



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced inspection of Regional Hospital Mullingar.

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: 19 November 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.

Table of Contents

1.0	Information about this monitoring programme.....	6
1.1	Hospital Profile	9
1.2	Information about this inspection	9
2.0	Inspection Findings	10
2.1	Capacity and Capability.....	10
2.2	Quality and Safety	17
3.0	Conclusion.....	25

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 COVID-19 pandemic, 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*¹ during the COVID-19 pandemic.

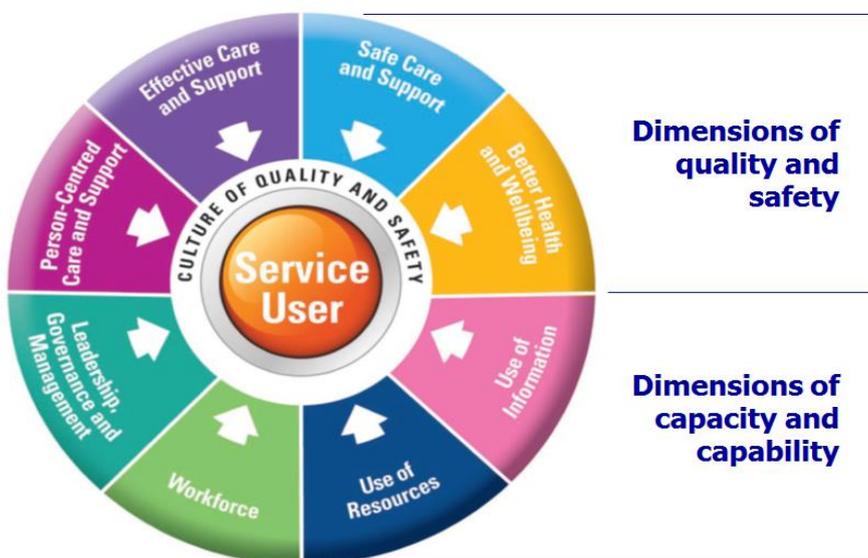
The national standards provide a framework for service providers to assess and improve the service they provide particularly during an outbreak of infection including COVID-19.

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 the infection prevention and control of healthcare-associated infections in acute healthcare services



*National standards for the prevention and control of healthcare-associated infections in acute healthcare services

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 formalised 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 healthcare services' provision under the dimensions of **quality and safety** through the following standards:

Quality and Safety	
Theme	Standard
2: Effective Care & Support	Standard 2.6: Healthcare is provided in a clean and safe physical environment that minimises the risk of transmitting a healthcare-associated infection. Standard 2.7 Equipment is cleaned and maintained to minimise the risk of transmitting a healthcare-associated infection.
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. Standard 3.8 Services have a system in place to manage and control infection outbreaks in a timely and effective manner.

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 support 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

The Midland Regional Hospital Mullingar is a model 3 acute teaching hospital which is owned and managed by the Health Service Executive and is part of the Ireland East Hospital Group.‡ The hospital provides a range of inpatient, day and outpatient services for surgery, medicine, obstetrics, gynaecology and paediatrics.

The hospital had an available bed capacity of 184 inpatient beds on the day of the inspection.

1.2 Information about this inspection

This inspection report was completed following an unannounced inspection carried out by Authorised Persons, HIQA; Kay Sugrue, Siobhan Bourke and Bairbre Moynihan on 19 November 2020 between 09.20 hrs and 15:28 hrs.

HIQA's focus during this inspection included a detailed evaluation of how, on the day of the inspection, Regional Hospital Mullingar had acted to minimise the spread of healthcare-associated infections; with a particular focus on systems to prevent, detect and manage COVID-19. HIQA noted that the hospital had experienced a number of COVID-19 outbreaks in March, April, September, October and November 2020. This report presents the findings on the day of inspection, inclusive of how outbreaks of infection were managed.

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 practice within the clinical environment in a sample of clinical areas which included:

- Medical 2 Ward (non COVID-19 pathway)
- Surgical 1 Ward (the designated COVID-19 isolation ward).

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.

- Section 2.1 Capacity and Capability
- Section 2.2 Quality and Safety

2.1 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 formalised governance arrangements in place to ensure the delivery of safe and effective infection prevention and control across the service

Judgment Standard 5.3: Compliant

Corporate and Clinical Governance

Corporate and clinical governance arrangements including lines of communication for infection prevention and control at the hospital were outlined in an organogram provided to HIQA. Overall responsibility and accountability rested with the general manager who was represented at all levels within the governance arrangements for the prevention and control of healthcare-associated infection.

The hospital's Healthcare Associated Infections and Antimicrobial Stewardship Committee was multidisciplinary and met on a quarterly basis. This committee was chaired by the general manager and reported upwards to the Clinical Governance Quality and Patient Safety Committee and the Executive Management Group Committee. The hospital was a member of the Ireland East Hospital Group and

reported into its Healthcare Associated Infections and Antibiotic Microbial Resistance Oversight Group on a quarterly basis.

A dual reporting arrangement also existed between the hospital and the Regional Infection Prevention and Control service in the Dublin Mid-Leinster Hospital's which provided a service at Portlaoise, Tullamore, Mullingar and part of the Community Health Organisation (CHO 8).[†] Similar to the findings of the 2019 HIQA inspection,² the hospital's consultant microbiologist and assistant director of nursing in infection prevention and control had a joint commitment with two other hospitals in the Dublin Midland Hospital Group. Hospital management described these links as beneficial providing additional support and knowledge from the onset of the COVID-19 pandemic.

Operational responsibility for implementing the annual infection prevention and control plan and programme rested with the infection prevention and control team. Inspectors were informed that the team was also represented on numerous other committees within the hospital committee structures. For example, a member of the team was represented on the Hygiene Services Committee. This committee reported to the Quality Patient Safety Committee.

A multidisciplinary hospital Coronavirus Committee Group was established at the onset of the pandemic which was chaired by the director of nursing. Inspectors were informed by hospital management that this committee met up to three times a week during the initial phase of the pandemic which had reduced to weekly meetings at the time of the inspection. Minutes reviewed by inspectors demonstrated comprehensive oversight of all COVID-19 related issues and day-to-day operations across the hospital group. This forum also reviewed updated national guidance for implementation locally and discussed correspondence and communication with Ireland East Hospital Group committees and other national forums.

Discussions with hospital staff demonstrated awareness of documented infection prevention and control arrangements which were described as effective. Overall, discussions with staff indicated that they felt supported by hospital management and that the pathways for streaming[‡] patients into COVID-19 and non-COVID-19 services were clear.

COVID-19 preparedness and outbreak management will be further discussed in section 2.2 of this report.

[†] Community Health Organisation 7 area consists of Laois/Offaly, Longford/Westmeath, Louth/Meath

[‡] Streaming is a hands off assessment that involves asking what the presenting complaint is and identifying risk factors for COVID-19. The outcome dictates which zone or service the patient moves to.

Emergency Department and Hospital Capacity

At the onset of the COVID-19 pandemic, the hospital had identified that the footprint of the acute floor, namely the emergency department was too small, and as such did not support the implementation of parallel streaming of patients into COVID-19 and non-COVID 19 pathways. To address this issue, the hospital implemented several measures including;

- Closure of 11 beds in Ward 4 to create a 15 space Respiratory Emergency Department.
- Suspension of the Ambulatory Review Clinic (ARC).
- The Acute Medical Assessment Unit (AMAU) proximal to the emergency department entrance was relocated to level B and hours of opening extended.
- The former AMAU became part of the Respiratory Emergency Department (RED) for the streaming and management of patients suspected or confirmed with COVID-19.
- Surgical 1 was designated for inpatients with suspected or confirmed COVID-19 infection. A four bedded room was reconfigured to a two bedded with negative pressure ventilation.
- An overall reduction of 40 hospital beds.

Hospital management informed inspectors that the creation of parallel patient pathways had reduced available inpatient capacity at the hospital. This was not so much an issue during the initial phase of the pandemic as many routine and scheduled care services were temporarily suspended. However, the resumption of normal services together with reduced capacity had impacted demands on inpatient beds, the effect of which was seen in the hospital's emergency department. This issue has been identified as an ongoing challenge for the hospital and remains a concern in the context of potential additional demands posed by the pandemic and increasing presentations at the hospital over coming winter months. Inspectors were informed that the loss of 11 beds from Ward 4 and six beds from Surgical 1 due to COVID-19 would be compensated through the development of a 10-bedded isolation unit with negative pressure ventilation systems due to be operational by January 2021.

Antimicrobial Stewardship Programme

The hospital had an antimicrobial stewardship programme in place. Hospital management informed inspectors that an antimicrobial pharmacist post had been approved and was at the recruitment stage.

Minutes from the Healthcare Associated Infections and Antimicrobial Stewardship Committee on 22 September 2020 demonstrated that antimicrobial consumption

rates, audit reports and implementation of antimicrobial stewardship interventions were monitored and reported on a quarterly basis to this committee.

Monitoring, Audit and Quality assurance arrangements

The infection prevention and control surveillance programme included surveillance of:

- 'alert' organisms[§], 'alert' conditions^{**} and Notifiable Diseases³
- hospital-acquired *Staphylococcus aureus* bloodstream infection
- hospital-acquired *Clostridioides difficile* infection
- COVID 19 detected cases.

Inspectors reviewed reports on nationally mandated key performance indicators from January to October 2020 demonstrating compliance against the 2020 HSE service plan targets.⁴

Assurance as to the effectiveness of the infection prevention and control systems and processes were provided through audit and monitoring of multiple elements of the infection prevention and control programme. These included but were not limited to the following:

- Environmental and patient equipment monthly hygiene audits.
- Local and national hand hygiene audits (local hand hygiene audits were temporarily suspended from January to September 2020).
- Quarterly peripheral vascular cannula and urinary catheter care bundles^{††} reports completed by infection prevention and control team (only completed in quarter 2 and ongoing in quarter 4).
- If applicable, central venous catheter care bundles.

Due to the additional demands posed by the pandemic at the hospital in addition to deficits within the infection prevention and control team experienced in early 2020, many scheduled audits were deferred. However, these audits had re-commenced once resource issues were addressed. Inspectors were informed by members of the infection prevention and control team that compliance with transmission based precautions was monitored during daily ward visits. In addition, ward managers completed ward check lists to ensure adherence to best practice.

§ 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

†† A care bundle consists of a number of evidence based practices which when consistently implemented together reduce the risk of device related infection.

Minutes from the Coronavirus Committee Group indicated that walkabouts were undertaken to check on infection prevention and control compliance. A recent example was a walkabout in the emergency department conducted on 11 November 2020. Inspectors were informed that a checklist was used but findings were not documented. Hospital management told inspectors that a more formalised schedule for hospital walkabouts by senior management had been considered and was due to be implemented in the near future.

Policies, Procedures and Guidelines

Inspectors reviewed a number of policies procedures and guidelines which covered aspects of standard precautions, transmission-based precautions and outbreak management. Several of these policies were developed by the regional infection control team and approved for local application. National and international guidance for COVID-19 preparedness were applied locally in the absence of locally developed guidance.

Influenza Vaccination

An influenza vaccination programme had commenced in the latter end of September 2020. Staff informed inspectors that vaccinations were administered by a team of four peer vaccinators. Uptake rates for influenza vaccine amongst hospital staff in the 2019/2020 influenza season was 61.7% which was above the national uptake target of 60%.⁴ Uptake at the time of the inspection was greater than 70% indicating that the hospital was well on the way to meeting or exceeding the 2020 national target of 75%.⁵

Quality Improvement Plan (QIP)

Inspectors reviewed the quality improvement plan (QIP) developed following the HIQA inspection on 4 December 2019. Overall, inspectors were satisfied that findings had been actioned with 11 out of 14 items were documented as completed. The remaining four issues were in progress and were related to resourcing issues and building works.

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

- Recruitment of approved posts and other identified resource deficiencies need to be addressed.
- Formal fit testing for respirators needs to be delivered to relevant clinical staff.
- Improvements in the management of training records required to accurately reflect infection prevention and control training required.
- Improvements were needed in occupational health supports available to the hospital.

Inspectors found that the hospital regularly reviewed infection prevention and control staffing resources to ensure the levels required were appropriate to the services provided. Infection prevention and control team resource deficiencies due to planned leave were addressed and supplemented further at the onset of the pandemic. These resources were a valuable addition to support the lone infection prevention and control nurse specialist in place at that time. Since September, resources had returned to the approved levels.

The infection prevention and control team comprised;

- 0.4 whole time equivalent (WTE)^{##} consultant microbiologists
- two WTE infection control nurses
- one WTE antimicrobial pharmacists
- one WTE surveillance scientist.

Additional resources had been sought by the hospital which had been approved including;

- 1.5 infection prevention and control clinical nurse specialists (one WTE was at the level of assistant director of nursing)
- one WTE consultant microbiologist
- one WTE antimicrobial pharmacist post was approved and was at the recruitment stage
- one basic grade and one senior grade laboratory scientists.

^{##} 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.

Additional resources required and not yet approved included;

- administrative support for the infection prevention and control team (a business case was under development and due to be submitted for approval)
- improvements needed in cleaning resources including multi-task attendants
- higher grade house-hold supervisors
- staff resources for new isolation unit.

Hospital management informed inspectors that an occupational health physician was available onsite in early 2020. Onsite access to this resource proved to be very helpful in the early onset of the pandemic. However, this situation changed to an offsite regional based resource resulting in reduced access to occupational health resources. Discussions with hospital management indicated that reduced access had proved a challenge for the hospital. This resulted in contact tracing for staff being undertaken by a hospital contact tracing team. Contact tracing for patients was undertaken by the infection prevention and control team. Additional occupational health resources was therefore required to fully support the management of outbreaks and other emerging issues at the hospital.

Infection Prevention and Control Education.

The infection prevention and control team provided a range of both formal and informal ongoing educational sessions to staff on infection prevention and control procedures and practices.

Numbers attending classroom based education and training sessions were curtailed due to physical distancing requirements impacting the delivery of education and training to larger numbers. Inspectors were informed that the training centre had moved off site necessitating staff to travel. To address these challenges, the infection prevention and control team provided two days of rolling sessions at the onset of the pandemic. This included training on donning and doffing of personal protective equipment and had multidisciplinary attendances.

Ward based educational sessions were not routinely documented on training records. Staff were encouraged to complete HSE Land eLearning. However inspectors were informed that these training reports were not included in overall training records.

It was accepted locally that the training records provided did not accurately reflect overall training levels. Records reviewed from February to June 2020 demonstrated the following;

- 292 staff had received coronavirus training
- 267 staff had been trained on the donning and doffing of personal protective equipment

- 675 hospital staff had attended mandatory hand hygiene training in the last 2 years.

Fit testing^{§§} FFP2 facemasks^{***} by an external company to avoid COVID-19 transmission while undertaking aerosol generating procedures (APGs) was to be provided to relevant clinical staff within the hospital. The date for this training had yet to be confirmed. The provision of this training needs to be progressed.

Overall, inspectors found some improvement was required in the documentation of all infection prevention and control training and education sessions delivered.

2.2 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: Partially compliant

- Potential cross transmission risks from staff providing care to both COVID and non-COVID patients should be reviewed and minimised where possible.
- Improvement required relating to the storage of supplies and equipment.
- Improvements were required to address wear and tear issues identified in both areas inspected.
- Infection prevention and control input relating to the documentation of aspergillosis risk assessment and monitoring requires improvement.

^{§§} 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.

Surgical 1 Ward and Medical 2 Ward were assessed by inspectors. In addition, inspectors conducted a walkthrough of the emergency department.

Transmission-based precautions were applied to patients suspected or confirmed to be infected with agents transmitted by the contact and droplet routes in line with national guidelines.⁶ Protective personal equipment was readily available outside isolation rooms and appropriate signage was visible on the doors of isolation rooms. Inspectors noted that perspex glass screens were used to create barriers and support physical distancing in patient waiting areas within the hospital. COVID-19 signage was visibly displayed in all clinical areas visited and inspected.

Inspectors noted a general lack of storage in the hospital resulting in multiple storage units containing supplies inappropriately stored on main corridors and thoroughfares. This issue was also observed in wards inspected. Hospital management had identified this finding as an ongoing challenge and was in the process of exploring the use of an off-site storage facility as a potential solution to this issue.

Emergency Department Environment and Infrastructure

Inspectors found that the hospital had processes and systems in place for early identification of suspected and positive cases of COVID-19 in the emergency department. Patients presenting to the department were assessed by a nurse using a questionnaire and subsequently streamed into COVID-19 and non-COVID-19 parallel pathways. Patients deemed at risk of COVID-19 were directed to the respiratory emergency department and those presenting as a low risk were directed to the main emergency department. COVID-19 screens were conducted on all patients admitted via the acute floor.

An additional patient waiting area had been provided for the main emergency department to enable physical distancing. There was a separate waiting area for patients on the COVID-19 pathway.

The main emergency department comprised 13 bays. There were two single rooms used for isolation purposes, one of which had a ventilation system with an ante room. Inspectors noted areas demarcated for patient trolleys on the main corridor for use when maximum capacity within the department was reached. The areas defined did not ensure minimum physical distancing (1m+) between the foot of one trolley and the head of another as recommended in national guidelines.⁷ This finding should be addressed following the inspection.

Concerns relating to parallel streaming of paediatric presentations to the department were raised by staff in the emergency department. All paediatric patients presented to the main emergency department. If identified as a risk of COVID-19, children

were immediately isolated and assessed. Inspectors were informed that current paediatric staffing resources could not enable defined parallel streaming for paediatric patients. The designated waiting area for paediatrics was relatively small, limiting the numbers that could wait at any one time when minimum physical distancing was applied. Inspectors were informed that this concern was escalated to hospital management and should be reviewed post this inspection.

Surgical 1 Ward

Surgical 1 Ward was the designated inpatient ward comprising 23 beds including four single rooms with ensuite toilet and shower facilities. One of the four-bedded rooms had been upgraded with a negative pressure ventilation system. There were two beds in the room and facilities supported patient ventilation if required. This room was under the clinical governance of the intensive care unit. Patients requiring isolation on the ward were appropriately isolated at the time of the inspection.

Overall, the ward was generally found to be clean. However, some wear and tear was observed by the inspector on surfaces such as floor covering and doors.

Hospital management informed inspectors that medical teams were assigned to the ward which helped to limit the foot fall on a day-to-day basis.

It is recommended that the number of healthcare workers caring for patients with possible or confirmed COVID-19 patients should be minimised where possible.⁶ On the day of the inspection, the inspector found that there was potential crossover of staff between COVID-19 and non COVID-19 patients. In addition, household staff were designated to the whole ward. Discussions with staff indicated that a multi task attendant had dual roles of catering and cleaning duties within one shift on that day. The ward manager stated that in general, these roles were solely dedicated to either catering or cleaning. Shared duties as described were far from ideal particularly in the context of a designated COVID-19 ward. Processes in place should reviewed following this inspection to ensure that potential cross-transmission risks are limited.

Medical 2 Ward

Medical 2 Ward was a 29 bedded ward. There were four single rooms each with ensuite toilet and shower facilities. One of the single rooms was a pressurised isolation room with controlled ventilation and an ante room. The ante room was used for the donning and doffing of personal protective equipment.

The ward was observed to be generally clean with a few exceptions. Some general wear and tear on surfaces was noted. For example, some floor covering and worktop surfaces were visibly worn.

Overall, lack of storage was identified as an issue in both areas inspected resulting in the storage of equipment such as commodes, patient hoists and wheelchairs in patient bathrooms. Stock levels and the ordering of supplies should be reviewed to ensure that supplies and equipment can be appropriately stored on the ward.

The inspector found the area designated for the preparation of intravenous medications was very limited and was exposed to splash contamination from the adjacent hand wash sink. This should be a focus of improvement.

Inspectors noted that due to the lack of capacity on the day, patients were accommodated in treatment rooms on both areas inspected.

Regular environmental hygiene audits were undertaken in both areas inspected. Hospital management informed inspectors that an electronic hygiene audit system had recently been introduced to the hospital but was not yet embedded in practice. The audit tool measured compliance with 11 elements and facilitated analysis and trending of results. It also facilitated rapid generation of reports and direct communication of issues identified to the person responsible for ensuring completion of corrective action.

Compliance with elements assessed in these were generally good. For example, Surgical 1 ward achieved 94.3% compliance in an audit conducted on 20 October 2020. Medical 2 Ward was 83.6% compliant in an audit undertaken on 5 November 2020. Maintenance issues impacted compliance relating to the general environment and storage issues identified by the inspector were also identified in this audit report.

Aspergillosis

Hospital management informed inspectors that there were three capital projects ongoing at the time of the inspection. Inspectors found infection prevention and control documentation relating to risk assessment and monitoring was not available to view. The hospital needs to provide greater assurance that appropriate controls are in place to minimise potential risks to vulnerable patients of invasive aspergillosis and these controls are regularly monitored through the duration of the building works.

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

Judgment Standard 2.7: Substantially compliant

- Some improvement was required in the management of equipment to ensure that patient equipment and household equipment is adequately cleaned and stored after use.

Equipment hygiene

Overall, equipment in the both areas inspected was generally clean, however there were some exceptions. For example, improvements were required in the cleaning of integrated sharps trays, a commode and a household cleaner's trolley on Surgical 1 Ward. On Medical 2 Ward, red stains were noted on a blood gas analyser which was located on the main corridor of the ward.

A green tagging system was in use on both wards inspected to identify equipment that had been cleaned. Inspectors found that this system was not consistently applied on Surgical 1 Ward however, patient equipment cleaning check lists were consistently completed on records reviewed. Trended audit results for patient equipment from 19 August to 19 November 2020 demonstrated a hospital wide compliance level of 91.5%. Surgical 1 Ward achieved 94.3% and Medical 2 Ward achieved 96.3 % average compliance over three audits conducted within that period.

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: Compliant

Regional Hospital Mullingar had systems in place for the proactive identification, assessment, mitigation, monitoring and reporting of infection risks in line with the service's risk management policy.

Risk Management

Inspectors reviewed the corporate risk register and found evidence of regular review. A specific COVID-19 related risk register was also in place. The hospital risk register was reviewed and discussed at the Clinical Incident Meetings.

Infection prevention and control risks articulated to inspectors were consistent with risks documented on these risk registers. Risks recorded on the risk register included the following:

- delays in patient care due to impact of COVID-19
- space and capacity issues due to limited footprint
- staff resource deficiencies across multiple disciplines
- infrastructural issues in the intensive care unit such as inadequate bed spacing, lack of isolation facilities and poor infrastructure
- lack of isolation rooms at the hospital.

Incident Reporting

Hospital management informed inspectors that it was hospital policy to report incidents of healthcare-associated infection and non-compliance with infection prevention and control guidelines on the national incident management system (NIMS).⁺⁺⁺ Inspectors were informed that ward managers were responsible for reporting health care associated infections in their area. Documentation reviewed demonstrated that infection prevention and control incidents reported were tracked and trended on a monthly basis by the infection prevention and control team.

Clinical incidents were discussed at the Clinical Incident Management meetings and as a standing agenda item on the Healthcare Associated Infections and Antimicrobial Stewardship Committee meetings.

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: Substantially compliant

- An outbreak report for outbreaks experienced in March and April 2020 were not as yet available at the time of this inspection.

Measures to Prevent and Control the Risk of COVID-19

In addition to the changes to governance and leadership already mentioned, the hospital had implemented multiple measures as part of its COVID-19 preparedness plan. These included but were not limited to:

⁺⁺⁺ 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.

- SARS-CoV-2^{***} surveillance testing for all patients on admission
- established a hospital contact tracing team
- created SARS-CoV-2 testing centre on site
- commenced in house laboratory testing for SARS-CoV-2 on 27 March 2020
- expanded laboratory capacity (500 + tests per week) to facilitate fast turnaround times (2 hours) enabling appropriate patient placement
- provided infection prevention and control support and guidance to local nursing homes
- upgraded facilities in preparation for COVID-19 including installation of negative pressure ventilation systems in endoscopy, theatre, labour ward and day ward
- monthly communication on updates from general manager to hospital staff
- staff redeployment had taken place in order to facilitate local testing and tracing capacity
- visiting restrictions
- development of COVID-19 infection prevention and control check list
- COVID-19 discharge checklist for transfers to residential care facilities confirming pre-discharge SARS-CoV-2 test was completed and documenting appropriate infection prevention and control precautions to be implemented.

The list of measures outlined above demonstrated that much work had been done by the hospital to prepare for COVID-19. Notable improvement was made in the hospital's testing capacity with the purchase of new equipment enabling batch tests of up to 200 tests per run. Hospital surveillance data reviewed by inspectors demonstrated that a total of 15,893 COVID-19 tests were completed on site up to 18 November 2020.

Management of COVID-19 Outbreaks

Data provided to inspectors indicated that up to 18 November 2020, 148 hospital patients and 82 staff had COVID-19 detected. The hospital had experienced its first COVID-19 outbreak on 13 March 2020 which extended into April. In addition to the implementation of national guidelines and provision of enhanced infection prevention and control training to staff, the hospital established a COVID-19 swabbing centre onsite and a local contact tracing team. An outbreak report was not available for review for these outbreaks.

Following the initial outbreaks there was a gap before the next outbreaks were experienced in October and November 2020. Minutes from the outbreak control team meetings held from 25 September up to the 4 November 2020 were reviewed

^{***} The virus, which causes COVID-19 infection, is called SARS-CoV-2 and belongs to the broad family of viruses known as coronaviruses.

by inspectors and indicated outbreaks involving low single figures had occurred in the following clinical areas over a three month period:

- Medical 1 Ward 15 September
- Medical 3 Ward 8 October
- Medical 2 Ward 16 October.

Surgical 1 Ward 28 October Minutes reviewed identified a mixture of potential onward transmission between staff members in one outbreak, community transmission and healthcare associated transmission in the others. Appropriate measures were implemented and included:

- Identification of close contacts
- SARS Cov2 testing of all healthcare workers as required
- Deep cleaning of affected clinical areas
- Ward closed to admissions
- Staff monitoring for symptoms
- Communication to all departments on adhering to national guidelines
- Walkarounds by director of nursing and infection prevention and control nurse to observe compliance with infection prevention controls
- Clinical placements of student nurses temporarily suspended.

Potential contributing factors identified for staff to staff transmission were documented as follows whereby in some cases healthcare workers were found to be:

- sharing multi-occupancy accommodation
- travelling to and from work in the same vehicle
- socialising together
- travelling outside county boundaries during level three restrictions
- breaching physical distancing guidelines during rest breaks
- not fully adhering to wearing surgical masks onsite.

The learning gleaned from these outbreaks highlights the importance of adherence to national guidelines and infection prevention and control protective measures. There is a risk as the pandemic continues that familiarity and complacency may ensue leading to individuals dropping their guard to what is a highly transmissible infection. It is therefore more important than ever that hospitals ensure rigorous adherence to available national guidance and application of recommended infection prevention and control practices to prevent onward transmission and ensure healthcare workers, patients and members of the public are protected.

3.0 Conclusion

Overall this inspection identified that Regional Hospital Mullingar was compliant with two of the six of the *National Standards for the prevention and control of healthcare-associated infections in acute healthcare services* assessed. A judgment of substantially compliant was made against three standards and partially compliant against one standard.

Leadership, Governance and Management

Inspectors found that there were clear lines of accountability and responsibility in relation to governance and management arrangements for the prevention and control of healthcare-associated infection at the hospital. Additional arrangements were established to ensure the hospital had adequate plans to prepare and oversee the hospital's COVID-19 response. Inspectors were satisfied that national guidelines on COVID-19 were reviewed and implemented at the hospital and compliance was monitored.

Notable efforts had been made relating to hospital infrastructure to facilitate the implementation of parallel pathways to ensure that patients at risk of COVID-19 were rapidly identified on entry to the hospital and appropriately managed. As a consequence, inpatient capacity has decreased which has created delays in throughput through the emergency department which traditionally worsen during the winter season. Additional bed capacity due to be finalised in January 2021 should help. However, hospital management should continue to work towards ensuring patient flow through the emergency department, thereby reducing the need to board patients identified for admission.

Workforce

Inspectors found that the hospital had acted to address resource deficiencies experienced by the infection prevention and control team at the beginning of the pandemic. Additional resources required had been identified and business cases submitted or were in preparation to be submitted. Efforts to progress recruitment should be further advanced.

Inspectors noted the infection prevention and control team had faced sizable challenges and additional workload since March 2020 in achieving and implementing changes made to date. The team continued to work to ensure compliance with infection prevention and control practices at the hospital at a time when guidelines were changing at a rapid pace which reflected new information and learning gained as the pandemic progressed. Some improvement was required in the documentation of infection prevention and control training provided to staff.

Effective Care & Support

Overall patient equipment and the environment in the wards inspected were generally clean with some exceptions. Maintenance issues were observed in both areas inspected and there was a general lack of storage identified.

Hospital management should review the areas demarcated for the placement of trolleys in the emergency department to ensure compliance with physical distancing guidelines.

In line with national guidelines, limiting exposure of staff to COVID-19 is an important measure and therefore, where possible, designated staff should be assigned to care for patients confirmed COVID-19 infection. Inspectors found that greater assurance on the processes to limit staff crossover was required on the ward designated for COVID-19 patients. This should include regular review of staff levels and allocation ensuring adequate staff resources are available to meet the needs of the patients and allow sufficient time to adhere to the necessary infection prevention and control precautions.

Inspectors found that there was scope to improve the input by the infection control team relating to risk assessment and documentation of aspergillosis controls required during capital building works ongoing at the hospital.

Safe care and support

Systems were in place to identify and manage risk in relation to the prevention and control of healthcare-associated infections. Overall, senior management had good oversight of the infection prevention and control risks on the corporate risk register.

The hospital had experienced several small COVID-19 outbreaks since early March. It was clear that the hospital had reviewed potential contributory factors to the outbreaks and had implemented national infection prevention and control guidelines and recommendations as they were updated over time. Learning from the outbreaks were recorded and appropriate actions taken.

Any lowering of guard or relaxation of protective precautions can potentially create a potential risk of transmission for this opportunistic highly transmissible SARS-Cov-2 virus. Therefore if further outbreaks are to be prevented, close monitoring, constant vigilance and strict adherence to infection prevention and control guidelines and interventions is required for the duration of the COVID-19 pandemic.

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.

4.0 References

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