requirement for admission to the ward. Similarly staff should also be tested.
2. Designate a team who are responsible for prioritisation of surgical cases. This team should include an anaesthetist and a surgeon.
3. Stop all non-urgent surgery immediately.
4. Increase surgical activity for urgent and serious cases immediately to reduce the number of patients untreated as the system enters the most high risk period (i.e. when the risk of services being overwhelmed is the highest).

### **8.1.3 Recommended Actions to Allow Resumption of Activity:**

1. When the outbreak is reducing, clear dedicated space to deal with the backlog of urgent and serious cases that have been deferred.
2. Consider using NTPF funding to allow extended working days (7am to 7pm) or Saturday working to treat urgent and serious cases – many of who can only be treated in the model 4 hospitals.
3. Consider using Blackrock and/or Mater Private to clear backlog of cardiac cases (freeing up capacity in MMUH and SJH for other activity)
4. Consider using Hermitage to clear backlog of neurosurgical cases (freeing up capacity in BH for other cases, e.g. cancer cases)

A care pathway for surgical patient triage and treatment during the pandemic was defined, with supporting documents to assist surgeons in management and prioritization of patients during the pandemic.





### 8.2 Prioritisation of Surgery

The RCSI National Clinical Programme in Surgery has developed a document which sets out the prioritization of urgent scheduled surgical conditions that will require surgical intervention within a 3-month timeframe. The cases that can be deferred and alternative therapies that can be considered during the COVID-19 restrictions are also discussed. This document can be accessed at the RCSI website [here](#).

### 8.3 Safety of Surgery

NCPS collaborated with surgeons and anaesthetists to better understand the risk of undiagnosed COVID-19 in patients presenting to hospitals for scheduled surgery. An Irish series of 1608 patients undergoing scheduled surgery prior to the end of the 1<sup>st</sup> lockdown period were screened preoperatively using a COVID-19 questionnaire only, without addition of a COVID-19 PCR swab. A low incidence of post-operative COVID-19 PCR (1.05%) or clinical diagnosis (0.93%) observed in this cohort. Post-operative admission to ITU for any reason was low (1.36%) as was 30-day mortality (0.56%). The questionnaire-only approach compared favorably to other screening strategies, in an environment where overall COVID-19 incidence is low.



Over the first year of the pandemic, a great deal more was learned about the risks of COVID to surgical patients. There are risks to patients in having surgery during or in the weeks after SARS-CoV-2 infection, whether the disease was mild or otherwise. The COVIDSurg and GlobalSurg Collaboratives published a peer reviewed paper in Anaesthesia, accepted 26<sup>th</sup> February 2021, which quantifies the risks at different time intervals subsequent to the infection and the findings are summarized in the table 1. These data are based on 140,231 patients across 1674 hospitals and 116 countries and the majority of patients were asymptomatic at the time of surgery. Of note, patients with ongoing symptoms had higher 30-day mortality than those whose symptoms had resolved or who were asymptomatic.

**Table 1: Timing of scheduled surgery following SARS-CoV-2 infection vs mortality risk; sensitivity analysis including on patients having elective surgery.**

Time since SARS-Co-V-2 infection	No infection	0-2 weeks	3-4 weeks	5-6 weeks	≥ 7 weeks
30-day post-operative mortality	0.62%	3.09%	2.29%	2.39%	0.64%

Ref: COVIDSurg Collaborative and GlobalSurg Collaborative; Anaesthesia 2021 doi:10.1111/anae.15458

Based on this evidence, patients with ongoing symptoms ≥ 7 weeks from diagnosis may benefit from further delay. For urgent surgical procedures, surgeons and patients may decide that the risks of delay are not justified (CovidSurg 2021).

### 8.3 Advice on patient consent during the COVID-19 era

The National Clinical Programme in Surgery and the National Clinical Programme for Trauma and Orthopaedic Surgery in conjunction with the RCSI have published guides to obtaining patient consent in the COVID-19 situation (RCSI, 2020)<sup>1</sup> During the COVID-19 pandemic, clinicians should provide patients with information on how the pandemic might alter the risks and benefits of their treatment. The link to this document can be found [here](#).

## 8.4 Virtual Clinics

The NCPS published guidance to surgeons on how to deliver virtual OPD services in March 2020 to support surgeons in the precipitous transition from normal services that followed the shutdown of scheduled activity recommended by the National Public Health Emergency Team and mandated by the Department of Health, (link available [here](#)). The HSE subsequently developed resources to support the delivery of remote [services](#).

From January–December 2020, HSE acute operations reported a total of 657,415 virtual consultations for both new and return attendances. General surgery topped the specialty group for utilization of virtual consultations.

### The introduction of virtual care for Opfit Programme, St James's Hospital

*Sarah Moore Physiotherapist*



The OpFit programme is a pre-operative exercise rehabilitation programme for patients scheduled for cancer surgery in St. James' Hospital, Dublin. Since the onset of the Covid-19 crisis in March 2020, the programme has pivoted towards virtual care. From April to December 2020, 391 patients were referred to the virtual programme. Of these, 136 patients attended the virtual exercise class, and a further 196 patients engaged in the home-based exercise programme. The virtual programme has supported patients during the pandemic by providing them with a daily structure and support from other patients, and will continue to run alongside the face to face classes when it is safe to restart these.

## 8.5 RCSI GP Surgeons Connect

The RCSI Surgeons Connect service was set up as an initiative of the NCPS in March 2020 to rapidly connect GPs and others in primary care with surgical experts to increase the number of patients with surgical conditions who can be managed in the community by providing doctor-to-doctor advice during the current COVID-19 crisis.

The service aimed to offer general practitioners quick access to consultative advice from consultant surgeons. RCSI developed a panel of volunteer surgical experts, all of whom were on the Specialist Division of the Medical Register who agreed to provide phone advice to GPs. The advice was provided by the surgical expert direct to the GP to support them in the management of surgical patients in the community.

Calls from GPs were centrally coordinated by the National Clinical Programme in Surgery (NCPS). Each telephone query was directed to an appropriate expert who phoned the GP within fifteen minutes of the original request being received. GPs also had the opportunity to email their request or direct their request via a central portal [www.RCSI/Surgeonsconnect.com](http://www.RCSI/Surgeonsconnect.com). While the duty of care remained with the GP, with the support of Slaintecare and the Acute Hospitals Division of the HSE, the Clinical indemnity scheme covered all participating surgeons. As part of the proposal, RCSI developed guidance for surgeons on how to do remote consultations. During this time there were 3,500 visits to the website with 51 RCSI Fellows having volunteered their time.



*"One of my calls was about a lady with difficulty swallowing. I arranged urgent gastroscopy and she was diagnosed with oesophageal cancer. She now has a chance of cure. If the diagnosis was delayed she would have had no chance. So you can chalk this up as a victory for the project."*

Prof Tom Walsh

## 9. Long Term impact of the pandemic on Surgical Activity

The HSE Quality Improvement Division has published a paper on the impact of the Covid-19 pandemic and societal restrictions on health and wellbeing on service capacity and delivery (link available [here](#).) This paper outlines some of challenges for the health service arising from the COVID-19 pandemic in areas such as cancer, screening, hip fracture, primary care, stroke and other, but it does not detail the specific impact on surgical waiting lists. It is hoped that the present document provides a comprehensive picture of the current status of surgical activity in Ireland and the impact of the pandemic on those who require surgical care.

It is clear that there is a compelling need for solutions and innovations to ensure that hospitals utilize all capacity in their region whilst maintaining clinical governance for every patient so that irrespective of the hospital delivering care, governance should remain with the surgical directorate and the responsible consultant.

It is probable that pandemic recovery will accelerate the re-profiling of healthcare and the healthcare professions, enabling the entire multidisciplinary team to deliver the care that patients need. Undoubtedly innovations like virtual out-patient consultations and community based care are here to stay. Keeping patients at home or near home for the majority of their care is an aspiration of Slaintecare and one that is broadly supported by the surgical community. Nonetheless, by its very nature, many components of surgery can only be delivered in model 3 and 4 hospitals. It is incumbent on all to recognize and support the unique contribution expert surgical care can make to the health and well-being of our population. It is internationally recognized that only through a well-functioning academic healthcare model can the most compelling surgical innovations be delivered.

The Office for Acute Strategy and Planning has selected 5 surgical specialties (out of 15 specialties) to participate in its programme of scheduled care transformation:

- Urology
- Otolaryngology
- General Surgery
- Plastic Surgery
- Trauma and Orthopaedics

The NCPS and NCPTOS are fully engaged with this process. NCPS have set up 4 working groups with various stakeholder representation to aid the reform of the scheduled care pathway and to support the active clinical prioritization strategy to target the waiting list for those waiting over 9 months. The focus

of these groups is to agree best practice for acute and community pathways from the patients first presentation to the GP or other service provider, through to diagnosis, assessment, treatment and discharge.

## COVID-19- Establishing a Hand Therapy Led Clinic

In March 2020, at the onset of the COVID-19 pandemic, there was an urgent need to re-organise our acute hospital services to free up capacity in Cork University Hospital for Covid-19 specific cases. One of the services that relocated to the South Infirmary Victoria University Hospital (SIVUH) was the trauma plastic surgery service. This is a regional service for the population of Munster with a large number of cases relating to hand and upper limb injury. This service requires a high degree of expertise in the area of posttraumatic and post-surgery hand rehabilitation.

The primary objective was to provide a seamless transfer of care in the safest way possible whilst ensuring optimal surgical outcomes for these patients. The needs of delivering this service in SIVUH were met by setting up a 'Therapy Led upper limb clinic' in the OPD of SIUVH. The therapy led clinic was run by a senior Occupational therapist and senior physiotherapist both specialised in hand therapy and supported by the wound management nurses. A surgical consult was available from the team on call if required but no formal surgical review was routinely required for these patients.

Over 200 patients were referred to the therapy led clinic during wave 1 and wave 3 of the pandemic. A level of flexibility was required to manage the volume of patients requiring face to face treatment and rehabilitation on a daily basis. The constraint of the routinely used consultant led clinic format requires patients to attend on a specific day and at a specific time dedicated to their consultant. This format often leads to a large volume of patients attending at one time, long waiting times and waiting areas becoming overcrowded. The therapy led clinic enabled therapists to have the autonomy to schedule patients' appointments based on patient rehabilitation need. The therapy led clinics played a major role in reducing patient waiting times and the number of patients in the waiting areas at any one time where social distancing measures were required.

Overall moving from a consultant led clinic to a 'Therapy Led Clinic' model of practice was an excellent solution in this unprecedented situation. It was found to reduce waiting time at clinics and allowed the consultant plastic surgeons to dedicate their time and expertise elsewhere during the pandemic. It afforded continuity of care between therapist and patient, provided a better control for social distancing in waiting areas, reduced waiting times of patients, and received a positive patient experience from a follow-up patient satisfactory survey.]



*From L-R: Elaine Loughnane (Physiotherapist), Helene Looney (Wound management nurse), Maria Bevan (Senior Occupational Therapist), Mike O' Brien (Senior Physiotherapist), absent: Aileen*

## References

1. COVIDSurg Collaborative. Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV-2 infection: an international cohort study. *Lancet*. 2020;396(10243):27-38.
2. Bolger JC, Donlon NE, Butt W et al. Successful maintenance of process and outcomes for oesophageal cancer surgery in Ireland during the first wave of the COVID-19 pandemic. *Ir J Med Sci*. 2021 Mar 16 (epub ahead of print).

## NCPS Publications

All of the documents below can be accessed at this [link](#)

- **19 January 2021 : NCPS guide for prioritisation of urgent schedule surgical conditions**
- **9 July 2020: Resumption of outpatient activity for otolaryngology and head and neck surgery in Ireland**
- **9 July 2020: Interim clinical guidance on flexible nasendoscopy (FNE) and nasal endoscopy in Ireland during COVID-19 pandemic**
- **11 May 2020: NCPS guide for consenting in the COVID situation v1**
- **15 April 2020: RCSI multidisciplinary guidelines on elective tracheostomy insertion in ventilated COVID-19 patients**
- **15 April 2020: Surgical patient flow during COVID-19 pandemic v2**
- **31 March 2020: Guidance on operating of Acute Surgical Assessment Units (ASAs) during the COVID 19 pandemic**
- **9 March 2020: Information for surgeons regarding virtual follow up of patients**

For guidance on scheduled and unscheduled care please visit the HSE repository [here](#)

