COVID-19 Update Acute Hospitals

Title: Brief Update on COVID-19 Outbreaks and Hospital acquired cases in Acute Hospitals

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☐ For noting

☒ For discussion

☐ For decision

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Brief Update on COVID-19 Outbreaks and Hospital acquired cases in Acute Hospitals

Transmission of COVID-19 in Acute Hospitals

Background/ Context
Control of the transmission of COVID-19 in acute hospitals is critical to protect patients from infection; to protect healthcare workers from exposure and to reassure prospective patients who need hospital services that it is safe to come to hospital. Control of transmission of the virus in hospitals is significantly impacted by levels of transmission in the community because when levels are high in the general population, more patients present with COVID-19, patients who test negative on admission may be incubating the virus and subsequently test positive and staff are more likely to acquire COVID-19 in the community.

In order to monitor transmission of the virus in acute hospitals, the HSE commenced monitoring the weekly number of Hospital acquired infections in June 2020. In general it is not possible to be certain regarding where and when a person acquired infection with COVID-19. For the purpose of this surveillance activity the HSE uses a standard definition of hospital acquired COVID-19 that takes account of the ECDC case definition. This definition excludes most cases of community acquired COVID-19 and includes most cases relating to inpatients with hospital acquired COVID-19.

There is some data available from France that is relevant. The French Public Health Agency (ASF) operate system e-SIN for reporting healthcare associated infection. In 2020 COVID-19 accounted for 60% of all signals received. This included 2035 signals of grouped cases of COVID-19. These signals represented 20160 patients, 13 371 professionals and 10 visitors. For those grouped cases for which information is available (n= 1 529) the index case was a patient in 55%, a professional in 37% and a visitor or family member in 7%. Although not directly comparable to data for Ireland this information indicates that healthcare associated COVID-19 is also major challenge in other healthcare systems. The responses summarised in the report are also similar to those measures applied in Ireland. [ Source. Point épidémiologique COVID-19 / Situation au 21 janvier 2021 / p. 1] (1)

In Jan 2021 monitoring of two additional metrics was commenced, namely the number of open outbreaks per hospital at the end of each week and the number of new diagnosis of COVID-19 in Healthcare workers (as available) in each hospital.

The emergence of a new variant of COVID-19 in Ireland with reported higher transmissibility has compounded the risks of transmission in all settings including acute hospitals. Staff absence rates have significantly increased during the current surge, and there are now approximately 4,000 acute hospital staff on COVID-19 related leave which presents significant challenges for hospitals in terms of having adequate staffing levels and dedicated teams assigned to COVID and Non COVID pathways of care.

**Measures in place to control transmission of COVID-19 in acute hospitals.**

The acute hospitals supported by the Hospital Groups and The HSE National Working Group for control of transmission of COVID-19 in the acute hospitals continue to actively manage the risks of transmission of COVID-19 by employing the following measures and balancing demands and resources on an hourly and daily basis:

1. **Reducing activity and maintaining separate pathways for COVID and Non COVID care.**

All adult patients expected to stay in hospital for one night including maternity services are tested for COVID-19 (Scheduled and Unscheduled). Every effort is made to isolate patients known to have COVID-19 or to cohort such patients in dedicated wards with dedicated staff. This is constantly actively managed but is challenging due to staff absence and infrastructural deficits (large wards and lack of isolation rooms)
in many hospitals. Access to hospitals is minimised and all elective services are cancelled except urgent, cancer and time critical cases, with alternative pathways being explored for example Virtual OPD clinics and availing of services of private hospitals.

2. Minimising the risk of transmission of COVID-19 within hospitals

Staff who has symptoms of COVID-19 are instructed not to present for work and vigilant monitoring of staff for symptoms of COVID-19 at start of shift continues. Hospitals are supported by Occupational Health services as in the management of outbreaks involving HCWs. Alcohol hand rub and PPE supplies are maintained and hospitals are assured of adequate supplies. There is continued emphasis on social distancing and basic Infection Prevention and Control practices and standard precautions. The AMRIC (Antimicrobial Resistance and Infection Control) team provide on-going support with IPC education and information, providing updated guidance, webinars and advice to acute hospitals. (Most recently updated guidance issued regarding increased use of FFP2 masks is appended below). A mass testing programme for HCWs has been approved for three hospital sites (one completed to date). In conjunction with this, testing to support an antigen validation study was conducted, in parallel, at one of the hospital site. The hospitals are actively progressing appointment and recruitment for additional IPC and Occupational Health staff funded by DOH August 2020. 19 of the 67.5 of these highly specialised staff, have been filled and recruitment of the remaining 48.5 is advancing.

3. Controlling Outbreaks

When COVID-19 outbreaks occur, the Outbreak management policy is activated in accordance with policy (2), outbreak control teams are convened, close contacts are identified and mass testing of staff and patient contacts occurs. Close contacts are cohorted so as to minimise the risk of further transmission. Again this requires active management of demand and resources and is challenging. Mass testing continues as much as possible and is being constantly managed in context of laboratory capacity and access to available external laboratory support.

4. Governance

Each Hospital has an IPC Committee which provides IPC advice within the hospital. These committees are supported by Hospital Group structures and by acute operations and AMRIC team nationally. The National Working Group for control of transmission of COVID-19 in the acute hospital setting, monitors the incidence of Hospital acquired COVID-19 and Outbreaks and the response to same. Weekly meetings are held with Hospital groups where data are reviewed, impact on services, risk management issues and escalated matters are addressed.

Data

A total of 995 cases of hospital acquired COVID-19 were reported by hospitals from June 20th 2020 to January 3rd 2021. The number of hospital acquired cases is significantly higher in recent weeks broadly reflecting the increase in cases in the community, with 846 cases reported between 4th and 17th Jan 2021.

Figure 1. Number of cases of Hospital-Acquired Covid-19 by hospital group per week
A total of 121 COVID-19 outbreaks were reported as open as of 17th Jan 2021. Seven Model 4 and Model hospitals reported numbers in excess of 5 open outbreaks, these included Tallaght, Mater, St. Vincent’s, Our lady of Lourdes, Mayo General, Galway University and University of Limerick hospitals.

A total of 1964 new laboratory confirmed cases in hospital staff were reported from 4th Jan to 17th Jan.

Analysis of CIDR reported Health care worker cases of COVID-19 from June to December indicates that in 48% of the 1650 cases in that time period, it was determined that the most likely transmission source was healthcare acquired.

Conclusion

Although it has been increasingly difficult to control transmission in hospitals with community transmission levels as they are, every effort is being made to minimise the risk of contracting COVID-19 in hospital for patients and staff. Frequent meetings continue with hospitals and proactive management of risks, maintenance of best IPC practice is on-going. Also learning from individual sites is rapidly disseminated to all sites. Mass testing is applied based continuous risk assessment (subject to capacity constraints).

The vaccination programme for frontline healthcare workers has been rolled out since December 29th. A number of frontline healthcare workers are scheduled to receive their second dose of vaccine this week. There is reason to expect that this will begin to impact on the number of healthcare workers developing illness due to Covid-19. It remains to be seen if this has an impact on transmission in the healthcare setting.

Ref.
1. Point épidémiologique COVID-19 / Situation au 21 janvier 2021 / p. 1]


Appendix

Memo regarding use of FFP2 masks

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Date: 26th January 2021

Re: Update on PPE - FFP2 Masks

Dear Colleagues,

In the past two months the situation with respect to the prevention and control of Covid-19 infection in the healthcare setting has been extremely challenging. The number of patients and healthcare workers acquiring COVID-19 in hospital has risen rapidly. In the week ending January 17th there were 442 (provisional) reported case of probable or confirmed hospital acquired Covid-19 in patients and 846 new diagnoses in healthcare workers. Multiple COVID-19 outbreaks were reported in several major hospitals. Likewise long-term residential care facilities are facing major challenges with an increase in transmission of infection. The increased infection is considered to be related to the very high number of cases in the community and the new variants of the virus which are more infectious.

With regard to PPE, it is important to emphasise that PPE is only one element of a comprehensive approach to IPC as outlined in HPSC/AMRIC guidance documents. PPE is only likely to be effective when used in conjunction with rigorous adherence to the fundamentals of IPC including hand hygiene, environmental management, early identification of people with COVID-19 and the application of contact and droplet precautions.

On January 12th I advised that, given the current surge and the concern re increased potential for airborne transmission it was appropriate to allow greater scope for institutional risk assessment and individual risk assessment with respect to use of respirator masks in situations in which surgical masks were generally recommended.

Recently HIQA have completed a review of international guidance on IPC. In the context of the HIQA review and recent experience the AMRIC team has reviewed the current guidance and has advised me that it proposes to update its guidance on use of personal protective equipment. Based on the fifth update of the European Centre for Disease Control document “Infection prevention and control and preparedness for COVID-19 in healthcare settings” the updated HPSC/AMRIC guidance will include a recommendation that healthcare workers in community and hospital settings should have access to a well-fitted respirator mask (FFP2) and eye protection when in contact with possible or confirmed COVID-19 cases and COVID-19 contacts. In the context of a ward or facility based outbreak or a COVID-19 assessment hub it is appropriate to consider all patients in the setting as suspected or confirmed COVID-19 cases. A surgical mask and visor also offer a high degree of protection. These may be more comfortable for and preferred by some staff. A surgical mask is appropriate for non-patient facing activity
and when caring for patients where there is no suspicion of COVID-19 and there is no evidence of transmission in the service.

A comprehensive approach to IPC is outlined in HPSC/AMRIC guidance documents which will continue to be reviewed on an on-going basis in light of emerging evidence and experience nationally and internationally. I would again like to thank you all for your enormous efforts to keep you, your colleagues and patients safe during this difficult time.

Yours sincerely

Dr Colm Henry
Chief Clinical Officer