National Public Health Emergency Team

Acute Hospitals Preparedness
Joint Department of Health-HSE Update

15 October 2020

Action required
☒ For noting
☐ For discussion
☐ For decision

Overview

The epidemiological situation in respect of Covid-19 is concerning with key metrics continuing to move in the wrong direction, including daily case numbers; 7-day and 14-day incidence rates and the numbers in hospital and ICU.

The public health challenge recently prompted the Government to tighten restrictions and move the entire country to Level 3 on the *National Framework for Living with Covid* while also emphasising a new campaign of enforcement to ensure greater compliance with restrictions. The possible need for further measures is being kept under review.

At this critical juncture, it is necessary and timely to review the preparedness of our acute hospital system to respond to the unprecedented challenges posed by Covid. In doing this, it is important to reflect on what has been accomplished to date and to identify the lessons that can help us as we move into what will potentially be a very challenging winter period. The available capacity in our hospitals will need to be used as effectively and efficiently as possible to manage the response to COVID alongside the resumption and continuation of non-Covid services to the greatest extent possible.

- The Covid-19 pandemic has had a significant impact on both patients and staff in the acute hospital sector, and it is expected that the 2020-2021 winter period will be extremely challenging.
- The first peak of Covid-19 infections occurred in an environment in which most elective care was cancelled and a significant reduction in patients presenting to hospital was seen. The current situation is much more complicated.
    - Elective care has now resumed, with significant backlogs being seen in many services.
    - Staff who had previously been redeployed to assist with caring for patients with Covid-19 have returned to their posts.
    - The number of patients presenting to EDs and Injury Units has returned to pre-Covid levels, presenting difficulties in terms of patient cohorting and physical distancing in EDs.
    - Hospital occupancy rates are back at pre-Covid levels and well above the recommended 85%.
    - There is very little capacity in the hospital system to respond to an increase in presentations as a result of Covid-19.
- These factors all combine to create an extremely challenging environment for the acute hospital sector over the coming months. While additional capacity will be created wherever possible, ultimately the focus has to be on reduction in the levels of the virus circulating in the community.

NPHET is requested to note the challenges facing acute hospitals, but also to acknowledge

- the scale of what has been demanded from staff at all levels to date, and their commitment and flexibility in response;
- the various measures put in place to ameliorate the impact of Covid and maintain non-Covid services as far as possible in a Covid environment; and
- the recently announced Budgetary funding aimed at enhancing capacity across the hospital system.

Appendix 1 to this paper sets out further detail on the current situation in acute hospitals including early lessons of the Covid-19 response.

Appendix 1

1. Early Lessons from COVID-19 for the Health Service

The circumstances today are different and more complex than in March or April, but it would be a mistake to lose sight of the lessons that we have learnt and that still hold their importance.

- Acute hospital services - the need to ensure sufficient capacity exists across acute services, including critical care;
- Infection Prevention and Control - the need to develop IPC capacity across the system to minimise the risk of spread of infection and to protect service users and staff;
- Workforce – the need to support healthcare staff who have demonstrated incredible resilience and flexibility and to acknowledge that the size of the workforce is not sufficient to meet the demands of the health sector; and
- Innovation - the requirement to deliver services in new, innovative ways including utilisation of various e-health initiatives.

Of course, all of these lessons are underpinned by the understanding that the factor of overriding importance in supporting health services and tackling Covid is the engagement of the whole of society in helping the most vulnerable and the engagement of individuals in following public health advice around physical distancing, hand-washing, respiratory etiquette, mask wearing and so on.

Preparation for initial surge

At the outset of the pandemic, all acute hospitals were asked to form a multi-disciplinary preparedness committee and given a checklist of issues to work through to support preparedness. The NCAGL office maintained close communication with the chairs of these committees throughout the first surge. The initial checklist was then replaced by the ECDC checklist. Issues were addressed by teleconference or visits.

The clinical programmes were asked to engage with their constituents and develop advisories/ guidance to minimise risk and maximise outcomes for their patient cohorts and their health care providers.

A model of care was developed outlining a 'Hospital within a Hospital model' with separate pathways for COVID and non-COVID service delivery and dedicated non-COVID service providers for vulnerable patient groups with conditions such as cancer care medical and surgical, and time-dependent surgeries.

The proactive, innovative response of the Irish healthcare system to the Covid-19 pandemic has been highly effective, resulting in a scenario where our hospitals were able to continue to provide care to those who needed it, often outside the traditional hospital settings, while at the same time caring for patients infected with a novel virus with, at the time, no known therapies. The lessons learned will guide the continuing response.

Applying the Lessons

Over the past months, significant work has been undertaken at central level, among Hospital Groups and in individual hospitals to mitigate the impact of Covid-19 as far as possible. The list below is in no way exhaustive but serves to highlight the type of measures put in place across the acute sector:

- Additional ICU beds were put in place and over 1,500 staff received training to allow them to support critical care surge as required. This helped ensure that intensive care units in Irish hospitals were not overwhelmed, as was seen elsewhere, with an associated improvement in outcomes;
- Collaboration between the NCCP, Hospital Group leadership and private providers allowed for cancer care to be transferred to private hospitals, allowing patients to continue to receive their treatment in a non-Covid environment;
- Early, innovative intervention by the National Renal Office resulted in decreased incidence of Covid-19 in Irish haemodialysis patients (4.6% compared to 10.9% in England and 16% in Spain), as well as decreased mortality rates for these patients (1.4% compared to 2.8% in England and 4% in Spain);
- Where possible care was transferred to the community to ensure that patients could avoid attending hospital as much as possible – for example, 90 Primary Immunodeficiency patients have had their care transferred into the community and a proposal is in place to extend this to train 50 secondary immunodeficiency patients with saving of 2,380 day case admissions for immunoglobulin as well as keeping these vulnerable patients out of the acute hospital setting;
- The Trauma Assessment Clinic (TAC) model has allowed consultants to assess patients with fractures who could be managed remotely. The TAC clinics have minimised hospital visits for thousands of patients, keeping them safe at home, as senior decision makers appropriately manage their injury; and
- The work of the Inclusion Health Service teams in the Mater and SJH has resulted in a much lower rate of outbreaks/disease than expected in homeless services, in contrast to the US/UK experience.
- The National Cancer Control Programme produced a range of guidance documents, approved by the HSE Clinical Advisory Group, covering various aspects of the continuity of cancer services across Radiotherapy, SACT, Surgery, MDMs, RACs and Symptomatic Breast Disease Clinics in the context of Covid-19. These were drawn up in close consultation with clinicians and have been welcomed and universally implemented. Further documents are in development and all those approved are 'living documents' that will be reviewed on an ongoing basis.

These initiatives and others like them will be essential given the challenges we face moving into the winter months where it will be necessary to manage side-by-side delivery of Covid and non-Covid care over a prolonged period. The Clinical Programmes have been and remain centrally involved in developing guidance in relation to key specialties and the National Clinical Lead for Acute Hospitals is leading with the support of clinical colleagues in ensuring guidance is in place to support delivery of care, both scheduled and unscheduled, in separated Covid and non-Covid pathways.

Elective Activity

Of course, it must also be acknowledged that the initial response to the pandemic involved the HSE taking measures to defer most elective scheduled care activity (note NPHET decisions of the 27th March and 5th May). This was done both to ensure patient safety and to ensure that all appropriate resources were available for Covid-19 related activity and time-critical essential care. This decision was in line with the advice issued by the National Public Health Emergency Team (NPHET) in accordance with the recommendations of the World Health Organisation. As a result of this decision,

scheduled care activity was significantly impacted, with the majority of elective care appointments and procedures deferred in March, April, and May, with consequential impacts on waiting lists.

Creating Multiple Streams in Emergency Departments

The level of activity in any given hospital is ultimately dependent on available floorspace and patient flow. Floorspace is inevitably limited by the constraints of the hospital building and the "traditional" safety valves of trolleys in corridors or more people in wards are not options given the need to maintain physical distancing.

The physical layout of most Emergency Departments was extensively reconfigured to allow for the separation of patients into two streams: those more likely to have COVID-19 and those less likely. In many cases this involved changed or increased footprints. Many departments also introduced different rotas and significant new processes for how patients were cared for in the ED.

One of the major deficits identified early was the lack of isolation and negative pressure rooms in EDs (used to deliver aerosol generating procedures). Some EDs had these retrofitted as part of renovations commissioned.

To facilitate streaming of patients on arrival to the ED, many sites had to acquire extra space at the entrance to ED. Some erected tents or portacabins. As query-COVID-19 patient presentations decreased, some sites have used this space to facilitate physical distancing in the waiting area. Reduced waiting area capacity has proven challenging - areas that could accommodate 30 people now accommodate six. Even with family/visitor restrictions, patients are being asked to wait in their cars to be called for assessment.

The ability to maintain improved patient flow and expand floor space remain part of the ongoing response. The availability of senior clinical decision makers to do this effectively is key and is understood to be provided for in the Winter Plan and can be addressed in monies provided.

National guidance for local implementation on Unscheduled Care Pathways including streaming Covid and non-Covid and on testing as part of those pathways has been developed – this is iterative and will continue to be developed further as needed.

3. Update on Current Situation

Acute Hospital Capacity

There continues to be deep concern about the capacity of our hospital system to cope with a renewed surge in the number of Covid cases, recognising also the limits of any hospital system to cope with uncontrolled spread. The question of critical care capacity is addressed in a separate paper (also presented to NPHET at today's meeting) and this paper considers acute beds more generally.

As part of the Covid-19 response, an additional 324 acute hospital beds were provided in March, bringing the current total of acute beds in the system to 11,597 excluding critical care capacity. Moreover, in line with the HSE's Critical Care Major Surge Preparedness Planning Framework, surge plans for further capacity for each Hospital Group have been developed in order to create additional

capacity if required. The caveat associated with the use of surge capacity is that it necessarily leads to a reduction in activity in other areas of the hospital.

As of Monday 12th October, the number of available general acute hospital beds is reported to be 313 with 33 adult critical care beds available. There were 230 patients with confirmed Covid-19 in hospitals around the country, with a further 108 suspected cases awaiting confirmation. It should be noted that 171 of these available beds are in three Dublin hospitals, while five hospitals report no available beds. This is significantly down from the reported approximately 2,000 beds at earlier phases of the pandemic. Further, ED attendances in the week to 6 October were 21,884 compared to 26,044 in 2019, while the average daily number of delayed transfers of care were reported as being at 410 compared to 676 for the same week last year.

This would suggest that hospital occupancy levels are returning to pre-Covid levels and that we are now in a very different environment than that seen at the beginning of the pandemic.

Budget 2020 and the Winter Plan

The past number of weeks have seen intensive focus on securing additional resources for the acute hospital sector to allow for a permanent expansion of capacity. An additional €236 million in revenue and €40 million in capital funding have been provided in Budget 2020 and the Department's Governance and Performance Division has advised that this will provide an additional 1,146 non-ICU acute beds by the end of 2021 compared to the start of 2020.

The Budget announcement builds on an extremely ambitious Winter Plan which includes the roll-out of the winter-specific measures. Specifically, it aims to reduce the number of patients waiting on trolleys for hospital admission by 30% and to improve Patient Experience Times, particularly in terms of keeping everyone safe in a Covid environment.

The delivery of Budget and Winter Plan measures are dependent on recruitment of appropriate staff, procurement of IT systems, delivery of physical infrastructure, developing new integrated ways of working and appropriate leadership and governance arrangements. Again, it should be noted that work is ongoing across all these areas, but delivery will not necessarily be straightforward.

4. Resumption/Phasing up of Non-Covid Services

The provision of essential, time-critical care has continued throughout the pandemic. Given the highly transmissible nature of the virus, this has been challenging. Utilisation of available beds has to be balanced between the needs of Covid-19 patients, emergency admissions and elective procedures and the management of delayed transfers of care. Hospital occupancy will need to remain at a level that allows for surge capacity to respond to increased demand for Covid care periodically, and the current recommendation is for 80-85%, as opposed to the near 100% occupancy levels prior to the pandemic.

The Department's Governance and Performance Division has also advised that, as part of the Winter and Service Planning process, the HSE is undertaking a strategic approach to service resumption. This includes the development of a longer-term plan to include augmented levels of service to regain a level of provision across community and acute hospitals where capacity was adversely impacted by

Covid-19. The plan seeks to enable delivery of 34,000 additional scheduled care procedures across outpatient, inpatient day case and scopes to be procured through the private hospitals.

However, in the past fortnight there has been an increase in the cancellation of elective surgeries at a number of sites throughout the acute hospital system. These cancellations are generally at short notice, and may arise from a number of factors, including increased ED attendance/trolleys, delayed discharges and localised Covid-19/infection impacts.

While the disruption/cancellation of scheduled care as a result of an increase in unscheduled care is a recognised winter trend, it is less common for such cancellations to occur this early in Autumn. There is a risk that any further increase in cancellation rates may negatively impact waiting times and could undo positive trends seen in the past few months. The HSE advises that it continues to monitor site performance.

Private Hospitals

The capacity of the public health system can be supported by that available in the private health sector. The Department's Governance and Performance Division has advised that the HSE is currently in negotiations with private hospitals and has also recently completed a procurement process to secure access to additional acute services and diagnostics from private providers which is required to address anticipated shortfall over the next two years. A procurement panel is now in place that will allow each hospital to run mini competitions for the services they need. It is expected that those services will be in place in early to mid-November. In the interim, the Department has approved an HSE temporary arrangement for the treatment of patients in private hospitals and funding of up to €25m has been sanctioned for this purpose. We now await the response of the private system to the need for a joined up approach. They are reported as being busy catching up with delayed private activity.

5. Infection Prevention and Control

The critical importance of infection, prevention and control (IPC) practices to protect both staff and patients is well-recognised and again progress has been made to ensure that the health service is in a stronger position than it was earlier in the year.

As part of the response to Covid, NPHET mandated the implementation of a suite of IPC measures and the HSE has made significant progress in implementing them across a number of different action areas, namely: governance, risk management, outbreak management, staff symptom declaration, staff segregation and adoption of social distancing guidelines. The Department continues to work with the HSE to ensure consistent implementation of these measures.

A HIQA desk top review of acute hospital IPC preparedness for COVID-19 submitted to NPHET highlighted the progress made to expand IPC capacity and capability in acute hospitals, but also identified continuing deficits.

Following further discussion within the Department and with the HSE, it was agreed that there was a need to consider an integrated approach to address IPC deficiencies across the acute hospital and community sectors. This integrated proposal is being co-ordinated by the AMRIC (Antimicrobial

Resistance and Infection Control) Implementation Team. In August, funding of €3.86m was secured to address immediate IPC requirements, including increased capacity in IPC, Occupational Health and immediate minor capital requirements across both acute and community services.

It is also accepted that there is a need to continue to incrementally build IPC capacity in a co-ordinated manner over the coming years. In that regard, Budget 2020 has allocated €7m to develop comprehensive, integrated IPC, including the recruitment of some 114 WTEs.

Hospital-acquired Covid-19 infections

AMRIC are now collecting data on hospital-acquired Covid-19 infections and have found that between June 21st and September 27th, there has been a total 53 cases of hospital-acquired Covid-19 infection. Of these, 50 cases were detected after 24th August, illustrating both the highly infectiousness nature of the virus and the urgent need to make every effort possible to protect healthcare workers and patients who are receiving care in our hospitals.

6. Staff

The health system has only been able to respond to the challenges of recent months as a result of the commitment and resilience of healthcare staff. Among other things, there has been a willingness to undertake training, including that undertaken by some 1,500 nursing staff to enable them to provide support to critical care surge as required.

At the same time, the pandemic presents challenges with absenteeism or the requirement to self-isolate impacting staffing availability alongside redeployment of staff to support Covid response measures. Although these challenges have eased substantially since the initial phase of the pandemic, particularly with acute staff returning from Covid redeployment, there is now the question of exhaustion among frontline staff as we face into the winter period.

It will be important that corporate supports are available to staff through employee assistance schemes while appropriate testing of staff for Covid and improved access to PPE should also help to minimise absenteeism.

Staff absence associated with cocooning and the increase in positive cases in the community is a growing feature of the HR landscape in the acute system. Hospital staff have responded to the needs in the nursing home sector and continue to do so where required. Beyond such measures, the need for further recruitment to maintain service delivery is evident, and it is noted that staff numbers have increased since March while the Budget makes available significant monies for a further expansion in the workforce. It is understood that workforce planning is already underway to support recruitment efforts into the future.

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