



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced inspection of Naas General Hospital, Naas Co. Kildare.

Monitoring programme against the *National Standards for the prevention and control of healthcare-associated infections in acute healthcare services* during the COVID-19 pandemic

Date of inspection: 08 October 2020

About the Health Information and Quality Authority (HIQA)

The Health Information and Quality Authority (HIQA) is an independent statutory authority established to promote safety and quality in the provision of health and social care services for the benefit of the health and welfare of the public.

HIQA's mandate to date extends across a wide range of public, private and voluntary sector services. Reporting to the Minister for Health and engaging with the Minister for Children, Equality, Disability, Integration and Youth, HIQA has responsibility for the following:

- **Setting standards for health and social care services** — Developing person-centred standards and guidance, based on evidence and international best practice, for health and social care services in Ireland.
- **Regulating social care services** — The Chief Inspector within HIQA is responsible for registering and inspecting residential services for older people and people with a disability, and children's special care units.
- **Regulating health services** — Regulating medical exposure to ionising radiation.
- **Monitoring services** — Monitoring the safety and quality of health services and children's social services, and investigating as necessary serious concerns about the health and welfare of people who use these services.
- **Health technology assessment** — Evaluating the clinical and cost-effectiveness of health programmes, policies, medicines, medical equipment, diagnostic and surgical techniques, health promotion and protection activities, and providing advice to enable the best use of resources and the best outcomes for people who use our health service.
- **Health information** — Advising on the efficient and secure collection and sharing of health information, setting standards, evaluating information resources and publishing information on the delivery and performance of Ireland's health and social care services.
- **National Care Experience Programme** — Carrying out national service-user experience surveys across a range of health services, in conjunction with the Department of Health and the HSE.

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1.0 Information about this monitoring programme

Under the Health Act 2007, Section 8(1) (c) confers the Health Information and Quality Authority (HIQA) with statutory responsibility for monitoring the quality and safety of healthcare among other functions. In light of the ongoing global pandemic of COVID-19, HIQA has developed a monitoring programme to assess compliance against the *National Standards for the prevention and control of healthcare-associated infections in acute healthcare services* during the COVID-19 pandemic.¹

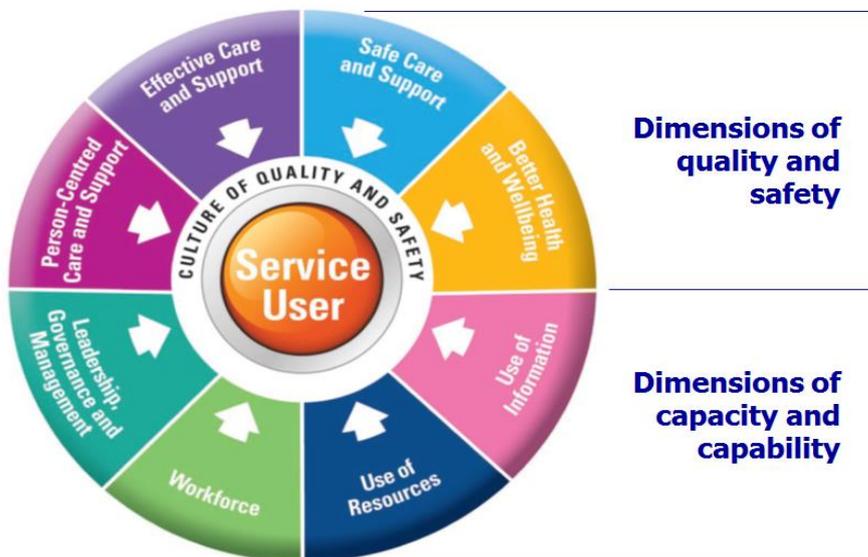
The National Standards provide a framework for service providers to assess and improve the service they provide particularly during an outbreak of infection including COVID-19.

Inspection findings are grouped under the National Standards dimensions of:

- 1. Quality and safety**
- 2. Capacity and capability**

Under each of these dimensions, the standards are organised for ease of reporting.

Figure 1: National Standards for infection prevention and control of healthcare-associated infections in acute healthcare services (2017)



Report structure

The lines of enquiry for this monitoring programme of infection prevention and control in acute healthcare services will focus on six specific national standards within four of the eight themes of the standards, spanning both the capacity and capability and quality and safety dimensions.

This monitoring programme assesses acute healthcare services' **capacity and capability** through the following standards:

Capacity and Capability	
Theme	Standard
5: Leadership, Governance and Management	Standard 5.3: Service providers have formalized governance arrangements in place to ensure the delivery of safe and effective infection prevention and control across the service
6: Workforce	Standard 6.1: Service providers plan, organise and manage their workforce to meet the services' infection prevention and control needs.

HIQA also assesses acute hospital's service provision under the dimensions of **quality and safety** through the following standards:

Quality and Safety	
Theme	Standard
2: Effective Care & Support	<p>Standard 2.6: Healthcare is provided in a clean and safe physical environment that minimises the risk of transmitting a healthcare-associated infection.</p> <p>Standard 2.7 Equipment is cleaned and maintained to minimise the risk of transmitting a healthcare-associated infection.</p>
3: Safe Care and Support	<p>Standard 3.1. Service providers integrate risk management practices into daily work routine to improve the prevention and control of healthcare-associated infections.</p> <p>Standard 3.8 Services have a system in place to manage and control infection outbreaks in a timely and effective manner.</p>

Judgment Descriptors

The inspection team have used an assessment judgment framework to guide them in assessing and judging a service’s compliance with the National Standards. The assessment judgment framework guides service providers in their preparation for inspection and supports inspectors to gather evidence when monitoring or assessing a service and to make judgments on compliance.

Following a review of the evidence gathered during the inspection a judgment has been made on how the service performed. The following judgment descriptors have been used:

Compliant	Substantially compliant	Partially compliant	Non-compliant
A judgment of compliant means that on the basis of this inspection, the service is in compliance with the relevant National Standards.	A judgment of substantially compliant means that the service met most of the requirements of the National Standards but some action is required to be fully compliant.	A judgment of partially compliant means that the service met some of the requirements of the relevant National Standard while other requirements were not met. These deficiencies, while not currently presenting significant risks, may present moderate risks which could lead to significant risks for patients over time if not addressed.	A judgment of non-compliant means that this inspection of the service has identified one or more findings which indicate that the relevant standard has not been met, and that this deficiency is such that it represents a significant risk to patients.

1.1 Hospital Profile

Naas General Hospital is a model 3 acute hospital which provides a range of services including medical, surgical and stroke care. The hospital is owned and managed by the Health Service Executive (HSE) and is part of the Dublin Midlands Hospital Group.*

The hospital has a bed capacity of 194 inpatient beds of which there were 18 single rooms with 17 of these rooms having ensuite toilet facilities. None of the hospital's single rooms had neutral or negative pressure ventilation systems[†] on the day of inspection.

1.2 Information about this inspection

This inspection report was completed following an unannounced inspection carried out by Authorised Persons, HIQA; Siobhan Bourke, Kathryn Hanly and Bairbre Moynihan on 8 October 2020 between 09.00 hrs. and 15.55 hrs.

HIQA's focus during the inspection included a detailed evaluation of how, on the day of inspection, the hospital organised themselves to minimise the spread of health-care associated infections; with a particular focus on systems to prevent, detect and manage COVID-19. HIQA noted that Naas General Hospital had experienced three COVID-19 outbreaks in the months prior to inspection. This report presents the findings on the day of inspection, including any learning applied since these outbreaks.

Inspectors spoke with hospital managers, staff, representatives from the Infection Prevention and Control Committee and patients. Inspectors also requested and reviewed documentation, data and observed the clinical environment in a sample of clinical areas which included:

- Imaal Ward (non COVID-19 pathway)
- Moate Ward (COVID-19 pathway)

In addition, inspectors conducted a walkthrough of the Emergency Department.

* Hospital groups: The hospitals in Ireland are organised into seven hospital groups. 1. Ireland East Hospital Group. 2. Dublin Midlands Hospital Group. 3. South/South West Hospital Group. 4. Saolta University Health Care Group. 5. University of Limerick Hospitals Group. 6. RCSI Hospitals Group. 7. Children's Health Ireland Hospital Group

[†] Negative pressure ventilation facilitates the flow of air from areas with higher pressure to areas with lower pressure. This controls the airflow into an isolation room while preventing air escaping from the room. Negative pressure rooms are used in hospitals for patients with airborne infections to prevent person-to-person cross infection.

HIQA would like to acknowledge the cooperation of the hospital management team and staff who facilitated and contributed to this inspection.

2.0 Inspection Findings

The following sections present the general findings of this unannounced inspection. To present the findings the report is structured as follows:

- Section 2.1 High risks identified during the unannounced inspection
- Section 2.2 Capacity and Capability
- Section 2.3 Quality and Safety

2.1 High risks identified during the unannounced inspection

During the onsite inspection the following high risks were identified and escalated to the hospital manager and the Chief Executive Officer of Dublin Midlands Hospital Group for immediate measures to be put in place to mitigate these risks.

COVID-19 preparedness plan

At the time of inspection, growing numbers of COVID-19 cases and the associated rising levels of hospital admissions resulted in the Government implementing Level 3 restrictions² nationally. The hospital had four inpatients with COVID-19 on the day of inspection. Furthermore, inspectors were informed that Naas General Hospital had declared a COVID-19 outbreak in August 2020.

Despite these indicators, inspectors were not assured that the contingency and preparedness plans for the ongoing management of COVID-19 at the hospital were in place. The hospital's COVID-19 Oversight Group had not met in the months prior to the inspection and did not have an up-to-date COVID-19 preparedness plan that was reviewed and signed off by the multidisciplinary COVID-19 Oversight Group. Inspectors were informed during the onsite inspection that this Group planned to recommence these meetings the week after the inspection.

Streaming in the Emergency Department

In addition, inspectors found that the hospital had not implemented adequate separation of patient areas in the Emergency Department, in line with national guidance.³ There was no separation of waiting areas and triage areas for patients presenting with risk factors or symptoms and signs consistent with COVID-19 and patients presenting with non-COVID-19 conditions. This was of particular concern considering the number of patients admitted to the hospital with suspected or confirmed COVID-19 had increased in the weeks prior to the inspection. Inspectors were informed on the day of inspection that a modular build to expand the Emergency Department was expected to be delivered to the hospital on 10 October.

These risks were escalated by HIQA to the hospital manager for mitigation.

Onsite COVID-19 testing capacity

Inspectors noted that Naas General Hospital had limited capacity for onsite testing resulting in a requirement to send 50% of COVID-19 samples off site to the National Virology Reference Laboratory for testing. This resulted in prolonged turnaround times for testing for admitted patients awaiting these results. Inspectors observed that this presented significant operational and capacity challenges at the hospital. This risk was escalated to the Chief Executive Officer of the Dublin Midlands Hospital Group.

Measures implemented at the hospital in response to high risks identified by HIQA

In correspondence provided to HIQA on 13 October 2020, hospital management provided HIQA with assurance that the COVID-19 Oversight Group was scheduled to meet 14 October 2020 and an updated preparedness plan was due to be reviewed and signed off at this meeting.

Hospital management also provided assurance that separate waiting areas had been implemented in the Emergency Department with immediate effect. A modular build unit had been delivered to the hospital on 10 October 2020. Plans for this modular build was to double the current space in the Emergency Department to provide a bigger reception area, waiting area and triage areas. This was due for completion by 18 December 2020. This correspondence also stated that separate assessment areas to enable streaming of patients on COVID-19 and non COVID-19 pathways were in place in the Emergency Department.

The Chief Executive Officer of the Dublin Midlands Hospital Group provided correspondence to HIQA on 22 October 2020 and 6 November 2020 outlining that resources to deliver sufficient COVID-19 testing capacity at Naas General Hospital had been escalated to the National HSE Taskforce on COVID-19 testing. HIQA were informed that there were plans for Tallaght University Hospital to provide batch testing for Naas General Hospital but these were dependent on further recruitment for medical laboratory scientists at Tallaght University Hospital. In the interim assurance was provided by the CEO that Naas General Hospital would be provided with resources to meet the demand for the hospital's COVID-19 testing requirements onsite by 9 November 2020.

2.2 Capacity and Capability

This section describes arrangements for the leadership, governance and management of the service at this hospital, and HIQA's evaluation of how effective these were in ensuring that a high quality safe service was being provided. It includes how the service provider is assured that there are effective governance

structures and oversight arrangements in place for clear accountability, decision-making, risk management and performance assurance. This includes how responsibility and accountability for infection prevention and control is integrated at all levels of the service. This is underpinned by effective communication among staff. Inspectors also reviewed how service providers plan, manage and organise their workforce to ensure enough staff are available at the right time with the right skills and expertise and have the necessary resources to meet the service's infection prevention and control needs.

Theme 5: Leadership, Governance and Management

Standard 5.3: Service providers have formalized governance arrangements in place to ensure the delivery of safe and effective infection prevention and control across the service

Judgment Standard 5.3: Non-compliant

Findings:

- COVID-19 Oversight Group had not met in the months prior to the inspection.
- An updated COVID-19 preparedness plan that was reviewed and signed off by the multidisciplinary COVID-19 Oversight Group was not in place.
- Onsite COVID-19 testing capacity was not sufficient to meet the needs of the hospital.

Corporate and Clinical Governance

The general manager held overall accountability and responsibility for the prevention and control of healthcare-associated infection at the hospital.

The infection prevention and control team were part of and reported into the Infection Prevention and Control Committee. The Infection Prevention and Control Committee reported quarterly to the Quality and Safety Committee, which in turn reported to the Executive Management Team. Inspectors were informed that due to the demanding workload arising from the COVID-19 pandemic, the Infection Prevention and Control Committee did not meet in the first quarter of 2020. However, these meetings were re-established from May 2020 onwards. Similarly, the Quality and Safety Committee had not convened in quarter one and two of 2020 due to redeployment of quality patient safety staff to frontline services during the COVID-19 pandemic. The Quality and Safety Committee did convene in quarter 3 and had a further meeting scheduled for quarter 4. Minutes reviewed by inspectors indicated that both committees met regularly in 2019.

The Chief Executive Officer of the Dublin Midlands Hospital Group chaired a Healthcare Associated Infections Committee that was held every two months. The General Manager and members of the Infection Prevention and Control Team

represented Naas General Hospital at this Committee. It was evident from review of minutes from these meetings that testing platforms for COVID-19 were a key priority for Naas General Hospital. The lack of isolation rooms at Naas General Hospital was also discussed at these meetings.

COVID-19 Oversight Group

Hospital management implemented a multidisciplinary COVID-19 Oversight Group in response to the COVID-19 pandemic in March 2020. The Terms of Reference for this group indicated that the Group was responsible for developing and delivering operational plans for the hospital and communicating these plans to all staff in relation to COVID-19.

Inspectors were informed that during the initial phase of the pandemic, this group met daily, then weekly, to ensure a hospital-wide response to the management of patients and services in the hospital. As outlined in Section 2.1 of this report inspectors were concerned that this group had not met in the months prior to the inspection.

Antimicrobial Stewardship Programme

The hospital had an effective antimicrobial stewardship programme that was led by a multidisciplinary team including an antimicrobial pharmacist. In addition to the onsite antimicrobial stewardship committee, inspectors were informed that a pharmacist from Naas General Hospital attended the antimicrobial stewardship committee in Tallaght Hospital to improve sharing of expertise and experience between the two sites.

Antimicrobial stewardship clinical rounds continued weekly at the hospital. The Committee had also introduced a quality improvement programme in 2020 to improve antibiotic prescribing for community-acquired pneumonia alongside other antimicrobial stewardship activities. The hospital had completed the 2020 Point Prevalence Survey of Antimicrobial Use as part of the annual national point prevalence survey in September 2020. Regular performance updates in relation to antimicrobial stewardship were reported through the established hospital governance structures.

The hospital should continue to build on the progress it has achieved to date and continue to expand its antimicrobial stewardship programme in line with national standards¹ and guidelines.⁴

Monitoring, Audit and Quality assurance arrangements

The infection prevention and control surveillance programme included surveillance of 'alert' organisms[‡], 'alert' conditions,[§] and Notifiable Diseases including COVID-19, hospital-acquired *Staphylococcus aureus* bloodstream infections and hospital-acquired *Clostridium difficile* infection.⁵

The infection prevention and control team used an information and communication technology system that assisted in the prompt identification of patients that needed to be isolated.

Assurance as to the effectiveness of the infection prevention and control systems and processes in place was provided through audit and monitoring of multiple elements of the infection prevention and control programme. These included but were not limited to environmental hygiene and patient equipment hygiene audits, hand hygiene audits, compliance with Carbapenemase-Producing *Enterobacteriales* ** (CPE) screening, peripheral venous cannula care bundle audits and urinary catheter care bundle audits. Compliance with the hospital's isolation prioritisation and patient placement was also monitored at the hospital. Service user feedback in relation to infection prevention and control was used to improve patient experience.

The hospital management team informed inspectors that the hospital had a scheduled programme of quality and safety walkabouts in place that were completed by members of the senior management team. Inspectors viewed quality improvement plans developed following these walkabouts that indicated that infection prevention and control issues were monitored and actioned in response to findings.

The hospital had a number of effective assurance processes in place in relation to the standard of hospital hygiene. Hospital hygiene audit results and patient equipment audits were trended and clearly presented to hospital management in overview reports, which is good practice. Hospital wide environmental hygiene audits achieved an average 92.1% compliance in the previous year. The high levels of compliance achieved in environmental hygiene audits were also reflected on the day of inspection. Findings in this regard will be presented in section 2.3 in this report.

[‡] Alert organisms are identified in the microbiology laboratory and include organisms such as CPE and other antibiotic resistant organisms

[§] Alert conditions include physical symptoms such as skin rashes, vomiting, diarrhoea, respiratory illness that could be due to an infectious illness

** Carbapenemase-Producing *Enterobacteriaceae* (CPE), are a family of bacteria which can cause infections that are difficult to treat because they are resistant to most antimicrobials, including a class of antimicrobials called carbapenems which have typically been used as a reliable last line treatment option for serious infection. Bloodstream infection with CPE has resulted in patient death in 50% of cases in some published studies internationally.

Overall compliance of 95% achieved in the national hand hygiene audits in June 2020 was above the HSE's national target of 90%.

Quality Improvement Plan (QIP)

Inspectors reviewed the quality improvement plan (QIP) developed following the HIQA inspection on 21 June 2017.⁶ The majority of the areas for improvement identified in the previous inspection were addressed. Upgrading and installation of clinical hand wash sinks was ongoing at the hospital. Inspectors were informed that minor capital funding was allocated from the Dublin Midlands Hospital Group Healthcare Associated Infections Committee for the purposes of upgrading and installation of clinical hand wash sinks. The hospital sought funding to increase the number of single isolation rooms at the hospital from the Dublin Midlands Hospital Group. This funding was approved and these plans were at the design stage and due for completion in 2021.

Policies Procedures and Guidelines

The hospital had a suite of infection prevention and control guidelines which covered aspects of standard precautions, transmission-based precautions and outbreak management.

Influenza Vaccination

It has been acknowledged that the health system and wider society should prepare for the potential for co-epidemics of COVID-19 and seasonal influenza in 2020/2021.

Uptake rates for influenza vaccine amongst staff did not reach the national uptake target of 60% in the 2019/2020 influenza season.⁷ The hospital reported that an influenza vaccination programme had commenced with the aim of significantly improving the uptake in line with the 2020 national target.⁸ Vaccinations were administered onsite by a team of peer vaccinators.

Theme 6: Workforce

Standard 6.1: Service providers plan, organise and manage their workforce to meet the services' infection prevention and control needs.

Judgment Standard 6.1: Substantially compliant

Findings:

- Additional consultant microbiologist resource at the hospital was required.
- There was no onsite Occupational Health Department at the hospital.
- Staff uptake of hand hygiene training required improvement.

The infection prevention and control team's resources had increased in the year prior to inspection. A locum consultant microbiologist (0.5) Whole Time Equivalent (WTE)^{††} was appointed in September 2019 in addition to the 0.33 WTE consultant microbiologist position at the hospital. On call support was also provided to the hospital from Tallaght University Hospital. Infection prevention and control nurses had increased from 1.5 WTE to 2.0 WTE. The team also comprised one WTE antimicrobial pharmacist, 0.5 WTE surveillance scientist and 0.6 WTE administrative support.

Inspectors were informed that in response to the COVID-19 pandemic, clinical staff with experience and expertise were redeployed to support the infection prevention and control team with their activities. This enabled the infection prevention and control nursing team to be onsite seven days a week at the onset of the pandemic. Inspectors were informed that the team had returned to its normal activities and working hours over the summer months.

Hospital management and staff informed inspectors that additional consultant microbiologist resource was required. The hospital sought approval for funding to increase consultant microbiologist resource so that 1.33 WTE consultant microbiologists would be available for the hospital.

Occupational Health

Inspectors were informed that the occupational health services for the hospital had been centralised and moved off site to Dublin in January 2020. Therefore the hospital did not have onsite access to a dedicated occupational health service. This resulted in challenges to meet the needs of the hospital during the ongoing COVID-19 pandemic.

^{††} Whole-time equivalent (WTE): allows part-time workers' working hours to be standardised against those working full-time. For example, the standardised figure is 1.0, which refers to a full-time worker. 0.5 refers to an employee that works half full-time hours.

In the absence of a dedicated service occupational health related queries were frequently directed to the infection prevention and control team during the COVID-19 pandemic. Furthermore staff contact tracing and follow up of COVID-19 test results for staff added to the workload of the hospital. In response to this challenge, the hospital redeployed staff from other services at the hospital to conduct contact tracing for staff at the hospital to support the infection prevention and control team.

At the time of the inspection these staff had been returned to their primary roles. Inspectors were informed that there was no access to occupational health staff outside of core working hours. COVID-19 testing for staff was processed through the National Viral Reference Laboratory. This resulted in delays in obtaining COVID-19 test results for healthcare workers at the hospital who were unable to work while these results were pending.

Inspectors were informed that additional occupational health resources were required to support the management of outbreaks and to provide a responsive service to any emerging issues.

Infection Prevention and Control Education

Infection prevention and control training schedule and training records were reviewed by inspectors. Hand hygiene training was mandatory for staff at induction and at least every two years thereafter. Additional training in transmission-based precautions including the appropriate use of personal protective equipment (PPE) had been provided to clinical and non-clinical staff at the hospital since the onset of the COVID-19 pandemic.

Records reviewed indicated that the infection prevention and control team had provided this training to 930 staff by the time of the inspection. To assess the effectiveness of this training and in view of the frequently changing guidance for staff, the infection prevention and control team developed a questionnaire to ascertain staff knowledge of compliance with recommended PPE. In response to the findings from this survey a PPE reference card was funded and developed as an aid memoire for staff. The hospital planned to provide a card to all clinical and non-clinical staff.

Hand hygiene training was provided across all staff disciplines. Records indicated that 78% of nursing staff, 64% of nursing auxiliary staff , 68% of medical staff and 89% of health and social care professionals had completed this training in the two years prior to the inspection date.

Fit testing^{††} and training for FFP2 and FFP3 facemasks^{§§} to avoid COVID-19 transmission was provided to clinical staff likely to undertake procedures that involve or may involve the generation of aerosols (aerosol generating procedures or AGPs). Further training sessions for this training were scheduled for October 2020 for staff yet to complete it.

A system was in place to ensure new staff or staff returning to work following extended leave were appropriately trained in infection prevention and control.

^{††} Tight-fitting facemasks rely on having a good seal with the wearer's face. In order to be effective the mask must fit tightly to the wearers face, fit testing should be undertaken by a trained professional.

^{§§} An FFP2 facemask is recommended for patients with respiratory symptoms or suspected or confirmed COVID-19 who require an aerosol generating procedure.

2.3 Quality and Safety

This section looks at how acute healthcare services ensure that infection prevention and control outbreak/s including COVID-19, are managed to protect people using the healthcare service. This includes how the services identify any work practice, equipment and environmental risks and put in place protective measures to address the risk, particularly during a pandemic.

It also focuses on how these services ensure that staff adhere to infection prevention control best practice and antimicrobial stewardship to achieve best possible outcomes for people during the ongoing COVID-19 pandemic.

Theme 2: Effective Care and Support

Standard 2.6: Healthcare is provided in a clean and safe physical environment that minimises the risk of transmitting a healthcare-associated infection.

Judgment Standard 2.6: Non-Compliant

Findings:

- Separation of COVID-19 and non COVID-19 pathways in the Emergency Department was not in place for the second surge of COVID-19.
- Insufficient single isolation rooms to meet demand at the hospital.
- Staff were wearing shoe covers which is not in line with national PPE guidance.
- The cleaner's room was shared between Moate Ward and the hospital's Coronary Care Unit.
- There was a lack of storage space in both wards with inappropriate storage of equipment and supplies

Patient placement

Inspectors were informed that demand for isolation rooms for patients requiring transmission-based precautions exceeded capacity at the hospital. For example on the day of inspection, 26 patients required single room isolation while there were 17 of these patients in single rooms at the hospital. As a control measure to reduce this risk, the infection prevention and control team worked closely with bed management at the hospital in advising patient placement.

On the day of inspection two patient bays with three admitted patients in each bay were closed to admissions while results of COVID-19 testing was awaited for patients in each of these bays. Challenges with patient placement was further

compounded by the reduced capacity for onsite testing. While results from samples processed onsite were available same day, there was a 24 to 48 hour turnaround for results sent to the National Viral Reference Laboratory. Inspectors were informed that some patients requiring admission were held in the Emergency Department while awaiting these results and this impacted on patient flow in the Emergency Department and represented an outbreak risk.

Transmission-based precautions

Transmission-based precautions were applied in both areas inspected to patients suspected or confirmed to be infected with agents transmitted by the contact, droplet routes in line with national guidelines.⁹ Personal protective equipment was readily available outside isolation rooms and cohort bays and appropriate signage was visible on the doors of isolation rooms. Inspectors observed that staff in both the Emergency Department and Imaal Ward were wearing disposable shoe covers as part of their PPE. The use of shoe covers is generally not recommended as healthcare workers may contaminate their hands when putting them on. Shoe covers are also difficult to doff (take off) thereby often requiring assistance and increasing the risk of cross contamination among healthcare workers.^{10,11} This was brought to the attention of the hospital management team on the day of inspection.

Inspectors observed posters on walls throughout the hospital to raise awareness of COVID-19.

Environment and infrastructure

Inspectors assessed Moate Ward and Imaal Ward and conducted a walkthrough of the Emergency Department. Overall the general environment in both areas inspected was clean with few exceptions.

Emergency Department environment and infrastructure

As outlined in Section 2.1, implementation of COVID-19 and non-COVID-19 streaming processes through the ED was not in place on the day of inspection. Inspectors were informed that this had been in place for the first surge of the COVID-19 pandemic where the Outpatients Department was utilised for patients presenting to the hospital and a triage system through an intercom system was used to stream patients to a COVID or non-COVID pathway.

On the day of inspection there was no separation of patients waiting areas or triage areas. Within the footprint of the Emergency Department assessment area, patients presenting with non-COVID related concerns were assessed in a separate bay from patients presenting with risk factors for COVID-19. The resuscitation room had two cubicles that were used for patients with COVID-19 and non-COVID-19 care needs.

Inspectors were informed that plans to convert the resuscitation room to two negative pressure ventilation rooms were due for completion on 18 December 2020. In addition there were plans to convert the two treatment rooms in the Emergency Department to negative pressure ventilation rooms by 13 November 2020.

Spatial separation between trolleys complied with public health guidelines¹² for minimum physical spacing.

Imaal Ward Environment and Infrastructure

The 31 bedded ward comprised four single rooms with en-suite facilities, one three-bedded room and four six-bedded rooms. Physical distancing was maintained between beds in multi-occupancy rooms in line with national guidelines.¹²

One of the six-bedded wards and ensuite toilet and bathroom had been recently renovated to make the environment dementia friendly. This included way finding, new lighting and use of wall paint colours to designate bed space. New flooring and surfaces in this bay were suitable for effective cleaning.

A number of hand hygiene sinks on this ward had yet to be replaced with clinical hand wash sinks that conform to Health Building Note 00-10 Part C: Sanitary Assemblies.¹³ The cleaner's room did not have a janitorial unit or hand hygiene sink. Overall, there was a lack of storage space in the ward with inappropriate storage of equipment and supplies resulting in clutter. This required review.

Moate Ward Environment and Infrastructure

The 31-bedded ward comprised four single rooms with en-suite facilities, one three-bedded room and four six-bedded rooms. Physical distancing was maintained between beds in multi-occupancy rooms in line with national guidelines.¹² The cleaner's room was shared between Moate Ward and the hospital's Coronary Care Unit. This should be reviewed as they may be a risk of cross contamination between wards as cleaning equipment for both wards was stored in this room. Similar to Imaal Ward, a lack of storage space for equipment and supplies required review.

Environmental hygiene in areas inspected

Inspectors were satisfied through observation, documentation reviewed and discussion with staff that there was good oversight of environmental hygiene in both areas assessed. Daily cleaning logs were consistently recorded in both wards assessed. Environmental audits were completed demonstrating good levels of compliance. The hospital had systems and processes in place to ensure that each ward had allocated daily cleaning resources with additional resources available out of hours.

Discussion with patients

Inspectors spoke with a number of patients. Overall, patients indicated that they were happy with standards of environmental hygiene they had experienced while being cared for at the hospital. They also indicated satisfaction with staff practices they had observed to reduce the risk of spread of infection.

Standard 2.7 Equipment is cleaned and maintained to minimise the risk of transmitting a healthcare-associated infection.

Judgment Standard 2.7: Compliant

Equipment hygiene

Overall, patient equipment in the both areas inspected were clean and well maintained with few exceptions. Inspectors viewed daily and weekly equipment cleaning checklists and schedules and noted they were consistently completed and were monitored by Clinical Nurse Managers on an ongoing basis. Inspectors reviewed the results of patient equipment audits for both wards and hospital wide patient equipment audits demonstrating that overall high levels of compliance were achieved.

Designated patient equipment such as monitoring equipment was available in each of the isolation rooms on both wards inspected. A replacement programme for commodes was in place and were seen during the inspection. Inspectors were informed that these were funded with minor capital funding allocated from HSE's Antimicrobial Resistance and Infection Control (AMRIC) Division through the Dublin Midlands Hospital Group. Storage of patient equipment and PPE was an issue on both wards and required review.

Theme 3: Safe Care and Support

Standard 3.1. Service providers integrate risk management practices into daily work routine to improve the prevention and control of healthcare-associated infections.

Judgment Standard 3.1: Substantially Compliant

Findings:

Improvements were required in risk management processes such as the identification and recording of infection prevention and control risks on the hospital's risk register

Risk management

The hospital had a system in place for the identification, assessment and management of risks in line with HSE guidelines.¹⁴ Risks were reviewed and managed by the Executive Management team and at the hospital's quality and patient safety committee meetings. Inspectors noted the following infection prevention and control risks on the hospital's corporate risk register:

- Insufficient single room capacity to meet infection prevention and control requirements for the hospital.
- Limited onsite SARS-CoV-2 testing capacity to meet demand at the hospital.
- Lack of hand wash sinks to comply with Health Building Note 00-10 Part C: Sanitary Assemblies.

Inspectors were informed that funding was approved for an additional 12 single isolation rooms at the hospital and that this project was at the design phase and due for completion in 2021.

Replacement and installation of hand hygiene sinks was in progress at the hospital and the project was due for completion by the end of 2020.

Inspectors found that not all infection prevention and control risks were identified and documented on the hospital's risk register. For example risks related to the lack of separate COVID-19 and Non-COVID-19 pathways in the Emergency Department were not identified, managed and recorded.

Incident Reporting

It was hospital policy to report incidents of healthcare-associated infection and non-compliance with infection prevention and control guidelines on the reported on the National Incident Management System (NIMs).^{***} Quarterly reports outlining tracking and trending of infection prevention and control related clinical incidents were presented and reviewed at the hospital's infection prevention and control committee meetings.

^{***} The State Claims Agency National Incident Management System is a risk management system that enables hospitals to report incidents in accordance with their statutory reporting obligation.

Standard 3.8 Services have a system in place to manage and control infection outbreaks in a timely and effective manner.

Judgment Standard 3.8: Non-compliant

Findings:

- lack of streaming of patients in the Emergency Department to ensure separate COVID-19 pathways (at risk of COVID-19) and non- COVID-19 pathways (COVID-19 not clinically suspected)
- lack of adequate onsite COVID-19 testing capacity
- insufficient isolation room facilities to meet demand
- lack of onsite occupational health resources to support the management of outbreak issues.

COVID-19 Preparedness

Inspectors noted that the hospital had cared for over 100 patients confirmed with COVID-19 between March 2020 and July 2020. During this timeframe, the hospital had implemented a range of measures to prepare for and manage these patients. These included but were not limited to;

- Assigning a multidisciplinary COVID-19 Oversight Committee to ensure decision making and planning were progressed to manage the pandemic. This committee met daily initially and then weekly as the pandemic progressed.
- Increased infection prevention and control team presence to seven days a week onsite.
- Development of laboratory services onsite to carry out COVID-19 testing.
- Establishment of an electronic link between the National Viral Reference Laboratory and the laboratory at Naas General Hospital.
- Assigning redeployed staff as a contact tracing team in the absence of onsite occupational health expertise.
- Assigning a member of staff to manage PPE.
- Providing training on donning and doffing PPE to 880 staff between March and June 2020.
- Ensuring communication of updated HSE guidance on COVID-19 to staff.
- Implementing visiting restrictions in line with national guidance and temperature and screening of staff and visitors at each entrance to the hospital.
- Use of the Outpatients Department as a non-COVID Emergency Department to enable streaming of patients with non-COVID-19 and suspected COVID-19 into different pathway at the hospital.

- Redeployment and training of staff to support staff in the intensive care unit.

A number of these initiatives were enabled by the cessation of some scheduled services such as elective surgery and endoscopy and facilitation of outpatient services by telephone clinics or off site clinics where feasible. At the time of the onsite inspection, the hospital had returned to normal services in line with national guidance and presentations at the Emergency Department had returned to pre pandemic levels.¹⁵

As outlined in Section 2.1, inspectors were not assured that the hospital had implemented an effective preparedness plan for a second wave of the COVID-19 pandemic. The COVID Oversight Group had not met in the months prior to inspection.

Inspectors were informed of some planned infrastructural changes to increase single isolation room capacity in the Intensive Care Unit from one single room to two negative pressure ventilation isolation rooms. As previously outlined infrastructural works in the Emergency Department were planned to convert the two treatment rooms in the Emergency Department to two negative pressure ventilation isolation rooms and to divide the resuscitation room to two negative pressure ventilation bays.

Inspectors were informed that the hospital had sought funding to increase isolation room capacity by 12 single isolation rooms. Plans were ongoing to determine a suitable location and funding for a modular build to facilitate this with an expected completion timeframe of 2021.

While acknowledging the planned infrastructural works at the hospital, risks to the hospital's capacity to meet the potential demands of the second wave of COVID-19 while continuing with the hospital's current activity levels remained. As outlined previously these risks included;

- the lack of streaming of patients in the Emergency Department to ensure separate COVID-19 pathways (at risk of COVID-19) and non- COVID-19 pathways (COVID-19 not clinically suspected).
- insufficient onsite COVID-19 testing capacity
- insufficient isolation room facilities to meet demand.
- lack of onsite occupational health resources to support the management of outbreaks issues.

These ongoing risks did not provide assurance to inspectors that the hospital had adequate plans in place to meet the demands of a second surge of COVID-19.

Management of COVID-19 Outbreaks

The hospital declared three outbreaks of COVID-19 in the months preceding the inspection. These outbreaks were declared in:

- March 2020
- May 2020 and
- August 2020.

A total of 22 confirmed cases were identified during the three outbreaks (11 patients and 11 staff). A multidisciplinary outbreak team was convened to advise and oversee the management of the COVID-19 outbreaks and the local Public Health Department was informed and were members of the outbreak control teams in line with national standards. The initial two outbreaks were confined to one patient bay on the affected ward. The August 2020 outbreak was found to be community acquired among staff. Contact tracing and testing of staff and patients on the affected ward was undertaken as part of the outbreak investigation and there were no further positive tests for COVID-19 reported.

Outbreak investigation is one of the key components of outbreak management that feeds into quality care and prevention of disease transmission. The infection prevention and control team prepared outbreak reports at the conclusion of the COVID-19 outbreaks. The reports viewed by inspectors summarised how the outbreak was detected, the investigations conducted and interventions carried out to control it. Learning and recommendations were detailed in the outbreak reports viewed.

Non COVID-19 outbreaks

The hospital had experienced a number of outbreaks of other organisms such as Influenza A in January 2020, a *Clostridium difficile* outbreak from 2019 to October 2020 and Methicillin-Resistant *Staphylococcus aureus*^{†††} (MRSA) in April 2020. Outbreak management teams were convened and outbreak reports were in progress at the time of the onsite inspection. It was evident to inspectors that the hospital had implemented a number of interventions to control and manage these outbreaks.

††† *Staphylococcus aureus* (*S. aureus*) commonly colonises the skin and nose. Methicillin-resistant *Staphylococcus aureus* (MRSA) infection is caused by a strain of bacteria that has become resistant to the antibiotics commonly used to treat ordinary staphylococcal infections.

3.0 Conclusion

Overall this inspection identified that Naas General Hospital was compliant with one, substantially compliant with two and non-compliant with three of the six *National Standards for the prevention and control of healthcare-associated infections in acute healthcare services* assessed.

Leadership, Governance and Management

Inspectors identified a number of significant risks in relation to infection prevention and control at the hospital in relation to the management of patients presenting during the second wave of COVID-19.

Inspectors were not assured that the hospital had adequate contingency and preparedness plans for the ongoing management of the second wave of COVID-19 in place.

Inspectors found that the hospital had not implemented separate pathways for patients presenting to the Emergency Department with COVID-19 and non COVID-19 complaints. Furthermore, insufficient capacity to perform onsite testing for COVID-19 resulted in delayed reporting of results for some patients. Inadequate single room isolation capacity in addition to insufficient onsite testing capacity resulted in challenges with appropriate patient placement for patients awaiting these results.

These risks were escalated to the hospital manager and CEO of the Dublin Midlands Hospital Group for mitigation. Assurances were provided that the COVID-19 Oversight Group was to be reconvened and a preparedness plan was to be reviewed and signed off by this Group. Furthermore, assurances were provided to HIQA that streaming had been implemented in the Emergency Department. Resources to ensure onsite capacity for COVID-19 testing was to commence 09 November 2020.

Despite the challenges faced by the hospital in relation to the COVID-19 pandemic, it was evident to inspectors that Non-COVID-19 related infection prevention and control issues were being effectively managed at the hospital despite the challenges of the hospital's infrastructure. Inspectors found there was an effective Antimicrobial Stewardship Programme in place. Furthermore assurance as to the effectiveness of the infection prevention and control systems and processes in place was provided through audit and monitoring of multiple elements of the infection prevention and control programme.

Workforce

Infection prevention and control resources had increased in the year prior to the inspection. The hospital had sought funding for additional consultant microbiologist

resource at the hospital, this should be progressed. It was recognised by hospital management that onsite occupational health resources were required to support the management of outbreaks and to provide a responsive service to any emerging issues. Uptake of hand hygiene training at the hospital required improvement and should be addressed.

Effective Care & Support

The hospital had identified inadequate isolation room capacity as a risk to effective infection prevention and control at the hospital. At the time of the inspection plans were underway to provide a number of negative pressure ventilation rooms at the hospital. However this would not significantly increase isolation room capacity at the hospital. As a control measure to reduce this risk, the infection prevention and control team worked closely with bed management at the hospital in advising patient placement.

Overall patient equipment and the environment in the wards inspected were generally clean with some exceptions. Transmission-based precautions were applied in both areas inspected. However the hospital should ensure that the practice of using overshoes as part of PPE is stopped.

Safe care and support

There was room for improvement in relation to the identification and documentation of infection prevention and control related risks at the hospital.

The COVID-19 pandemic has been characterised by rapid change, as hospitals learned from experience in Ireland and abroad. As would be expected with any pandemic involving a novel virus, national infection prevention and control guidelines have needed to update over time as knowledge relating to the virus and disease evolved. It was evident to inspectors that the hospital had effectively managed and controlled COVID-19 outbreaks in the first wave of the pandemic. Furthermore the hospital had implemented interventions to control and manage non-COVID-19 related outbreaks at the hospital. Notwithstanding this the hospital needs to be supported to meet the risks identified during the inspection to ensure any further outbreaks can be managed while continuing with the hospital's normal activity levels.

Following this inspection the hospital needs to address the areas for improvement identified in this report and requires the support of the hospital Group to effectively address issues highlighted in order to facilitate compliance with the *National Standards for the prevention and control of healthcare-associated infections in acute healthcare services* and other existing national healthcare standards.

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