

National Public Health Emergency Team

NPHET Discussion Paper
Measures for Disease Management
in Acute Hospitals

18 June 2020

Action required

- For noting
- For discussion
- For decision

Measures for Disease Management in Acute Hospitals

NPHET Subgroup on Acute Hospital Preparedness

Introduction/Background

Given the high rate of COVID-19 infection amongst healthcare workers, the Department of Health identified the critical importance of infection, prevention and control (IPC) practices to protect both staff and patients. While IPC is generally well developed in our acute hospitals, and it was established that systems were in place to manage outbreaks and control further spread of the COVID-19 within the hospital setting, questions arose as to whether there is sufficient focus on *outbreak prevention*.

At its meeting on 31 March last, NPHET accepted that more could, and should, be done to reduce the risk of nosocomial infection and mandated the implementation of a suite of 29 measures to prevent transmission of the virus in acute hospitals; to slow the demand for specialised healthcare; safeguard risk groups; protect healthcare workers; and minimise the export of cases to other healthcare facilities and the wider community. In particular, the purpose of these measures was to:

1. Strengthen infection control governance structures at the national, Hospital Group and individual hospital level;
2. Establish a surveillance process for COVID-19 virus among health care workers;
3. Provide daily data on rate of infection amongst staff and patients who have acquired COVID-19 following admission;
4. Ensure that a steady and sustainable precautionary approach is adopted;
5. Ensure training and education is provided for hospital staff;
6. Develop speciality-specific procedures and processes for COVID-19;
7. Ensure sustained focus on staff behaviours to mitigate the risk of nosocomial infection.

The full list of measures mandated by NPHET is provided in Appendix 1.

Implementation Update

Since the NPHET decision in late March, officials from the Department's Acute Hospitals Policy Division have been engaging with HSE Acute Operations seeking clarification of, and assurances on, the implementation of these measures. Good progress has been made in that regard and an overarching governance structure to provide oversight for all issues relating to COVID-19 infection control is in place within the HSE, namely the HSE AMRIC (Antimicrobial Resistance and Infection Control) Oversight Group and Implementation Team.

The HSE has also been working with the Hospital Groups to implement the NPHET mandated measures across a number of different action areas, namely: governance, risk management, outbreak management, staff symptom declaration, staff segregation and adoption of social distancing guidelines. Based on feedback provided to date by the Hospital Groups, the HSE has advised that:

- all Hospital Groups now have IPC governance structures in place;
- a range of staff surveillance measures have been implemented across the acute hospital sector, including temperature checking, self-declaration of symptoms or symptoms check;
- across each Hospital Group, oversight by management and occupational health is strong and testing services are available to staff with symptoms/concerns;
- all Hospital Groups confirmed that processes are in place in hospitals to monitor compliance with standard precautions including active observational monitoring by the IPC Team in conjunction with department managers;
- all Hospital Groups have outbreak control teams in place and public health departments have been notified of all hospital outbreaks;
- all Hospital Groups have verified that all HCAI/IPC risks/issues are escalated to HSE Acute Operations in line with escalation procedures for outbreaks/ incidents /situations of healthcare associated infection;
- all Hospital Groups have processes in place to ensure separate pathways for patients with known or suspected COVID-19 infection;
- significant effort is being made to separate staff caring for COVID-19 patients and non COVID-19 patients and these measures are under constant review;
- progress has been made to monitor training sessions in the use of PPE; to actively manage social distancing between staff by a variety of methods including bulletins/notices, improving changing and dining facilities, staggered breaks and start times, signage, badge wearing and provision of staff accommodation.

The Department will continue to work with the HSE to ensure consistent implementation of the measures across the acute hospital sector.

IPC Resource Requirements

One of the measures mandated by the NPHET was a review of acute hospital IPC preparedness for COVID-19. This review was undertaken by HIQA and a final report was submitted to NPHET in early

May. While the report highlighted the progress which has been made in recent times to expand IPC capacity and capability in acute hospitals, deficits in IPC capacity were identified.

The Department has since engaged with the HSE in relation to the deficits identified and it is clear that in order to safely and sustainably manage the provision of COVID-19 and non COVID-19 health services into the future, significant additional investment will be required; the need to roll-out an ICT system across all acute hospitals to maintain and increase efficiency in infection surveillance has also been noted. The Department will engage with the HSE in relation to these longer-term development funding requirements in the context of the Estimates 2021 process.

In response to a request from the Department, the HSE identified a range of IPC improvements that can be implemented in the short term to help minimise the risk to staff and patients and facilitate the delivery of safe health services (see Appendix 2, Table 1). The total additional Revenue funding required to facilitate these improvements is **€1,295,047** in 2020 with an associated ELS requirement of **€3,288,740** in 2021. The minor capital funding requirements are **€1,383,550** in 2020 and **€1,250,550** in 2021.

The HSE has indicated that the improvements proposed, represent the minimum requirements for now, but further funding will be needed going forward. The HSE has also confirmed that all of the projects/recruitments proposed are deemed to be of key priority, and all can be implemented immediately. In terms of staffing, the focus is to recruit key IPC staff by Quarter 4 2020. It is noted, in particular, that in order to mitigate the risks identified by HIQA, it is proposed to recruit Microbiologist/Infection Control consultants to develop networks within Hospital Groups to support individual consultants in model 3 hospitals. The minor capital improvement projects proposed focus on improving wash facilities and hospital infrastructure in order to maintain a clean environment and support IPC good practice. The costs for these minor capital projects are profiled over 2020 and into the early months of 2021, to encompass the phasing of necessary work in a given hospital, ward, etc. All of the IPC-related ICT projects proposed are ready for licence purchase.

The HSE has also outlined a significant requirement for additional Occupational Health resources to support the resumption of safe services; to manage outbreaks; and to provide a responsive service to any emerging issues/screening programmes relating to COVID-19 during Winter 2020. The high incidence of COVID-19 infections in healthcare workers (approximately 32% of all cases as of 14 June 2020) has put considerable demands on Occupational Health services over recent months. While

temporary measures have been put in place during the pandemic, it is recognised that a more sustainable solution is required for the remainder of 2020 and into 2021. The HSE has outlined funding requirements for occupational health staff amounting to **€329,407** in 2020 and **€984,181** in 2021 (see Appendix 2, Table 2 for more details).

Conclusion

The Department believes that there is a real need to address IPC deficits and support Occupational Health requirements across the acute hospital sector. To that end, we will need to build capacity on an incremental basis, seeking the appropriate funding through the annual Estimates programme. However, there is also an urgent need to address some of the identified deficits in the immediate/short term to facilitate the full resumption of healthcare services and ensure the delivery of safe COVID-19 and non-COVID-19 healthcare services. It is clear that COVID-19 will continue to be a challenge, but other IPC challenges exist that also need to be targeted on a continued basis. This will require additional resourcing for hospitals in 2020 and 2021. Government has provided additional funding to underpin the national response to COVID-19; we will seek the necessary approval to secure the funding required to address the immediate needs for IPC/Occupational Health, through the normal channels.

Request to NPHE

NPHE is requested to support the proposal submitted by the HSE for IPC and Occupational Health improvements as set out in Appendix 2, and to endorse the application for additional funds in the context of specific funding made available by Government to underpin the national response to COVID-19.

17 June 2020

Appendix 1 - Measures Required in Acute Hospitals

Public Health/Infection Prevention

Establish/update guidance and assure actions in the context of disease management

- National COVID-19 Infection Prevention Team;
- Hospital Group Infection Prevention Team;
- IPC Team contact/Focal Point in each acute hospital;
- Establish a surveillance process for acute respiratory infections potentially caused by COVID-19 virus among health care workers; (WHO: *Infection prevention and control during health care when COVID-19 is suspected: March 2020*);
- Hospitals to provide data, on a daily basis, on rate of infection amongst staff and patients who acquired COVID-19 following admission;
- Provide central, interactive HSPC resource to deal with speciality specific queries from clinicians;
- Additional public health resources should be allocated to the East to support the management of current clusters;
- Outbreak control teams, to include representation from Public Health, should be mandated.

Risk assessment – scale of risk based on disease progression, environment and staff

- Set out a risk assessment scale based on disease progression, environment and staff;
- Risk rate all hospitals. (HIQA);
- Recommend control/mitigation mechanisms.

Suite of actions in line with risk rating

- Ensure triage, early recognition, and source control by isolating patients/staff with suspected COVID-19;
- Hospitals with outbreaks should be prioritised for PPE;
- Staff should use surgical masks for all clinical encounters
- Staff undertaking aerosol generating procedures should use respirator masks;
- Speciality specific standard operating procedures for COVID-19 should be developed;
- Monitor staff compliance with standard precautions and mechanisms for improvement provided as needed;
- Explore the rationale to apply a broader case-definition to identify suspected Covid-19 in hospital staff;
- Explore potential to introduce antigen testing.

Staff

- Actively monitor all staff in acute hospitals at start of shift and at one point during the shift;
- As far as possible, ensure separation of staff caring for COVID-19 patients;
- IPC training for all staff, not only healthcare staff; (ECDC: *Infection prevention and control for COVID-19 in healthcare settings*; March 2020)
- Ongoing education and training opportunities provided to ensure that a steady and sustainable precautionary approach is adopted;
- Staff assigned to treat COVID-19 patients must be trained in the proper use of PPE and participation in such training should be documented;
- Encourage healthcare workers to have a high level of clinical suspicion;
- Ensure that all staff understand the importance of promptly seeking medical care;
- Prioritise hospital staff for COVID-19 testing;
- All staff social interaction should be discouraged, and strict protocols should be in place for non-clinical areas;
- Identify and provide dedicated accommodation incl hotel rooms for hospital staff.

Appendix 2: Immediate IPC and Occupational Health requirements for Acute Hospitals

TABLE 1 Infection Prevention Control Requirement Acute Hospital 2020		Capital		Revenue	
Hospital Group	Requirement	2020	2021	2020	2021
CHI	Consultant Infection Prevention and Control x 1			€55,283	€165,849
	ADON Infection Prevention and Control x1			€19,000	€57,000
	CHI at Crumlin Nazareth Ward replacement/upgrade sinks in patient rooms and clinical support rooms	€21,000	€21,000		
	CHI at Tallaght; Bottle washer, flooring replacement, installation of glass covers on windows, replace damaged seating in OPD	€49,800	€49,800		
	CHI at Temple St upgrade Toilet facilities in St. Frances' Clinic, replacement of non HBN compliant clinical sinks and painting clinical areas.	€35,500	€35,500		
CHI Total		€106,300	€106,300	€74,283	€222,849
DMHG	IPCCNS x 2.5			€40,736	€122,207
	Surveillance Scientist x3			€53,922	€161,766
	Consultant Microbiologist x2			€110,566	€331,698
	Senior Pharmacist x 0.5			€10,222	€30,666
	Sinks upgrade Coombe Hospital	€6,250	€6,250		
	Sinks upgrade Naas Hospital	€15,000	€15,000		
	Sinks upgrade Portlaoise Hospital	€15,000	€15,000		
	Sinks upgrade St. James Hospital	€12,000	€12,000		
	Sinks upgrade Tullamore Hospital	€10,000	€10,000		
	Isolation room upgrade in Radiotherapy Department SLRON	€12,500	€12,500		
Temp mapping of water system Tallaght Hospital	€12,500	€12,500			
DMHG Total		€83,250	€83,250	€215,446	€646,337
IEHG	Consultant Microbiologist/ Infectious Diseases x2			€110,566	€331,698
	IPCCNS x 4			€65,177	€195,531
	Senior Pharmacist x1			€20,444	€61,333
	Surveillance Scientist x2.5			€44,935	€134,805
	Upgrade Ely Theatre ventilation to provide additional endoscopy facilities to support resumption of IPC compliant endoscopy and day case services impacted by Covid 19 restrictions on service	€175,000	€87,500		
	Upgrade of toilet and wash facilities including hand washing sinks in several hospitals	€75,000	€37,500		
IEHG Total		€250,000	€125,000	€241,122	€723,367
Saolta	CNS Health Informatics x1			€16,294	€48,883
	Electronic Environmental Hygiene Audit Tool for 6 hospitals - again single standardised tool to be used for auditing hygiene standards @ €41,000x 6 sites	€125,000	€125,000		
	Hand Hygiene scanner used in relation to training and standards @ €20,000 x 6 sites	€60,000	€60,000		
	Annual Costs ICNet licences ref approval capital Saolta Sites and into CHO 1 and CHWest ref Capital costs approved by ICIO. Note: Year 1 cost recurring x 5 years			€150,000	€0
Saolta Total		€185,000	€185,000	€166,294	€48,883
SSWHG	Consultant Microbiologist/ Infectious Diseases x2			€110,566	€331,698
	IPCCNS x6			€97,766	€293,297
	Senior Pharmacist x1			€20,444	€61,333
	Surveillance Scientist x4			€71,896	€215,688
	upgrade of Hand hygiene sinks in SIVUH	€146,000	€146,000		
	Upgrade of Sluice Rooms in 16 wards in Waterford University Hospital	€280,000	€280,000		
SSWHG Total		€426,000	€426,000	€300,672	€902,015
ULHG	Consultant Microbiologist/ Infectious Diseases x1			€55,283	€165,849
	IPCCNS x2.5			€40,736	€122,207
	Senior Pharmacist x1			€20,444	€61,333
	Surveillance Scientist x1			€17,974	€53,922
	Assessment of pipework ref. Legionella risk	€45,000	€45,000		
	ATP system for monitoring of cleaning processes	€3,000	€0		
	ICNet Licence and training for Outbreak Manager function			€48,800	€0
	Replace air handling unit in aseptic unit, Pharmacy UHL	€95,000	€95,000		
	Replace wooden, porous nurse stations in 5 wards	€25,000	€25,000		
	Replacement Hand Hygiene sinks in clinical areas	€150,000	€150,000		
	Time Tag PIVE Wrist bands (management of SA-BSI)	€5,000	€0		
	Upgrade Showers in clinical areas	€10,000	€10,000		
ULHG Total		€333,000	€325,000	€183,237	€403,311
	Consultant Microbiologist/ Infectious Diseases x1			€55,283	€165,849
	IPCCNS x2.5			€40,736	€122,207
	Surveillance Scientist x1			€17,974	€53,922
RCSI Total				€113,993	€341,978
Grand Total		€1,383,550	€1,250,550	€1,295,047	€3,288,740
	Total 2020	€2,678,597			
	Total 2021	€4,539,290			

TABLE 2 Occupational Health services Acute Hospital 2020	Revenue	
	2020	2021
Requirement		
Occupational Health CNS x 2 per Group and CHI	€228,120	€684,358.50
Occupational Health grade 5 x1 per Group or CHI	€99,267	€297,801.00
Totals	€329,407	€984,181