



Service Continuity in a COVID Environment

A Strategic Framework for Delivery

8 June 2020

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1. Executive Summary

1.1 Purpose and Objective

The COVID-19 pandemic has led to unprecedented interruption to normal healthcare activity, with both community and acute settings affected. The anticipated high-volume surge in COVID patients was flattened by close adherence to Public Health advice and levels of capacity within the health system are becoming available for services.

The purpose of this strategic framework for service continuity is to guide the reintroduction of services that were suspended or reduced as a result of COVID-19. In doing so, this document outlines:

- The impact of COVID-19 on services across community and acute settings.
- International context for reintroducing services in a COVID environment.
- Challenges to service continuity in a COVID environment.
- The need for continued adaptation to ways of working in service delivery.
- Guiding principles for reintroducing services in a COVID environment.
- An overview of the phased approach to reintroducing services based on an analysis of demand, priorities, risks and benefits across services.
- Common requirements to reintroduce services in a COVID environment.
- Next steps to progress the reintroduction of services.

1.2 Key Points

- Services resumption should be configured by taking into consideration the patient pathway
 and the multidisciplinary nature of care delivery and its interdependencies with a gradual
 increase in activities based on clinical urgency, a requirement for adequate capacity,
 infection control, SARS-CoV-2 testing and PPE supplies to be in place.
- Cancer and other time-dependent services that were postponed due to the additional risk of treatment during pandemic surge should be prioritised, recognising that the patient journey will touch on many aspects of healthcare.
- Many services will need to be resumed on a phased basis, addressing those with the most critical requirements initially, to reflect this multidisciplinary delivery system.
- Many services will have to learn new ways of delivering care to accommodate the Infection Prevention and Control strategies required to mitigate the new risk.
- This will have an impact on productivity and the demand capacity ratio.

1.3 Next Steps

The key actions for delivery to give effect to the Strategic Framework (Figure 1 below) are outlined in Section 13 of the document, under the thematic headings of the Strategic Framework:

- 1. Protect Surge Capacity.
- 2. Reintroduce Priority Services.
- 3. Engagement and Communication.
- 4. Governance.
- 5. Best Practice Guidance.
- 6. New Ways of Working.

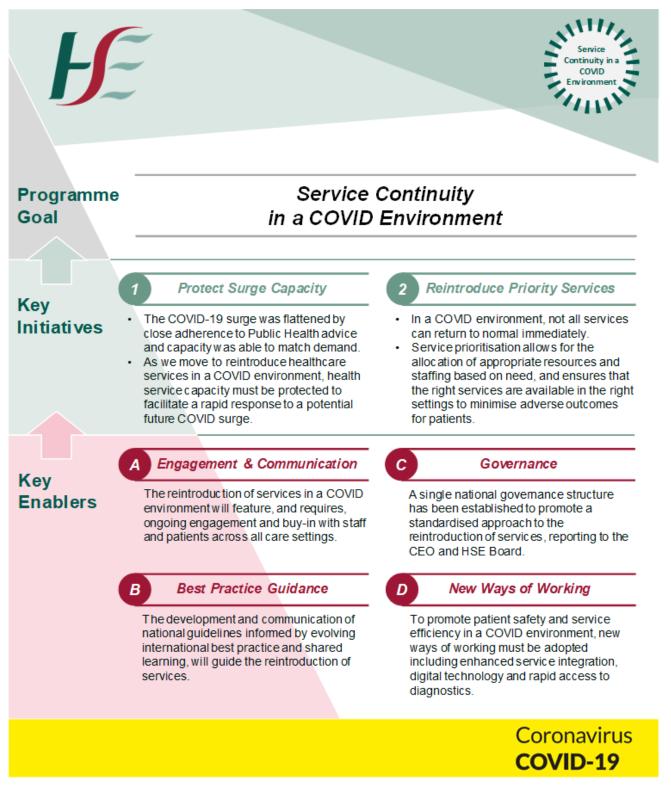


Figure 1: Strategic Framework for Service Continuity in a COVID Environment

2. Glossary

Acute setting: Any service delivered in an acute hospital setting, and not in a community setting.

Capacity: The amount of a given service that can be delivered based on the resources required to deliver the service and the service delivery model.

Community setting: Any service delivered in a primary care, disability, mental health, older persons or health and wellbeing setting that occurs outside of an acute hospital setting.

COVID-19: Infectious disease caused by the virus Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2).

COVID and Non-COVID pathways: Pathways which describe how COVID and non-COVID patients will be streamed separately in COVID environments across all care settings, and for all patient journeys.

COVID environment: Health and social care settings in which there is a pervasive threat of contracting COVID-19 infection and a need to rigorously comply with infection, prevention and control measures to reduce the spread of COVID-19.

COVID services: Essential services that were not suspended on 27 March 2020 in accordance with public health guidance and / or new models of care / services designed specifically to respond to COVID needs.

Diagnostic services: Organized services for the purpose of providing diagnosis to promote and maintain health.

SARS-CoV-2: Severe Acute Respiratory Syndrome Coronavirus 2 is the virus that causes the infectious disease COVID-19.

Screening services: Services intended to detect a condition (e.g., colorectal cancer) at an early and more treatable stage.

Service continuity: The ongoing delivery of health and social services.

Scheduled care: Scheduled or planned care is healthcare that is scheduled in advance with an appointment and therefore is not considered an emergency.

Sláintecare: The 10-year programme to transform Irish health and social care services.

Unscheduled care: Unscheduled care is any care or contact with the health services seeking help, advice or care that cannot reasonably be foreseen or planned before a patient presents. It is care that can be requested at any time and therefore must be available 24/7. By definition unscheduled care is urgent and requires immediate action at time of presentation.

3. Introduction - Impact of COVID-19 on the Delivery of Health Services

3.1 Rationale for Suspending or Reducing Services in a COVID Environment

The COVID-19 pandemic has led to unprecedented interruption to normal healthcare activity, with all services affected, across both the acute and community setting. During March 2020, increasing public health measures were implemented in a phased approach. On 27 March 2020, a decision was taken by the National Public Health Emergency Team (NPHET) to postpone all "*non-essential surgery, health procedures and other non-essential health services*". This decision was taken in the context of:

- An increasing number of confirmed COVID-19 cases, disease clusters, deaths and patients requiring critical care support.
- The European Centre for Disease Prevention and Control (ECDC) update of 25 March 2020, which categorised the risk of "*healthcare system capacity being exceeded in the EU/EEA and the UK in the coming weeks*" as high.
- Challenges for staff and patients in complying with physical distancing guidelines, often in a high-risk environment.
- The ongoing need to redeploy staff and resources to support the response to COVID-19.
- Escalating concerns that there would not be enough capacity in the healthcare system to treat COVID patients if non-essential work continued

3.2 Impact on Community Services in a COVID Environment

Community service activity has decreased as part of general COVID mitigation measures but also, in part, due to the redeployment of staff to support COVID services. Primary Care and Social Inclusion, Mental Health, Older Person, Palliative Care and Disability Services continue to deliver essential services (e.g. residential services), but other services have been reduced (e.g. home support for lower level priority users) or suspended (e.g. clinic-based therapies), as shown in Table 1 below.

Table 1. Breakdown in percentage of community services continued, reduced or suspended due to the COVID pandemic

	Primary Care and Social Inclusion	Mental Health	Disabilities Services	Older Persons Services
Service Continued	43.4%	43.2%	42.9%	30%
Reduced Service	32.3%	51.4%	35.7%	40%
Service Suspended	24.2%	5.4%	21.4%	30%

3.2.1 Community Demand for Services in a COVID Environment

The constraints around delivering service in a COVID environment has had an impact across a range of community services, causing a significant reduction in the obtainment of national targets.

Service	Metric	Percentage reduction against national target for April 2020
Audiology	No. of patients seen	43%
Occupational Therapy	No. of patients seen	30%
Ophthalmology	No. of patients seen	37%
Physiotherapy	No. of patients seen	28%
Podiatry	No. of patients seen	28%
Psychology	No. of patients seen	29%
Public Health Nursing	No. of patients seen	29%
Speech and Language Therapy	No. of patients seen	46%
General Adult Community Mental Health Teams	No. of new cases seen	19%
Intensive Home Care Packages	No. of home support hours provided	15%

 Table 2: National targets for discrete community services April 2020

A Community Capacity Working Group has been set up in the Department of Health. This group and its work will align and integrate with the work outlined in this document to reintroduce services in a phased approach, in line with clinical and operational decision making and having regard to public health.

3.2.2 Impact of COVID-19 on Primary Care

Primary care has continued to deliver acute care while delivering essential COVID-19 services. However, the decline in health seeking behaviour, akin to what we have seen in acute hospital settings, has resulted in a substantial fall in presentations to primary care leading to decreased routine primary care follow up and opportunities for optimising disease management and health promotion and prevention. Significant primary care service provision was prioritised and a level maintained during this pandemic for example child health, acute to community discharges, emergency therapies and services to include emergency dental services, nursing support packages to children with life limiting conditions, public health nursing, community medical officer and registration of births and deaths.

From a social inclusion perspective, there were significant supports provided to the Homeless, residents in direct provision, Roma and Travellers communities throughout the initial phase which will need to be enhanced in line with the implementation of national actions plans and strategies.

Palliative Care service provision was maintained within the in-patient and community settings to include end of life care within homes. This also included related out of hours services.

3.2.3 Primary Care Demand in a COVID Environment

The enablement and support of General Practice services will be vital to allow the wider health system to reintroduce service in a safe and phased manner while reducing pressure on the acute hospital setting.

Demand for Primary Care services has begun to increase as community transmission levels of COVID-19 have dropped and fears about contracting the virus in healthcare settings are lessening. In addition to the pre-existing demand for primary care services, there will be additional demands for services which support the redirection of care away from acute settings and hospital avoidance, such as chronic disease management and health promotion and prevention, including

vaccination. This will be supported by a refocusing of some Community Assessment Hubs, where demand and activity is low, towards management of respiratory illnesses (both influenza and COVID-associated) and certain chronic diseases in the community which will affect Emergency Department presentations and inpatient admissions most importantly as we approach winter and the associated demands.

The strategic approach to reintroducing primary care service provision across all disciplines is focused around psychosocial supports, delivering care as close to home as possible, child health and chronic disease management within our communities. Palliative care provision in the community will need to be built upon with a particular emphasis on end of life care in the home. Social inclusion supports to the homeless, migrants, those with addictions and members of the Traveller Community will also need to be built upon.

3.2.4 Impact of COVID-19 on Mental Health

Mental health acute inpatient and community residential facilities have stayed open through the pandemic. Service users have continued to avail of these and also community mental health services, albeit at reduced numbers in some settings. Public health advice will continue to provide guidance while services return to a more comprehensive provision. In community settings, essential services continue on a face-to-face appointment system, while further services are delivered remotely. There is a concern that on-going reduced capacity in community services will increase the requirement for inpatient admissions. Rapid service reconfiguration has taken place in many CHO areas as part of the COVID response. In acute and residential settings all CHOs have reconfigured facilities to eliminate multi-occupancy bedrooms, to reduce the risk of cross infection. A number of resident transfers have taken place to mitigate risk associated with shared or dormitory style accommodation. While this is appropriate in the short term, over the medium and long term, this must be reviewed to ensure all residents are accommodated in appropriate care facilities in line with their assessed needs. In addition, three new approved centres have been registered since March.

The COVID pandemic necessitated an amendment to the Mental Health Act pertaining to those who are involuntarily detained in mental health settings. A remote process for mental health tribunals was introduced.

Mental Health service improvement activity has been reduced or suspended in some circumstances due to COVID-19. Particularly affected services include the National Clinical Programmes for Eating Disorders, Early Intervention Psychosis, Assessment and Management of people with Self Harm presenting to the Emergency Department, Attention Deficit Hyperactivity Disorder in Adults and Specialist Perinatal Health Services.

3.2.5 Mental Health Demand in a COVID Environment

Within Mental Health services, it is clear that the psychosocial impact and mental health burden as a result of the COVID-19 pandemic is unprecedented. Compounded by the economic impact of the pandemic, COVID-19 is likely to cause a long-term increased demand for mental health services, and in particular specialist services. Specific population cohorts have been identified as particularly vulnerable and likely having increased requirements for mental health supports these include:

 Groups who will be particularly vulnerable to the emergence of new mental health difficulties requiring specific interventions, for example COVID-19 survivors and their families.

- People with established mental illness who are likely to be particularly vulnerable to relapse, exacerbation of symptoms and impaired functioning in the context of the COVID-19 pandemic.
- People requiring a range of more specialist mental health services ranging from Child and Adolescent Mental Health Services, including forensic services, to those of the National Clinical Programmes, e.g. eating disorders, early intervention psychosis, the assessment and management of people with self-harm presenting to the Emergency Department, Attention Deficit Hyperactivity Disorder in adults and, Specialist Perinatal Health Services.

3.2.6 Impact of COVID-19 on Disability Services

Within disability services, in preparing for and responding to the acute phase of the COVID-19 pandemic, a range of very significant responses were implemented including the closure and diversion of resources aligned with day services for adults, significant changes in the way children's therapy services are being provided, the movement of people awaiting rehabilitation hospital placements to home from acute hospitals, loss of respite, reductions in home supports and personal assistant services, loss of momentum on key programmes such as de-congregation, personalised budgets, the autism programme and the development of the children's network teams. It has affected the progress on almost every aspect of services and, by extension, the lives of people living with disability. However, it is noted that disability umbrella organisations working in partnership with the HSE achieved a substantial level of co-operation in implementing measures to develop capacity within the sector not only from a staff preparedness point of view, but also in terms of physical capacity through close co-operation and guidance from the Regulator.

3.2.7 Disability Services Demand in a COVID Environment

The lives of some people with disabilities, and their families, have changed drastically as a result of COVID-19 and the reduction or suspension of services. This has caused increased concern which may have resulted in experiences of isolation, loneliness, distress, loss of potential for personal learning and development. Some people are finding the current restrictions, including cocooning for those to whom it applies, to be very limiting, leading to some individuals and families struggling to manage. The demand for Disability services therefore remains high across the spectrum of home, personal assistance, day and residential services, as well as vital therapies for children and young people with a disability.

3.2.8 Impact of COVID-19 on Older Persons Services

Day services which provide an average of 28,000 places weekly were suspended due to the COVID-19 pandemic. Adaptations to service delivery were implemented such as increasing Meals on Wheels, phone line support and outreach through social distancing compliant visitations.

Services supporting hospital discharges (transitional care) have continued but are reduced in their capacity due to restrictions in Long Term Residential Care as a result of public health requirements. Emergency residential respite services are greatly reduced due to capacity constraints and home respite and carer support have also had to decrease activity.

Home support services have continued albeit at reduced activity, particularly for those clients categorized as priority level 3 and 4 and assessments of need for new referrals to the service. The provision of aids and appliances to support independence have also decreased. Meals on Wheels services have increased in activity during COVID due to a significant increase in volunteers and Day care services being redirected.

Older Persons Specialist Support Teams (ICPOP) activity has continued, however these specialist teams have focused on increasingly supporting residential settings, in collaboration with the public health teams to manage outbreaks of COVID-19, and expanded for inclusion of specialists in Geriatric Medicine, Palliative Care, etc. in collaboration with acute hospitals.

Helplines and signposting services have increased during COVID-19 due to a significantly increased demand for services facilitated by increased volunteers. There has been a reduction in activity in specialist falls clinics and therapeutic services.

3.2.9 Older Persons Services Demand in a COVID Environment

We are already seeing the demand for Older Persons services rise as more older people are now increasingly presenting and being admitted to hospital, with levels reaching and expected to surpass comparable levels in 2019.

Unscheduled care	Metric	31 March 2020	12 May 2020	Difference
	ED attendances (75+)	1,730	2,918	68.7%
	ED admissions (75+)	1,065	1,552	45.7%

Table 3. Increase in Presentations and Admissions of Over 75 Population to Hospitals

This trend is leading to an associated increase in delayed transfers of care out of acute hospitals back to the community as capacity in residential settings has been impacted by COVID-19 and assessments for home care support services have been reduced. In addition, older people at home are becoming increasingly deconditioned due to social restrictions and cocooning which will place increasing demand on rehabilitation services going forward. As we reintroduce services, in a manner which protects capacity to rapidly respond to a potential COVID surge, the demand for Older Persons services which support hospital avoidance and facilitate earlier discharge from hospitals will be key to maintaining capacity,

3.2.10 Impact of COVID-19 on Health and Wellbeing

All health and wellbeing activities were suspended except for some smoking cessation clinics and the self-management support for chronic disease living well programme which was reintroduced in April 2020 with agreement with the Sláintecare programme.

3.2.11 Health and Wellbeing Demand in a COVID Environment

Given the impact that COVID-19 has had on the most vulnerable in our communities the requirement to deliver a strong and focused health and wellbeing accessible programme of support, whilst addressing health inequalities, is imperative.

The fight against COVID-19 has identified issues in our response to emerging gaps among subgroups of our population affected disproportionately by health inequalities. The Health and Wellbeing agenda is required now more than ever by not only this vulnerable cohort but also our staff, our communities and the population as a whole.

We need to ensure when ramping back up services and adopting new ways of working that we are led by a population-based needs analysis and health intelligence approach and build on our collaborative approach with Public Health in this regard.

3.3 Impact on Acute Services in a COVID Environment

3.3.1 Scheduled Care

Across acute hospital settings, that were receiving hospitals, scheduled survives were postponed or severely curtailed to provide capacity for COVID inpatients, for staff to be redeployed for training in the use of Personal Protective Equipment (PPE), COVID ward care and to support Critical Care surge delivery. Services that were postponed included daycase services, elective surgeries and outpatient appointments. Where services could not be safely postponed, they were delivered after case by case assessment either in the base hospital or relocated to another appropriate environment. Essential outpatient appointments were delivered, where possible, using a digital health solution. The overall impact has been an increase in patients awaiting inpatient and day-case admissions as well as outpatient appointments.

3.3.2 Unscheduled Care

Unscheduled care is the predominant driver of activity in acute hospitals. COVID-19 required a major reorganisation of patient management with screening on arrival and division into COVID and non-COVID pathways. Productivity was impacted by the increased demands associated with Infection Prevention and Control (IPC) requirements associated with COVID care and the requirement for separate pathways both from an infrastructurally and a workforce point of view. This was mitigated by the unanticipated reduction in presentations both to general practice and to the Emergency Department. This decline in health seeking behaviour is thought to be due to public apprehension about contracting the virus within hospital settings and primary care facilities. There is concern regarding secondary harm occurring within the population due to delays in accessing treatment and patients presenting later in the course of their illness, with potentially negative impacts on their health and outcomes. To date, excess deaths appear to be due in the main from COVID-19.

3.3.3 Patient Flow

The reduction in both scheduled and unscheduled activity ensured that the acute hospital system operated at (or below) 80% resulting in the ability to admit patients to the ward without delay, resulting in the TrolleyGAR figure being largely or near zero. The ability of acute hospitals to deliver inpatient services is heavily dependent on patient flow from the acute setting into the community. The emerging challenges in the private nursing home sector, in many cases their closure to new admissions, has also impacted on non COVID-19 activity. Attendance and admission avoidance were supported by the community hubs and a number of outreach programmes for vulnerable groups delivering care in the community, e.g. the inclusion health service response to COVID-19 and the Neurology outreach for individuals with Motor Neurone Disease and Multiple Sclerosis.

3.3.4 Acute Setting Demand in a COVID Environment

The demand for services was reviewed by examining:

- Scheduled activity demand, reflected in waiting lists for inpatient and day case admissions, scopes and outpatient clinics held on public, private and National Treatment Purchase Fund (NTPF) waiting lists.
- Unscheduled activity demand, largely generated from presentations to the Emergency Department, which declined significantly due to public concerns about contracting the virus, but which are now rising again.
- Fall in referrals to rapid access cancer clinics especially, together with a protracted suspension of cancer screening services, leading to delayed presentations, more advanced disease and poorer outcomes placing additional demand on cancer services.

Key figures illustrating demand are shown in Tables 4 and 5 below.

Table 4. Decrease in Inpatient / Outpatient Activity and Increase in Numbers on NTPF Waiting
Lists Pre and Post-COVID Measures

Scheduled Care ¹	Outpatient Activity	February 2020	May 2020	Difference
	Outpatient Attendance (New and Return)	273,890	190,937	(30.3%)
	Inpatient Activity	February 2020	April 2020	Difference
	Elective Inpatient Discharges	7,803	2,679	(65.7%)
	Day Case (including Dialysis)	90,445	44,701	(50.6%)
	Waiting List	27 February 2020	28 May 2020	Difference
	NTPF Outpatient Waiting List	558,554	575,863	3.1%
	NTPF Inpatient Waiting List	66,705	86,946	30.3%

Table 5. Decrease in Unscheduled Care Activity and e-Referrals to Cancer Services Pre and Post-COVID Measures

Unscheduled Care	KPI	March 2019	March 2020	Difference
Guio	New ED attendances	107,748	71,584	(33.6%)
Cancer Services ²	Healthlink	Ave		
OCT VICES	Weekly e-Referrals	Weeks 2 to 11	Weeks 12 to 17	Difference
	Breast	770.0	392.3	(49.0%)
	Lung	44.3	18.3	(58.6%)
	Prostate	71.7	35.7	(50.3%)
	Pigmented Lesion	106.9	34.3	(67.9%)
	Total	992.9	480.7	(51.6%)

3.4 Health Service Response to COVID-19

The health service response to the emergency posed by COVID-19, is guided by advice from Public Health, and was unprecedented in terms of its scale, impact and response times. The need to secure acute capacity, particularly ICU capacity was addressed by obtaining private hospital capacity for a number of months, purchasing additional ventilators and upskilling and redeploying staff to convert existing clinical areas to ICU beds. A significant number of new staff were also recruited as part of a national campaign.

The requirement for additional hospital step down capacity and isolation facilities was addressed by the rapid conversion of existing infrastructures into field hospitals. Community Assessment Hubs were created as a hospital avoidance measure to allow patients with COVID-19 to be

¹ Source: HSE Management Data Reports (MDR) dated April / May 2020 and NTPF Outpatient & Inpatient Waiting List Reports dated 27 Feb / 28 May 2020

² Source: National Cancer Control Programme. Note, not all GP referrals are made electronically. Therefore, the data presented above describes the number of electronic GP referrals sent via Healthlink as opposed to the number of new patients actually attending each of the rapid assessment cancer clinics.

assessed in the community and General Practitioners played a crucial role in the referrals for testing and management of COVID-19 patients in the community. Across health and social services all staff received Infection Prevention Control training including the use of PPE, to protect and prevent against the spread of COVID-19. The forecast requirement for PPE was modelled (at a level over 10 times pre-COVID PPE levels), a supply chain established, and sourced in an extremely competitive global market.

Area Crisis Management teams established a number of Residential care and home support COVID-19 Response Teams (CRT) to address community outbreaks. A COVID-19 testing and contact tracing service was created through the development of pathways, staff redeployment and training, the creation of testing centres, the procurement of testing kits, the development of laboratory capacity and the continued expansion of capacity to reach testing and contact tracing targets.

The Public Health function continues to be a leadership role in the national response to COVID-19, including the management of health surveillance activities, such as contact tracing, complex case and outbreak management and surveillance. The continued role of Public Health will be essential in guiding the reintroduction and delivery of services in a COVID environment, particularly in the event of a potential COVID surge and / or the expected increase in acute care demand during the winter season.

3.5 Rationale for Service Continuity in a COVID Environment

As a result of public compliance with mitigation measures, the acute healthcare service was able to match demand and maintain essential and time-dependent services. With surge control and the NPHET direction that service delivery can return based on clinical and organisational decision making, community and acute services can resume in a manner that:

- 1. Ensures, given the impact of COVID-19 on the most vulnerable in our communities, that when ramping back up services and adopting new ways of working we are led by a population-based needs analysis and health intelligence approach.
- 2. Ensures that the acute hospital system runs in line with the occupancy level recommendation of 80% to ensure patient flow and avoid trolley waits.
- 3. Avoids overcrowding in the Emergency and Outpatient Departments.
- 4. Reflects the need to increase services that support hospital avoidance and timely hospital discharge in order to maintain sufficient capacity for Winter 2020/21.
- 5. Reintroduces services guided by need, in a phased, clinically aligned and integrated way across community and acute settings.
- 6. Redevelops models of care and care pathways to maximise the activity that can safely be provided in a COVID environment, including digital technology adaptation, to protect the future of the health system.
- 7. Recognises the capacity limitations that are emerging due to IPC requirements in healthcare facilities.
- 8. Applies evolving international experience and collective knowledge to ensure the safety of the public, our healthcare workers and the wider healthcare system as we deliver services in a new and pervasive COVID environment.

4. International Context for Reintroducing Services in a COVID Environment

Globally, countries have begun or are in the planning stages of resuming clinical activity that was postponed or cancelled due to mitigation measures implemented in the context of the COVID-19 pandemic. Evidence is primarily emerging from Ministries of Health and various professional societies. Although the level of detail and breadth of guidance varies considerably by source, there is consistency on the need for a gradual increase in activities with a requirement for adequate capacity, infection control and Personal Protective Equipment supplies. As such, to date there is a dearth of international evidence to guide policies, procedures or guidance around the reintroduction of clinical activity. However, key concepts such as (1) Organisation measures (2) Physical space measures and (3) Patient flow measures are emerging from international literature. As more regions continue to ease restrictions related to COVID-19, it is anticipated that further guidance will be published however there is likely to be a time lag before evidence on the effectiveness of measures specific to COVID-19 are available.

4.1 Reintroducing Community Services

Similar to the approach for reintroducing acute services, comparable jurisdictions showed that they are adopting a phased approach to community services reintroduction based on the priority of services. In a memo from the NHS, the Chief Executive states that in the coming weeks there will be an increase in demand throughout the community services, mental health, and primary care services. Over a six-week window, the NHS plans to prepare to support this increase in patients, continue providing essential community health services, and phase back other services when the appropriate support is in place. There is also an emphasis on communication during this phased return, ensuring patients are proactively contacted and supported throughout the process.

Scotland has adopted a four-phase process to safely return community services to a pre-COVID capacity. The first phase upon release from lockdown will entail the safe restart of community services such as mental health and a ramp up of digital consultations. The second phase will include remobilisation plans to increase the provision for the backlog of demand, prioritised referrals to secondary care, and an increased number of home visits to shielded patients. The third phase will include a phased resumption of visiting to care homes by family members. The final phase will see the full range of community services resume with a greater emphasis on technology.

New Zealand has also adopted a four phased approach for a safe return from a COVID environment. They specifically identify disability services, mental health services, and older persons services as areas of priority throughout this process. In addition, they have acknowledged the psychosocial impacts derived from the lockdown phase and have developed a dedicated Psychosocial Response and Recovery plan to support these members of high priority populations and communities.

Australia has also prioritised disability services with a dedicated management and operational response plan. Approximately 1 in 5 Australians have a disability, and studies have shown that those with disabilities tend to fall within multiple high priority groups. This can have a compounding effect on their health needs and overall outcomes.

4.2 Reintroducing Acute Services

A brief review of comparable jurisdictions (Australia, Australian States, England and New Zealand) shows that they are adopting a phased approach to reintroducing services based on clinical prioritisation and all identifying cancer as the highest priority.

Service Continuity in a COVID Environment: A Strategic Framework for Delivery

There is a range in the scale and scope of services to be reintroduced by jurisdictions. The Australian federal government is permitting 25% of previously closed theatre and endoscopy lists to reopen from late April. The NHS aims to restore urgent surgery, non-surgical procedures, outpatient and diagnostic appointments to pre-COVID levels of capacity within a six-week period.

There is also variation in the reintroduction of cancer services. All screening services in the NHS will be available for the "highest risk groups", as identified by individual screening programmes. In New Zealand, breast and cervical cancer screening programmes are currently gradually resuming but the programme for bowel cancer remains suspended until more COVID-related restrictions are eased.

5. Challenges for the Reintroduction of Services in a COVID Environment

5.1 Need to Maintain COVID Services for the Foreseeable Future

There are well-documented deficits in hospital capacity, in particular critical care, in terms of bed numbers, infrastructural design and workforce. The acute hospital system has an average occupancy of 94% (OECD) and surges above 100% during the winter season leading to delays in patient flow, overcrowding in Emergency Department waiting rooms, patients having to wait on trolleys in overcrowded EDs pending the availability of a ward bed.

Community care deficits lead to an overcrowded and overwhelmed primary care service, which defaults into the Emergency Department further aggravating the problems there. Deficits in Community rehabilitation, convalescence services and home care packages delay appropriate transfer of care, which impacts patient care and prognosis as well as impeding patient flow.

Capacity to manage COVID cases is essential to limit the spread of the virus, including capacity for testing and contact tracing, COVID pathways for known and suspected cases, and required self-isolation facilities. It is also essential that we maintain acute bed occupancy at 80-85% so that hospitals can function efficiently, e.g. allocation of patients to specialty wards. Key to supporting acute capacity is the on-going availability of sufficient services that support hospital discharge such as residential care and home support and hospital avoidance services such as specialist Older Persons team services.

5.2 'Naive' Global Healthcare Systems

Globally, there is no experience in any healthcare system in responding to a pandemic of this nature. In this 'naive' global healthcare system, the dearth of evidence based, or even experiential based, knowledge means we must proceed in its absence.

5.3 Developing End-to-End Pathways in a COVID Environment

General Practitioners play a vital role in facilitating the appropriate flow of patients across community and acute settings. Increased General Practice access to diagnostics will help ensure timely diagnoses and avoid potentially unnecessary hospital outpatient referrals. This will drive the development of integrated end-to-end pathways that shift the delivery of care away from acute hospital settings. Where patients are referred to Emergency Departments, it is also essential that appropriate streaming pathways are in place that allow senior decision makers to stream patients to alternative services rather than admission.

5.4 An Aligned National Approach to Service Continuity

A varying scale of service reintroduction at a local level has already begun. The safe reintroduction of services is a welcome development however it poses challenges in ensuring (1) consistency in approach to safe service delivery in a COVID environment, (2) equity of access to service delivery at a national level and, (3) alignment of services across patient pathways.

5.5 Reduced Capacity in the System

The reintroduction of services in a COVID environment poses a number of challenges with regard to capacity and efficiency in the system. Key social distancing measures and IPC requirements, such as the current two-metre distancing, will have material impact on the available physical space to deliver services, significantly impacting on the overall capacity and operational activity levels on the acute inpatient / outpatient and community residential settings. Acute hospitals run

at close to or in excess of 100%. If we look at the impact of the 80% occupancy requirement on acute capacity it requires a reduction of up to 108,000 cases which exceeds all of the elective capacity.

Acute Operations estimate that the potential impact of the two-metre rule could result in approximately a 25% reduction in acute inpatient beds. Further analysis by the South/Southwest Hospital Group highlighted in an infrastructure survey they identified a loss of bed capacity and productivity as a results of physical distancing measures, including:

- A reduction of Cork University Hospital's capacity by 144 inpatient beds
- A reduction of University Hospital Kerry's capacity by approximately 70 inpatient beds
- A reduction in capacity of up to 50% for some day surgical and endoscopy units.

All hospitals in the survey above also found that canteens and offices might not be able to support all staff when enforcing physical distancing. To provide flexibility for a COVID surge, Acute Operations have advised that an 80-85% capacity level should be maintained. This, combined with the current requirement for two-metre distancing in healthcare facilities and a legacy of capacity issues as recognised under the Sláintecare strategy and the Capacity Review, highlights the need for alternatives to expand capacity including the option of private hospital capacity and the delivery of community hospital avoidance pathways and supports.

Table 6 below identifies the expected activity per the National Service Plan which assumed current high occupancy levels. This assessment can be further assessed at a hospital level.

Targeted Acute Activity			
Targeted Inpatient Cases in 2020	645,038		
Targeted Emergency Cases	444,606		
Targeted Elective Cases	91,635		
Targeted Maternity Cases	108,796		
Acute Acti	vity Impact		
Total Available at 80%	516,030		
Total Available at 80%, Excluding Maternity	428,993		

Table 6. Targeted Acute Activity in 2020 and Total Available at 80%

5.6 Reduced Operational Productivity in the System

Patient pathway to allow for physical distancing in emergency departments, theatre and treatment rooms, examination room layouts, diagnostics and x-ray and all waiting areas. will lead to a significant reduction in activity due to delays associated with appointment-based systems, patient screening, use of PPE, environmental cleaning, and news methods of delivering care. This will reduce productivity but is likely to improve the patient experience and reduce non-value adding activities.

5.7 Winter Surge

Across recent years the winter season brings an average increase of 15-20% in unscheduled care activity, this is primarily driven by respiratory conditions. In a COVID environment, the health

services ability to plan for Winter 2020/21 will be severely impacted. Current occupancy levels are reaching 95%, above our target of 80%. If there is a second wave of COVID-19 during this period, the system will not have the capacity to meet unscheduled care demand unless specific actions are taken, such as:

- The expansion and improvement of influenza vaccination programme uptake to reduce influenza related admissions.
- The rapid development of hospital avoidance and timely hospital discharge services for older people in the community, through such as Intermediate Care facilities and Specialist Older Person services teams.
- Enhanced support for General Practice in direct access to community diagnostic services and specialist consultation and enhanced MDT delivery of Chronic Disease Management (CDM) services to enable the delivery of care in the community and reduce unscheduled acute presentations.

5.8 Staffing Challenges

Significant staff redeployment has taken place in order to generate capacity for COVID services. Returning these staff to their previous roles presents a challenge as COVID services, particularly testing and contact-tracing, need to continue for the foreseeable future. Overcoming these challenges may require the roles and responsibilities of different staff members to be reviewed, alternative workforce strategies to be deployed or staff to be reassigned to other care settings which will require employee relations engagement. In addition, staff will continue to be at risk of contracting COVID-19 and, with regular testing, will be required to self-isolate. This will also be a challenge in maintaining the necessary staffing levels. In addition, ongoing IPC and PPE requirements are changing the way tasks are being performed, such as creating additional steps associated with safely using and disposing of PPE.

5.9 Staff Training and Education

COVID-19 has presented challenges to the delivery of traditional learning and development models. The HSE recognise training and education as critical to the delivery of safe quality care. Ensuring that staff training and education is prioritised and facilitated as we reintroduce services.

5.10 Public Expectations

Services will not be reintroduced to the same scale or scope as pre-COVID levels and may have to be reduced or suspended again in the event of a COVID surge. Public expectations surrounding service reintroduction need to be carefully managed as how services are delivered will change, particularly with the increased adaptation of technology. A national approach is required to ensure a clear and consistent message to inform the public of service continuity plans and increase confidence in the public to re-engage in positive health seeking behaviours. In particular, a clear and transparent approach needs to be adopted in terms of informing the public about what services can be delivered and what cannot.

5.11 Cost Implications of a COVID Environment

The measures to respond to this challenge will have significant cost implications for the organisation. The key drivers of cost to date in managing COVID-19 include PPE requirements, Private hospitals capacity (including consultant contract), Testing and Contract Tracing (including laboratory costs and staffing), Intermediate care capacity (including field hospitals and City West), Medical equipment (including ventilators), Healthcare workforce capacity (including On Call for Ireland, retired and overseas staff returning, locum and absenteeism cover).

Additional costs will now be incurred to facilitate the reintroduction of services in a COVID environment. These include but are not limited to:

- The adaptation of new ways of working such as digital technology:
 - ePrescribing expansion.
 - \circ Telemedicine.
 - Digital communication between acute hospitals and primary care.
 - Technology to support community service coordination and delivery.
- Enhanced integration across community and acute settings:
 - The development of hospital avoidance services.
 - The expansion of Intermediate care services to support timely discharge from hospitals.
 - Increased community diagnostic facilities.
- Investment in enabling supports including facilities and staffing.

6. The Need for Continued Adaptation of New Ways of Working

As the volume of both unscheduled and scheduled activity increases, we cannot return to previous ways of working. Overcrowded emergency and outpatient departments do not allow health services to comply with public health and safety measures. Delays in transfers of patients back to the community, either to their homes or to residential care facilities and prolonged length of stays due to delays in accessing necessary diagnostics, interventions, procedures or surgeries reduce vital acute hospital capacity necessary to rapidly respond to a COVID surge.

For the foreseeable future, health services will have to operate and develop pathways to treat both COVID and non-COVID patients simultaneously, in the context of an evolving pandemic where vital COVID capacity needs to be maintained and heightened safety measures need to be rigorously adhered to. As such, there is an urgent need to reconceptualise how we deliver care, to both address the present health needs of our population in a COVID environment and protect the future viability of health services by progressing the implementation of the Sláintecare vision.

The reintroduction of services will not be a return to status quo, but instead will build on the momentum that exists in the system and the realisation that traditional barriers to change can be overcome. Staff engagement and collaboration played a huge role in enabling service to rapidly adapt to the emergency and change the way services were delivered. Service reintroduction represents an opportunity to reform and deliver elements of Sláintecare and as such new ways of working need to be adopted. The following outline the 5 key new ways of working initiatives which are supportive of National Service Plan priorities.

6.1 Enhanced Integration of Care Pathways

Activity levels in acute hospitals will drop significantly due to the IPC measures necessary to deliver safe care in a COVID environment. The constraints of delivering care in a COVID environment will be further compounded by the oncoming known pressures associated with influenza in the winter months. This combined with the pervasive threat of a further COVID surge represents a significant challenge for the health service as a whole, but particularly for capacity in the acute hospitals to meet unscheduled care demand.

Key to addressing this challenge is the enhancement of service integration across acute and community settings, and also targeting the most vulnerable in the community. Community services play a vital role in maintaining health and wellbeing through health promotion and disease prevention, patient empowerment, early intervention and treatment services which minimise the impact of chronic disease, mental illness, disability and frailty, and improve the health outcomes and quality of life of the population. The enhancement of community services that shift care away from acute settings, in a coordinated and integrated manner across all healthcare settings, are key to delivering the right care in the right place and at the right time. The response to the COVID pandemic has accelerated us on this journey and we must now continue to adapt and re-design our patient pathways to support this future model of care.

6.2 Enhancing and Supporting General Practice

Sláintecare articulates a vision in which services are shifted from acute to community settings where possible, in turn relieving capacity within acute facilities. This is of particular importance in light of the increased demand on healthcare services associated with COVID-19, the impact which COVID-19 has had on capacity in the system and the potential winter surge. General Practitioners are an essential component in achieving this necessary shift in delivery of care from acute to community settings.

Five key building blocks for enhancing General Practice services have been identified and are outlined below:

6.2.1 Manpower Provision

An increase in General Practice capacity is required to facilitate the changes in working practices required as a result of COVID-19 with particular consideration of the time required to conduct safe patient consultations, in line with Public Health guidance, e.g. PPE measures. Increased capacity will also be required to meet the extra demand resulting from a potential COVID surge and / or delivery of care throughout the influenza season. Potential mechanisms to meet these capacity requirements within General Practice include grant aids to employ practice nurses and doctors' assistants and the transfer of hospital doctors to work within general practice during winter.

The continued and increased utilisation of virtual / phone-based consultations and telephone triage, while not appropriate in all cases, may also help to offset some of the capacity burden within General Practice. These models of care delivery may also be preferable for small general practice facilities where challenges exist in maintaining patient safety measures, e.g. social distancing.

6.2.2 Timely Access to Diagnostic Services in the Community

A key element to enhance and support general practice services within the community is timely and / or direct access to diagnostic services. This includes X-ray, ultrasound, MRI and CT scans, upper and lower GI endoscopy and certain laboratory investigations. Potential options to to address this include GP access to private diagnostics facilities, designated capacity within diagnostics services allocated to GPs in public facilities etc.

6.2.3 Provision of Medical Assessment Units (MAUs) and Surgical Assessment Units (SAUs)

Multiple MAUs and SAUs currently exist throughout the country, for example in Cork University Hospital, University Hospital Galway, etc.). These units provide an effective route for patients to be seen promptly, efficiently and safely in an acute facility following GP referral. In order to optimise MAUs and SAUs, they should be prioritised, increased in number, and standardised, with an ongoing presence from senior clinical decision-makers.

6.2.4 Effective, Timely and Comprehensive Digitally Enabled Hospital Discharge Communication

Timely GPs access to patient hospital discharge information and awareness of the treatment / medications provided to the patient while in hospital are essential to deliver effective care within the community and mitigate patient safety risks. A potential option to improve the efficacy of this communication process is to provide electronic discharge information where handwritten communications would have been issued previously.

6.2.5 Enhanced Community Wide Integrated Information Technology Enabled Service Provision

There has been a general investment in information technology within General Practice services, and the COVID-19 pandemic resulted in further welcomed developments in relation to ePrescribing. Appropriate information technology solutions are required to enable real-time communication across the system and ensure integration across community services to deliver patient-centred care as envisaged in Sláintecare.

These building blocks represent the most pressing needs for General Practice services to support their pivotal role in protecting capacity and ensuring appropriate allocation of resources across the wider healthcare system.

6.3 Enhancing Older Persons Services, including Chronic Disease Management

Older persons are a significant driver of demand in acute hospital settings, both in terms of admissions but also in terms of their prolonged length of stay, attributable both to the complexity of their underlying comorbidities but also due to difficulties in finding suitable supports to allow them to step down from acute hospitals to either their own homes, Intermediate Care facilities or Long Stay Residential facilities. Scaling back up existing supports and the enhanced development of both hospital avoidance and hospital step down pathways will be critical to maintain capacity in acute hospital settings.

As COVID-19 has had a significant impact on Long Stay Residential facilities, akin to acute hospitals, capacity may be significantly reduced in order to ensure compliance with COVID-19 Infection Prevention Control measures and protect the facilities from potential future outbreaks. Therefore, with less long stay beds available, facilitating timely discharge from hospital to these settings will not be possible.

Enhanced community services such as:

- Home support hours;
- Specialist Older Persons multidisciplinary teams (ICPOP);
- Community Intervention Teams (CIT);
- Frailty Intervention Teams;
- Outpatient Parenteral Antimicrobial Therapy services;
- Chronic Disease Management; and
- Rehabilitation services

have a crucial role to play both in optimising health to avoid hospital admission and in facilitating timely discharge from hospital. The expansion of home support services may enable older persons, who would otherwise have been admitted to Long Stay Residential facilities to be discharged to home in a timely manner and hence not incur the likely delayed transfers of care that will occur with reduced capacity in Long Stay Residential facilities.

6.4 Digitally Enabled Healthcare Delivery

Across both community and acute settings, we have seen how the adaptation of technology, even in its simplest form, such as a telephone consultation, has allowed us to manage patients safely, effectively and efficiently during COVID-19. Retaining and maintaining some of the innovations which were implemented as part of the COVID response will be a key enabler of timely service provision as we deliver services in a constrained COVID environment while simultaneously working to meet the pre-existing unmet demand in the system. Progressing some of the priorities and actions identified in the National Service Plan as advancing the implementation of Sláintecare will also serve to support these new ways of working, including:

- Develop a business case and take forward the procurement of a primary care management system.
- Establish the ePharmacy programme.
- Complete and assess the current ePrescribing pilot with a view to informing a national programme of work.

6.5 Measures to Reduce Acute Hospital Admissions

Within acute hospital settings the identification of measures which can reduce unnecessary unscheduled care presentations and associated admissions, shorten admitted length of stays and avoid unnecessary acute scheduled referrals have always been priorities. However, in order to

protect our acute service in a COVID environment and into the future, we must now accelerate the adoption of these measures by:

- Increasing senior decision making in Emergency Departments
- Protecting capacity in Acute Medical and Surgical Assessment Units for the purposes for which they are intended
- Shifting to a 24/7 model of care which provides access to essential services including diagnostics.

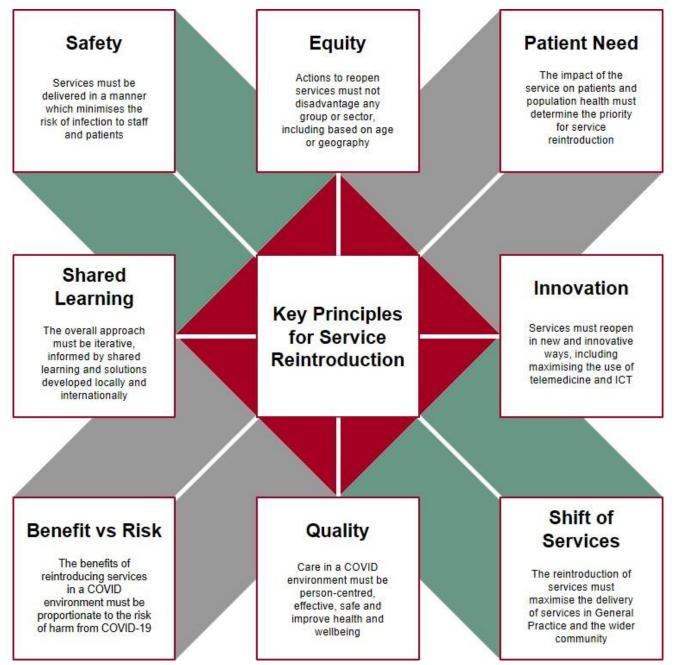
7. Public Health Principles and Guidance for Ramping Up Services in a COVID Environment

A common set of principles and guidelines, closely aligned to the national Public Health strategy and guidance, will be used to guide the reintroduction of all services. In this regard, the following key overarching principles to service reintroduction and guidance on IPC have been developed to guide decision making.

7.1 Key Principles for Service Reintroduction

The figure below outlines key principles to guide decision making when reintroducing services.

Figure 2: Key Principles for Service Reintroduction



Patient and staff safety remain of paramount importance when delivering services in a COVID environment. All centres must have access to rapid testing of patients and healthcare workers suspected of COVID-19 and for appropriate testing of contacts. Under the testing strategy for the reintroduction of services, appropriate testing will be key to maintaining staff health and wellbeing and sustaining service continuity.

7.2 Public Health Guidance on Infection Prevention and Control

Outlined below is key guidance on infection protocol control, related to service reintroduction:

- 1. All service delivery must be based on the basic premise of good IPC practices. There is a requirement for a renewed emphasis on training and supervision of adherence to basic IPC measures (Standard Precautions) in all settings at all times.
- There is a requirement for more effective identification of people (including those with COVID-19) who require IPC measures (Transmission-based Precautions) in addition to Standard Precautions to manage risk.
- 3. There is a requirement to embed the management of the risk of healthcare-associated COVID-19 in the broader processes of control of healthcare associated infections.
- 4. IPC capacity and reporting must be enhanced as quickly as possible to support safe delivery of healthcare services during the pandemic.
- 5. Rapid identification of people with clinical features of COVID-19 is necessary to support segregation of those who require COVID-19 care from those who require general healthcare. Examples of this include Community Assessment Hubs (which could evolve to further enhance primary care delivery) and cohorting into separate streams of care in acute settings. In congregated care settings, the identification of people with COVID-19 but without typical clinical features suggesting this diagnosis must be enhanced by surveillance testing in advance of admission or at the time of admission.
- 6. Efforts must be made to reduce the need for patients / service users to congregate. What can be delivered virtually should be delivered virtually with due regard for the care needs and preferences of the person. Even where virtual services are generally a useful option they may not be appropriate for everyone.
- Patients must, in so far as possible, minimise their risk of contracting COVID-19 in the two weeks prior to their scheduled admission. In addition, patients must attend for a COVID-19 test within 48 hours of scheduled admission
- 8. Access by people who do not need to be in the healthcare environment (for example, visitors) must be strictly controlled and measures to support distancing should be implemented.
- 9. Healthcare workers must have access to appropriate PPE and services must only be delivered if the necessary PPE is available for the staff (and patient if appropriate) required to deliver the particular service.
- 10. All healthcare workers must stay away from patient contact activities if they have clinical features of a communicable infectious disease including COVID-19. They should self-assess and report the absence of any symptoms suggestive of COVID-19 infection prior to commencing work each day. If any symptom is present they must return home, not mix with anyone, and contact the appropriate medical practitioner who will arrange a test if this is required based on the evaluation of symptoms. Some centres will also temperature check staff prior to commencing work.

Interim clinical guidance for the delivery of service continuity in a COVID environment has been developed by the NCAGL, Acute Operations. Links to this guidance are included as Appendix 1.

8. Prioritisation of Services in a COVID Environment

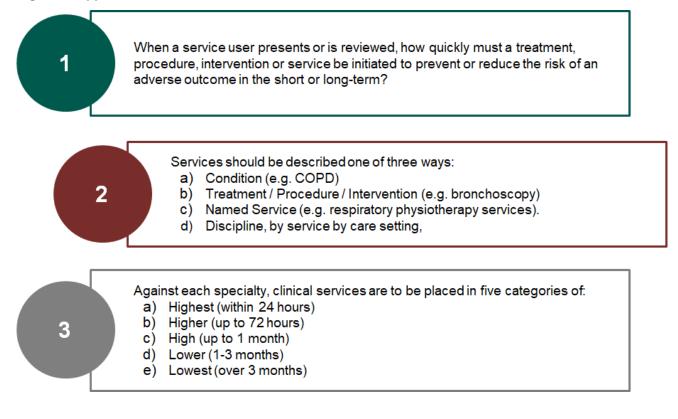
Service prioritisation is a key first step in planning for and operationalising the reintroduction of healthcare services in a COVID environment and allows for the allocation of appropriate resources and staffing, in the appropriate setting, to meet demand and deliver those services.

8.1 Approach Taken for Prioritisation of Services

A four-step approach was taken to prioritise services, as outlined below:

 A clinical prioritisation framework was collated by the National Clinical Advisors and Group Leads, supported by the National Clinical Programmes and Integrated Care Programmes. Non-emergency but time-dependent treatments, procedures, interventions and services across all care settings were identified, as shown in Figure 3.

Figure 3: Approach to Collate Clinical Prioritisation Framework



- The impact of the pandemic on the demand for these services was considered. As set out earlier in this document, a fall in referrals to rapid access cancer clinics especially, together with a protracted suspension of cancer screening services, will lead to delayed presentations, more advanced disease and poorer outcomes.
- 3. The benefits and risks of reintroducing these services in a COVID environment was considered. For example, when considering the benefits and risks for screening services specifically:
 - Benefits include the early detection and treatment of cancer and diabetic retinopathy, and an associated reduction in delayed presentations and poor outcomes.

- Risks include putting healthy people, invited to participate in a service, at risk of contracting COVID-19 and additional pressure on subsequent diagnostic and management pathways.
- 4. The impact of these services on health and wellbeing (including psychosocial and health protection) and the avoidance of escalation of care to acute settings was considered.

Services were then categorised into immediate, high, medium and low priority for the purposes of reintroducing services that were suspended or reduced during the COVID crisis period.

8.2 Requirements and Dependencies

A view was also formed on some of the dependencies specific to the reintroduction of services in a COVID environment. Some of these dependencies were identified in the Service Continuity Roadmap. A key next step will be to identify and manage these dependencies so that services along the end-to-end patient pathway can be reintroduced in an integrated manner.

Ten interim requirements have also been identified which are common to the reintroduction of all services in both community and acute settings. These are set out later in this document.

8.3 Service Continuity Roadmap

A Service Continuity Roadmap has been developed which categorises services into phases for the reintroduction of services.

Given the challenges surrounding delivering services in a COVID environment and the associated capacity constraints, services are to be reintroduced in a phased manner. The ease with which services can be introduced will vary considerably within and across services depending on how they are able to overcome the common dependencies and their own service specific dependencies. It is noted there will be opportunities to commence a range of services promptly where services reintroduction dependencies require little resource or time to address. However, it is noted that it may be more challenging for other services to be reintroduced therefore measures to overcome dependencies should begin as soon as possible and align with other services that are key inter-dependencies.

9. Key Requirements, Clinical Examples and Service Checklist to Reintroduce Services in a COVID Environment

9.1 Common Requirements

Critical to reintroducing services in a clinically safe manner, and in line with public health guiding principles outlined in Section 7, is the identification of requirements that need to be in place in order to deliver services in a COVID environment. These requirements for service delivery will be set at a national level.

Ten interim requirements have been identified which are common to the reintroduction across all services in both community and acute settings.

These have been further categorised into:

- Dependencies that must be addressed before reintroducing services (communication, COVID and non-COVID pathways, IPC requirements, COVID screening, staff and patient flow measures, scheduling changes).
- Additional requirements that can be addressed after / in parallel with reintroduction -(integrated governance and oversight, continuity plans, technology, activity forecasts, staff redeployment).

9.2 Service-Specific Dependencies

As well as common requirements across all services, there will be requirements that are specific to services that need to be identified and managed.

Figure 4: Common Requirements for the Reintroduction of Healthcare Services in a COVID Environment

	Common requirements for the reintroduction of healthcare services in a COVID environment				
C.	Communication Public information campaign to increase public confidence in the delivery of healthcare services in a COVID environment, the type and timing of service reintroduction and encouraging uptake of important screening and treatment services		Scheduling changes Required adaptations to schedules to reflect the necessary time requirements in between patients, to accommodate infection, prevention and control measures and allow for coordination of appointments, including diagnostics to minimise footfall in health settings.		
у х	COVID and non-COVID pathways Development of pathways at a national level to ensure a standardised approach to effectively stream patients in COVID environments across all care settings (e.g. ED to specific wards in acute hospitals).		Continuity plans for COVID surge Plans to define how to either exit from services or wind them down if surge capacity is required.		
	IPC requirements Guidance on the requirements for PPE for specific healthcare services in a COVID environment and the additional clearing requirements of physical spaces and equipment.	Ģ	Utilising digital technology support Ongoing leveraging of digital health (phone, video technology applications), to support the delivery of healthcare services (e.g clinical consultations) in both the community and acute hospital setting.		
	COVID testing and screening Public Health National guidance on pre-admission screening / risk assessment activities for healthcare services in a COVID environment.	Ā	Activity forecasts Model out the forecast activity levels for each reintroduced service. This needs to factor in service delivery constraints and overheads required to operate in the environment. Performance reporting will be required to track activity, against re-baselined KPIs for these services.		
●→◆ ↓ ■←●	Staff and patient flow measures National guidance on measures to allow for required safe distancing, such as (1) modified treatment workflows that decrease the number of staff in contact with patients; (2) removal of congregated areas (e.g.discharge lounge); (3) just in time' appointments.		Staff redeployment The redeployment of staff from COVID-related activities to facilitate the reintroduction of the prioritised healthcare services in a COVID environment.		

Figure 5: Dependencies that must be addressed before reintroducing services

	C.D.	× X X	
	Communication	COVID and non-COVID Pathways	IPC Requirements
Explanation	As services are reintroduced a public information campaign is needed to both (1) increase public confidence in the delivery of services in a COVID environment and (2) accurately inform the public on the type, timing of service reintroduction and anticipated level of activity. To ensure alignment across acute and community settings, enhanced real time communication and knowledge sharing is needed to facilitate the flow of patients across the care continuum as different services are scaled up / reintroduced.	Pathways need to be developed at a national level to ensure a standardised approach to effectively stream COVID and non-COVID patients in COVID environments across all care settings (e.g ED to specific wards in acute hospitals). These pathways should describe how COVID and non-COVID patients will be streamed separately in COVID environments across all care settings, and for all patient journeys.	The requirements for Infection Prevention Control measures including PPE for specific services should follow the existing IPC Health Protection Surveillance Centre (HPSC) guidance. A high-level, overarching framework and checklist, to support services in determining what IPC issues they need to consider when planning and delivering their approach to service continuity, is being developed.
Examples	 Weekly communication to General Practitioners updating them on those services which have been reintroduced and are accepting referrals and the anticipated timeline for review of those referrals Public communication campaigns to heighten awareness of the need for positive health-seeking behaviour and the services that are being reintroduced 	• Patients attending for outpatient appointments are screened the day before for COVID symptoms, attend just before the appointment in response to a 'just in time' text, enter the building from a designated side entrance for outpatients, have a temperature check on entry, put on a mask, sanitise their hands, follow the signs to enter the clinic room directly with no wait, are seen by a single clinician with bloods taken in an adjacent room, and a virtual follow up appointment is arranged after the consultation.	 Community therapy rooms will require cleaning in between patients. Home support service staff are required to wear PPE during visits
Checklist	 Is there a clear public communication plan in place utilising various media channels and delivered in line with national guidance and communication? Are there communication platforms to enable sharing between general practice and other community settings and acute settings about activity levels and patient pathways? 	1. Have COVID and non-COVID pathways been developed for all care settings and across all patient journeys?	 Are all staff trained in the use of PPE and IPC requirements in their clinical setting? Is the supply of PPE sufficient to meet anticipated activity?

Figure 5 Cont.: Dependencies that must be addressed before reintroducing services

		●→◆ ↓ ■←●	
	COVID Screening	Staff and Patient Flow Measures	Scheduling Changes
Explanation	A key enabler of the reintroduction of services in a COVID environment is the development of testing and screening criteria for accessing services. A clinical risk stratification for services needs to be developed to determine which patient interactions require COVID testing. A staff testing plan also needs to be developed. In parallel, a plan for management of contact tracing in the event of an outbreak within a service needs to be developed.	In order to deliver care in a way which is safe for patients and staff and complies with all the public health and safety requirements including social distancing, flow measures for staff and patients needs to be modified.	Due to Infection Prevention and Control measures, existing schedules will have to be adopted to reflect the necessary time to clean clinical spaces in between patients. In order to reduce footfall in clinical spaces, changes to appointments need to be made to minimize the number of times patients have to visit a clinical setting.
Examples	 A clinical risk stratification tool can be used to determine the COVID risk associated with the different types of clinical interactions i.e clinical exam in outpatient settings or community therapy appointment (lower risk) or Aerosol Generating Surgery (highest risk) Low risk: (1) Self isolation 14 days before admission / appointment to reduce the risk of exposure to COVID 19, (2) phone screening assessment before admission to check for symptoms or signs, (3) temperature check on day of admission 	 The number of patients attending group community treatment sessions is reduced and treatment area is reconfigured to allow for the required social distancing Modified staff workflows that decrease the number of staff in contact with patients e.g. only one member of the clinical team enters patient room and assesses patient during ward rounds or reviews a patient in outpatients Removal of congregated areas e.g. waiting rooms are modified to comply with social distancing, discharge lounges are removed 	 Coordination of appointments to create a 'one stop shop' so patients have their clinical appointments and any necessary investigations and diagnostics on the same day Alteration of theatre schedules to allow for extra time in between cases for additional cleaning
Checklist	 What testing capacity is required to test for COVID in patients identified as needing testing according to the clinical risk stratification? Have all patient interaction types been stratified according to the clinical risk stratification tool? Is a plan in place for the management of contract tracing in the event of an outbreak within a service? 	1. Have COVID and non-COVID pathways been developed for all care settings and across all patient journeys?	 Have all schedules been altered to reflect the necessary time between patients to allow for additional cleaning? Have patient appointments been reviewed and co-ordinated?

Figure 6: Additional requirements that can be met after / in parallel with reintroduction

	III	¢,	<u>ب</u>	
	Continuity Plans	Technology	Activity Forecasts	Staff Redeployment
Explanation	As we enter progressive phases in which social restrictions are eased, there remains a high level of concern that we may still experience a COVID surge which will require a rapid response to redeploy resources and services to obtain the capacity to treat COVID patients. Therefore, plans need to be developed to determine how service activity will be decreased or stopped in the event of a COVID surge in a way that minimises harm to patients and facilitates the best continuity of care in such circumstances.	The adaptation of technology has had a significant impact on our ability to deliver services in a COVID environment. Adaptation of technology has enabled care to be delivered remotely, helping ensure the safety of patients and staff while ensuring continuity of care. The reintroduction of services in a COVID environment will require ongoing leveraging of telehealth (phone, video, other technology applications / systems) to support the delivery in both the community and acute hospital setting.	It is not anticipated that the activity and performance of services in a COVID environment will easily return to pre- COVID levels even with the adaptation of new ways of working. In order to set realistic expectations about the management of both existing waiting lists and new referrals and the resources required, services should model out forecast activity levels. They should review demand for their services in light of reduced capacity and identify additional measures / alternative care pathways that may help address this unmet need.	Across community and acute settings staff were redeployed to support COVID related activities. To facilitate the reintroduction of prioritised services in a COVID environment, the required staff need to be identified and plans put in place to identify who can be allocated to the reintroduced services.
Examples	 Routine follow up therapy appointments are suspended immediately Home support for level 4 priority users are suspended 	 Community therapy clinics conducted via video links General practice medication reviews conducted over the phone with the patient and community pharmacist Anaesthetic pre-assessments clinics for low and medium risk patients conducted via telephone Teleconsultations between General Practitioners and hospital consultants to discuss priority cases to try to avoid acute patient hospital admissions 	 Over the next 8 weeks it is anticipated that services can be scaled back up from the current 20% of normal activity to XX% of normal activity Teleconsultations / shared care with General Practitioners could help reduce referrals to services 	The redeployment of staff to reintroduced services will be based on clinical prioritisation.
Checklist	 Are plans in place for how to reduce or suspend identified services? 	 What elements of my service could be delivered over the phone or via a video link? What technology resources are available to support telemedicine delivery for the service? What additional resources are required? 	 What level of activity the service can provide in the short, medium and long term? Have measures have been identified to try and address unmet need through alternative measure/ alternative care pathways 	 What staff members are required to reintroduce this prioritised service? Do I need all my team, or only some members? Can staff return incrementally? Further to the HPSC and other guidance, are there any specific issues for my staff members working in a COVID environment? How specialist a role does the member of staff that has been redeployed perform? Could another available member of the team perform the role?

10. Risks Regarding the Reintroduction of Services in a COVID Environment

Detailed risk and mitigation plans are being developed at workstream and programme level with regard to the reintroduction of services. The risk management process is, and will continue to be, actively governed and managed by the Service Continuity Oversight Group, with escalations to the EMT as and when required.

The below table summarises key high-level risks faced in relation to the reintroduction of services in a COVID environment.

Risk Description	Mitigation Actions	Likelihood	Impact*
Reduced Capacity - Capacity in acute hospitals should not exceed 80-85% in order to allow for a rapid response to a potential COVID surge. There is a risk that the reserved capacity will need to be used to meet the increased service demands associated with Winter 2020/21 and the reduction in capacity in Long Term Residential and Intermediate care settings.	 Identify and deliver opportunities for alternative service models and pathways to mitigate capacity constraints, e.g. older persons specialist outreach teams, hospital avoidance services and enhanced home support services. Clear planning regarding expected capacity constraints, development of targets and tracking of delivery against that. 	Likely	Major
Funding - There will be operational and capital cost requirements for the HSE including, but not limited to: the adaptation of digital technology, enhanced integration across community and acute settings and investment in enabling supports including facilities and staffing.	 For prioritised services, across the identified phases, all funding submissions will be accompanied with robust business case planning regarding requirements for additional operational and capital funding, addressing appropriate cost benefit analysis. Prioritise requirements and available funding based on prioritised services or the dependencies critical to the reintroduction of a prioritised service. A robust centralised process for funding requests should be used, overseen by the Oversight Group. 	Likely	Major
Flexibility to Increase / Reduce Services in a COVID Environment - A scale of COVID surge may present that means that capacity is again needed for COVID services. If capacity has been reconfigured, there will be a risk that it cannot be readily redeployed to respond. In addition, a COVID surge may be local, regional or national in scale. There is a risk that a national suspension of services in response to a local surge might adversely impact patient outcomes unnecessarily.	 In the context of the delivery plan for prioritised services across phases, identify which services' reintroduction would be impacted under COVID surge scenarios. Develop continuity plans for reintroduced services under surge scenarios, recognising that some organisations in the system have progressed these plans Ensure that future response initiatives to a COVID surge encompass the lessons learned to date. Specific responses (e.g. with a geographic focus or service focus) would enable the maintenance of reintroduced services where possible and appropriate. 	Likely	Major
Time-Related / Time-Critical Illnesses and Associated Outcomes- Delayed presentations, an increase in waiting lists, and a decline in health seeking behaviour, with likely	 Develop a public awareness campaign to promote positive health seeking behaviours. Develop metrics to fully understand the unmet need in the system in order to 	Likely	Major

Table 7: Key High-Level Risks in Relation to the Reintroduction of Services in a COVID environment

result in more advanced disease and poorer outcomes as a result. This will continue to escalate until services are reintroduced and activity increases.	 identify the capacity requirements to meet that need. Identify opportunities to increase capacity in the system to meet the increased demand in a timely manner e.g. ongoing utilisation of private hospital capacity. 		
New Ways of Working - The risk of not being able to stand up the required technology supports and infrastructure to enable healthcare delivery in a COVID environment. The risk that opportunities for enhanced integration and alignment are missed, if services return to old ways and working and operation.	 Identify gaps in current technology capabilities and the requirements across the system to enable technology enhanced delivery of services. Develop plan for implementation and integration of new technology. A clear communication plan across the system focussing on new ways of working and service integration. The development of shared learning platform to encourage collaboration and adoption of new ways of working. 	Likely	Moderate

*Likelihood and impact determined using the HSE Risk Assessment Tool and Guidance

11. Potential Delivery of Services in a COVID Environment Through Capacity

11.1 Community Utilisation Strategy

Within Community settings we have seen innovative solutions to increase capacity for COVID demand, with the creation of Community Testing, Community Assessment Hubs and Self Isolation Facilities, as well as targeted responses to vulnerable groups. In the absence of a future COVID surge and the continued suppression of COVID-19, the potential to repurpose these facilities to address capacity for healthcare services, such as increased assessment and treatment in the community and 'hospital avoidance' supports could be developed. In particular, repurposing Community Assessment Hubs and supporting the provision of diagnostic imaging will be key to supporting Emergency Department avoidance in areas which do not have access to Injury Units.

11.2 Hospital Utilisation Strategy

11.2.1 Strategic Aims

- 1. Acute capacity to deliver on surge and obviating the need for trolley waits for admission, estimated to require 80-85% occupancy levels to be maintained.
- 2. Increase critical care capacity to deliver on surge.
- 3. Deliver COVID and non-COVID pathways for unscheduled care.
- 4. Deliver scheduled non-COVID care pathways with separated infrastructure from other unscheduled activity.

11.2.2 Organisational Enablers

- **Healthcare delivery system:** Parallel and 'hospital within hospital' approach to the separation of COVID and non-COVID care2, which can flex up and down following the disease trajectory.
- **Cohesive leadership:** collaboration and co-operation between systems design and management and systems delivery, with regular meetings and feedback, using the principles of quality improvement and shared learning to design, implement and improve on systems change.
- Systems responsiveness: the dynamic nature of pandemic surge requires vigilance over infection prevalence and an ability to respond to increased infection rates in terms of disease recognition, capacity to treat and prevent nosocomial and community spread. This requires communication pathways between modelers, monitors, system leadership and service delivery to facilitate outbreak/ cluster recognition and management. Pre-agreed trigger levels in terms of infection prevalence and/or hospital occupancy can help inform system actions in response to surge. Monitoring at a national, regional and hospital level will identify COVID-19 pressures and resource availability to inform planning.

Clinical urgency follows an order associated to a time-interval in which treatment is considered desirable and/ or appropriate, both for clinical and contextual reasons. Priority refers to the need of each individual patient at an index time, once they are placed on a waiting list, and becomes a measure of increasing clinical need as time goes by.

The governance of healthcare delivery systems resumption is designed to take into consideration both urgency and priority both at a whole system and a service level. For example:

- At a systems level: The Continuity and Sustainability Plan.
- At a service level: The multidisciplinary team meetings for cancer care.

Scheduling approaches include consideration of the clinical need, urgency and priority to deliver equitable care.

11.2.3 Communication

- Educate patients not to postpone medical care. Inform them of pathways to ensure their safety whilst accessing care. Support such pathways with self-care advice, knowledge on key symptoms and signs that require urgent attention.
- Inform patients and caregivers of new care pathways and ways to access those pathways.
- Communication between services and sectors of pathway changes is key to ensure timely access.
- Detect and correct so-called 'fake news'.

11.2.4 Research / Audit

Research and audit are tools to identify and measure the effectiveness of systems and treatment change. They are essential monitors of the strategic principles of proportionality, non-maleficence, equity, and reciprocity. Surveillance facilitates the monitoring of the effectiveness of IPC strategies as well as informing planning.

11.2.5 Private Hospital Capacity

Capacity from the private hospitals was obtained to support the treatment of COVID-19 in a surge scenario. The Heads of Terms agreement with the 18 private hospitals will conclude at the end of June 2020.

In reintroducing services, there may be ongoing opportunities to leverage private capacity, to enable the delivery of key services to be reintroduced. The following options are available to deliver optimal utilisation of hospital capacity and service reintroduction:

- 1. Use existing NTPF framework to treat patients on the NTPF waiting list according to the service prioritisation framework, or;
- 2. Negotiate with private hospital/s in relation to delivery of specific services / procedures to facilitate service reintroduction (e.g. non-emergency surgical oncology).

However, given the uncertainty of both the COVID environment and the timeframe for any ongoing negotiations with private hospital/s, leveraging existing NTPF mechanisms (option 1) can be utilised immediately and not require any reconfiguration of services across private hospitals.

12. Governance, Delivery and Work-Breakdown Structure for the Reintroduction of Services in a COVID Environment

12.1 Implementation Approach

The reintroduction of services cannot be considered in isolation, each service is dependent on one or more services in the end-to-end pathway. It will be essential for us to embed an integrated approach to service continuity that better reflects the required pathway of care rather than the current organisational structure. A principle of this programme of work is to ensure an enhanced focus on integrated working at both a local and national level.

12.2 Governance and Delivery Structure

The programme is governed through the Service Continuity in a COVID Environment Oversight Group. The Oversight Group is chaired by the Chief Clinical Officer and the Chief Operations Officer and reports to the CEO. The membership of the Oversight Group includes a Hospital Group CEO, a Community Healthcare Organisation (CHO) Chief Officer, and a patient representative.

The governance and delivery structure of the programme is set out in Figure 7. Governance will continue to explore opportunities to integrate any appropriate components of the programme structure to promote efficiency of delivery of work and avoid any duplication of effort.

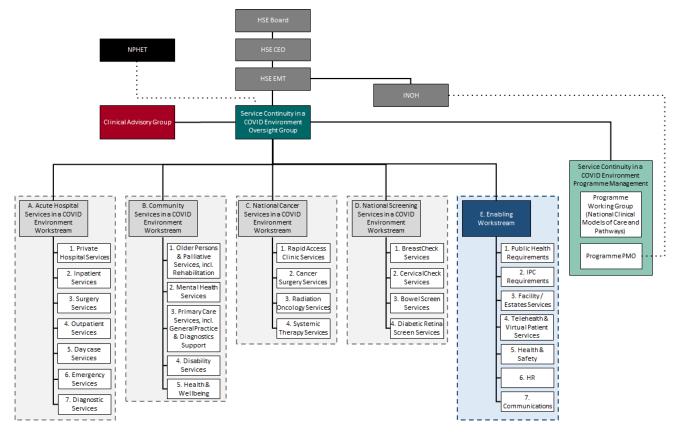


Figure 7. Programme Structure for Service Continuity in a COVID Environment.

Service Continuity in a COVID Environment: A Strategic Framework for Delivery

Figure 7 above is intended to illustrate the Programme governance and delivery structure only. As per the HSE Accountability Framework, the accountability for operationalising the reintroduction of services within acute and community settings remains within the Hospital Group and Community Healthcare Organisation governance structures, and their reporting lines to the respective National Directors for Operations Acute and Community. Delivery reporting on service continuity activity will be incorporated under the overall balanced scorecard reporting framework under the performance arrangements between the HSE and HSE Board.

Service Continuity in a COVID Environment Oversight Group	 The Oversight Group will be chaired by CCO and COO and will report to the CEO and the HSE Board. The Oversight Group is supported by the Programme Management Office. The high-level role of the Oversight Group will include: Defining the requirements of services for delivery in a COVID environment. Governing the prioritisation of services, and the delivery of activity to reintroduce services in a COVID environment. Approving the scaling up / reintroduction of services in a COVID environment.
Clinical Advisory Group	 The Clinical Advisory Group will be populated by the CCO, in consultation with other key senior clinical colleagues. The high-level role of the Clinical Advisory Group will include: Providing senior clinical advisory support to the Oversight Group and PMO regarding the development of key considerations and requirements as related to the clinical prioritisation of services, and the delivery of activity to reintroduce services in a COVID environment.
Service Continuity in a COVID Environment Programme Management	 The Programme Management Office will be led and resourced by the Office of the CCO and will report to the Oversight Group. The role of the PMO is to address programme-level activities / work packages (including national models of care and pathways) and to provide programme management support to the Oversight Group, through: Definition of the requirements of services for delivery in a COVID environment. Definition of programme approach and reporting requirements regarding the prioritisation of services, and the delivery of activity to reintroduce healthcare services in a COVID environment. Definition of the programme approach for the approval of the reintroduction of healthcare services.
Services Delivery Workstreams	Each of the workstreams will be led by the Workstream Lead and will report to the Oversight Group. Against the programme defined requirements, the high-level role of the workstreams will be to:
(Acute	• Develop, with the NCAGLs / clinical programmes, the prioritisation for specific

Table 8: Roles and Responsibilities in the Programme Structure

	• Develop, with the NCAGLs / clinical programmes, the prioritisation for specific
ity	services, and the delivery plan to reintroduce services across national service level and local service delivery settings / environments, agreed in collaboration with Heads of Service / Voluntary Providers across CHOs.
	 Develop the requirements for signs off and approval for reintroducing

Hospital Commur etc.) Enabling Workstream (i.e. Public Health, Estates etc.) The Enabling Workstream will be led by the Workstream Lead and will report to the Oversight Group. The high-level role of the Enabling Workstream will be to:

- Work with the PMO to develop key programme requirements for reintroducing services in a COVID environment.
- Deliver specific work packages related to the overall programme requirements and enabling activity

13. Framework Actions

This section outlines the key actions for delivery to give effect to the Strategic Framework. Key actions are outlined under thematic headings of the Strategic Framework.

13.1 Protect Surge Capacity

Actions	Timeline
Complete a service review and assessment of additional capacity / alternatives for service provision e.g Private hospitals, field hospitals, Community Assessment Hubs.	Quarter 3, 2020
Develop continuity plans, including risk stratification, for the reintroduction and reduction of services within hospital groups and CHOs, to prepare for a potential COVID surge.	2020
Develop and implement pathways and support services across community and acute settings in order to promote hospital avoidance.	In progress

13.2 Reintroduce Priority Services

Actions	Timeline
Complete service prioritisation activity for service reintroduction in a COVID environment.	Quarter 2, 2020
Agree common principles and dependencies to support reintroduction of services in a COVID environment.	Quarter 2, 2020
Each Hospital Group and CHO should continue the reintroduction of services in line with service continuity framework principles.	In progress
Develop and implement a HR workforce plan to enable the reintroduction of services and maintain COVID services.	Quarter 3, 2020

13.3 Engagement and Communication

Actions	Timeline
 Develop a national communications campaign for staff to: Inform staff of national guidance in line with Public Health advice. Facilitate the sharing of best practice and learnings. 	Quarter 3, 2020
Develop a national communications campaign for the public to:Inform on the phases and timelines for service reintroduction.	Quarter 3, 2020

 Promote positive health seeking behaviours. 	
 Continued engagement with relevant stakeholders, including: Hospital Group CEOs & CHO Chief Officers. RCPI RCSI. ICGP. Hospital Group Clinical Directors. Health Spokespersons. Medical Leaders Forum. 	In progress

13.4 Governance

Actions	Timeline
Establish and implement service continuity governance framework.	Complete
CCO and COO to provide progress updates and fortnightly reporting to the CEO.	Quarter 2, 2020

13.5 Best Practice Guidance

Actions	Timeline
Continue to develop local and national guidance on service delivery in line with Public Health advice.	In progress
Implement testing strategy for staff and public.	In progress
Implement best practice guidelines locally and nationally to protect staff in a COVID environment including determining requirement for, sourcing of supply, distribution and appropriate use of PPE.	

13.6 New Ways of Working

Actions	Timeline
Continue to enhance and support General Practice in line with section 6.2.	In progress
Continue to implement National Service Plan priorities around digitally-enabled healthcare delivery in line with section 6.4.	In progress
Developm integrated national models of care and care pathways as outlined in section 6.	In progress

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Appendix 1: Links to Examples of Interim Clinical Guidance for the Delivery of Service Continuity in a COVID environment, developed by the NCAGL, Acute Operations

- 1. Peri-Procedural Period <u>https://www.rcsi.com/dublin/-/media/feature/media/download-document/dublin/covid-19-section/surgical-practice/other-national-clinical-programmes-and-recognised-bodies/ncagl-acute-operations-interim-guidance-on-the-peri-procedural-period-may-2020.pdf</u>
- 2. Planned Hospital Admission for Non-COVID Care <u>https://www.rcsi.com/dublin/-</u>/media/feature/media/download-document/dublin/covid-19-section/surgicalpractice/other-national-clinical-programmes-and-recognised-bodies/ncagl-acuteoperations-interim-guidance-on-the-management-of-planned-hospital-admission-fornon.pdf
- 3. Day Case Procedures (Non-AGPs) <u>https://www.rcsi.com/dublin/-</u> /media/feature/media/download-document/dublin/covid-19-section/surgicalpractice/other-national-clinical-programmes-and-recognised-bodies/ncagl-acuteoperations-interim-guidance-on-the-management-of-day-case-procedures-non-agpsmay-2.pdf
- 4. Day Case Procedures (AGPs) <u>https://www.rcsi.com/dublin/-</u> /media/feature/media/download-document/dublin/covid-19-section/surgicalpractice/other-national-clinical-programmes-and-recognised-bodies/ncagl-acuteoperations-interim-guidance-on-the-management-of--day-case-agps-may-2020.pdf
- 5. OPD <u>https://www.rcsi.com/dublin/-/media/feature/media/download-</u> <u>document/dublin/covid-19-section/surgical-practice/other-national-clinical-programmes-</u> <u>and-recognised-bodies/ncagl-acute-operations-interim-guidance-non-covid-opd-v4.pdf</u>
- 6. Algorithm for inpatient pyrexia <u>https://www.rcsi.com/dublin/-</u> /media/feature/media/download-document/dublin/covid-19-section/surgicalpractice/other-national-clinical-programmes-and-recognised-bodies/ncagl-acuteoperations-in-patient-pyrexia-algorithm.pdf
- 7. Algorithm for healthcare workers <u>https://www.rcsi.com/dublin/-</u> /media/feature/media/download-document/dublin/covid-19-section/surgicalpractice/other-national-clinical-programmes-and-recognised-bodies/ncagl-acuteoperations-hcw-algorithm-v6.pdf
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- 9. HSE approach to return to work safely protocol <u>https://healthservice.hse.ie/staff/news/coronavirus/hse-approach-to-return-to-work-safely-protocol.html</u>
- 10. Return to work safely protocol https://www.gov.ie/en/publication/22829a-return-to-work-safely-protocol/
- 11. Roadmap for reopening society and business https://www.gov.ie/en/news/58bc8b-taoiseach-announces-roadmap-for-reopeningsociety-and-business-and-u/