Report of the unannounced inspection of maternity services at Sligo University Hospital, 13 March and 14 March 2019

Health Information and Quality Authority

An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Report of the unannounced inspection of maternity services at Sligo University Hospital

Monitoring programme against the *National Standards for Safer Better Maternity Services* with a focus on obstetric emergencies

Dates of inspection: 13 March and 14 March 2019

Safer Better Care

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 and Youth Affairs, 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

The *National Standards for Safer Better Maternity Services*[1] were published by HIQA in 2016. Under the Health Act 2007,[2] HIQA's role includes setting such standards in relation to the quality and safety of healthcare and monitoring compliance with these standards.

HIQA commenced a programme of monitoring against the *National Standards for Safer Better Maternity Services*, with a focus on obstetric emergencies, in maternity hospitals and in maternity units in acute hospitals in May 2018. The *National Standards for Safer Better Maternity Services* will be referred to as the National Standards in this report.

For the purposes of this monitoring programme, obstetric emergencies are defined as pregnancy-related conditions that can present an immediate threat to the well-being of the mother and baby in pregnancy or around birth. HIQA's focus on such emergencies, as we monitor against the National Standards, intends to highlight the arrangements all maternity units have in place to manage the highest risks to pregnant and postnatal women and newborns when receiving care.

Pregnancy, labour and birth are natural physiological states, and the majority of healthy women have a low risk of developing complications. For a minority of women, even those considered to be at low-risk of developing complications, circumstances can change dramatically prior to and during labour and delivery, and this can place both the woman's and the baby's lives at risk. Women may also unexpectedly develop complications following birth, for example, haemorrhage. Clinical staff caring for women using maternity services need to be able to quickly identify potential problems and respond effectively to evolving clinical situations.

The monitoring programme assessed if specified[3] National Standards in relation to leadership, governance and management had been implemented. In addition, maternity hospitals and maternity units were assessed to determine if they were resourced to detect and respond to obstetric emergencies which occurred, and explored if clinical staff were supported with specialised regular training to care for women and their newborn babies.

This monitoring programme also examined if specified[3] National Standards in relation to effective care and support and safe care and support had been implemented. The programme assessed whether or not maternity hospitals and maternity units could effectively identify women at higher risk of complications in the first instance. It also examined how each maternity hospital or maternity unit provided or arranged for the care of women and newborns in the most appropriate clinical setting. The programme looked at how risks in relation to maternity services were managed and how the service was monitored and evaluated.

In monitoring against the *National Standards for Safer Better Maternity Services,* with a focus on obstetric emergencies, HIQA has identified three specific lines of enquiry (LOE). These lines of enquiry represent what is expected of a service providing a consistently safe, high-quality maternity service, particularly in its response to obstetric emergencies. These lines of enquiry have been used by HIQA to identify key relevant National Standards for assessment during this monitoring programme.

All three lines of enquiry reflect a number of themes of the National Standards. For the purposes of writing this report, compliance with the National Standards is reported in line with the themes of the National Standards. The lines of enquiry for this monitoring programme are listed in Figure 1.

Figure 1 – Monitoring programme lines of enquiry

LOE 1:

The maternity unit or maternity hospital has formalised leadership, governance and management arrangements for the delivery of safe and effective maternity care within a maternity network.*

LOE 2:

The maternity service has arrangements in place to identify women at higher risk of complications and to ensure that their care is provided in the most appropriate setting.

The maternity service has arrangements in place to detect and respond to obstetric emergencies and to provide or facilitate ongoing care to ill women and or their newborn babies in the most appropriate setting.

LOE 3:

The maternity service at the hospital is sufficiently resourced with a multidisciplinary workforce that is trained and available to detect and respond to obstetric emergencies at all times.

A further aspect of HIQA's monitoring programme was to examine progress made across the maternity services to develop maternity networks. The National Standards support the development of maternity networks in Ireland.

* Maternity Networks are the systems whereby maternity units and maternity hospitals are interconnected within hospital groups to enable sharing of expertise and services under a single governance framework.

Further information can be found in the *Guide to HIQA's monitoring programme against the National Standards for Safer Better Maternity Services, with a focus on obstetric emergencies* [3] which is available on HIQA's website: www.hiqa.ie

1.1 Information about this inspection

Sligo University Hospital is a statutory hospital which is owned and managed by the Health Service Executive (HSE). The hospital is part of the Saolta University Health Care Group.[†] The maternity unit is co-located with the general hospital. The hospital provides a range of general and specialist maternity services designed to meet the needs of women with normal, medium and high risk pregnancies. There were 1,356 births at the hospital in 2018.

To prepare for this inspection, inspectors reviewed a completed self-assessment tool[‡] and preliminary documentation submitted by Sligo University Hospital to HIQA in June 2018. Inspectors also reviewed information about this hospital including previous HIQA inspection findings; other information received by HIQA and published national reports. Information about the unannounced inspection at the hospital is included in the Table 1.

Table 1: Inspection details

Dates	Times of inspection	Inspectors
13 March 2019	09:30hrs to 19:15hrs	Denise Lawler Aileen O' Brien Joan Heffernan Emma Cooke
14 March 2019	07:45hrs to 15:30hrs	

During this inspection, the inspection team spoke with the following staff at the hospital:

- representatives of the hospital's Executive Management Team; the General Manager, Director of Midwifery and the Clinical Director, Quality and Safety Directorate, Saolta University Health Care Group
- the hospital's lead consultants in each of the clinical specialities of obstetrics, anaesthesiology and paediatrics.

[†] The Saolta University Health Care Group comprises of seven hospitals – Letterkenny University Hospital, Sligo University Hospital, Mayo University Hospital, Roscommon University Hospital, Portiuncula University Hospital, Ballinasloe, Merlin Park Hospital and University Hospital Galway.
[‡] All maternity hospitals and maternity units were asked to complete a self-assessment tool designed by HIQA for this monitoring programme.

In addition, the inspection team visited a number of clinical areas which included the:

- Emergency Department where pregnant and postnatal women who presented to the hospital with pregnancy-related and postnatal concerns were assessed
- Early Pregnancy and Fetal Assessment Unit where women who presented to the hospital during pregnancy were assessed
- Emergency Gynae Assessment Unit in the Surgical Gynaecology Ward where women who presented to the hospital during pregnancy were assessed
- Labour Ward where women were cared for during labour and birth
- Intensive Care Unit where women who required additional monitoring and support during pregnancy and post birth were cared for
- Operating Theatre Department where women underwent surgery, for example in the case of caesarean section
- Maternity Ward where women were cared for during pregnancy and in the immediate postnatal period
- Special Care Baby Unit where babies requiring additional monitoring and support were cared for.

Information relevant to the monitoring programme was obtained by speaking with midwifery and nursing managers and staff midwives and nurses in the clinical areas identified above and doctors working in the maternity service. In addition, during the inspection, inspectors observed the clinical working environment and reviewed hospital documentation and data pertaining to the maternity service.

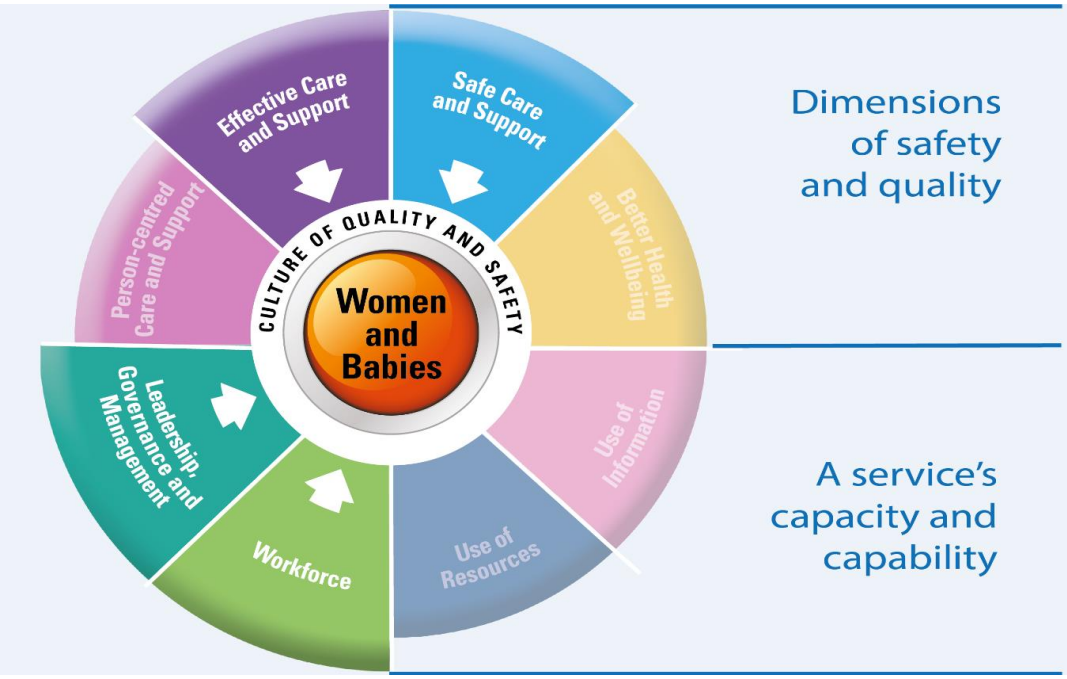
HIQA would like to acknowledge the cooperation of the hospital management team and all staff who facilitated and contributed to this unannounced inspection.

1.2 How inspection findings are presented

This inspection was focused specifically on maternity services and the systems in place to detect and respond to obstetric emergencies, as outlined in the published Guide[3] to this monitoring programme. Therefore, as part of this inspection programme, HIQA monitored compliance with some, but not all of the National Standards. Report findings are based on information provided to inspectors during an inspection at a particular point in time.

The National Standards themes which were focused on in this monitoring programme are highlighted in Figure 2. Inspection findings are grouped under the National Standards dimensions of Capacity and Capability and Safety and Quality.

Figure 2: The four National Standard themes which were focused on in this monitoring programme



Based on inspection findings, HIQA used four categories to describe the maternity service's level of compliance with the National Standards monitored.

These categories included the following:

- **Compliant:** A judgment of compliant means that on the basis of this inspection, the maternity service is in compliance with the relevant National Standard.
- **Substantially compliant:** A judgment of substantially compliant means that the maternity service met most of the requirements of the relevant National Standard, but some action is required to be fully compliant.
- **Partially compliant:** A judgment of partially compliant means that the maternity 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.
- **Non-compliant:** A judgment of non-compliant means that this inspection of the maternity service has identified one or more findings which indicate that the relevant National Standard has not been met, and that this deficiency is such that it represents a significant risk to patients.

Inspection findings will be presented in this report in sections 2 and 3. Section 2 outlines the inspection findings in relation to capacity and capability and Section 3 outlines the inspection findings in relation to the dimensions of safety and quality. Table 2 shows the main report sections and corresponding National Standards, themes and monitoring programme lines of enquiry.

Table 2: Report sections and corresponding National Standard themes and inspection lines of enquiry

Report section	Themes	Standards	Line of enquiry
Section 2: Capacity and Capability	Leadership, Governance and Management	5.1, 5.2, 5.3, 5.4, 5.5, 5.8, 5.11	LOE 1
	Workforce	6.1, 6.3, 6.4	LOE 3
Section 3: Dimensions of Safety and Quality	Effective Care and Support	2.1, 2.2, 2.3, 2.4, 2.5, 2.7, 2.8.	LOE 2
	Safe Care and Support	3.2, 3.3, 3.4, 3.5	

2.0 Capacity and Capability

Inspection findings in relation to capacity and capability will be presented under the themes of the National Standards for Safer Better Maternity Services of Leadership, Governance and Management and Workforce.

This section describes arrangements for the leadership, governance and management of the maternity 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 will also describe progress made in the establishment of a maternity network from the perspective of this hospital. This section also describes the way the hospital was resourced with a multidisciplinary workforce that was trained and available to deal with obstetric emergencies 24-hours a day.

During this inspection, inspectors looked at 10 National Standards in relation to leadership, governance and management and workforce. Of these, Sligo University Hospital was compliant with six National Standards, substantially compliant with three National Standards and non-compliant with one National Standard.

Inspection findings leading to these judgments and key findings in relation to the hospital's level of compliance with the National Standards monitored during this inspection are included in Table 3 and Table 4 within this section.

2.1 Leadership, Governance and Management

Leadership, governance and management refers to the arrangements put in place by a service for clear accountability, decision-making and risk management as well as meeting its strategic and statutory obligations.

A well-governed maternity service is clear about what it does, how it does it, and is accountable to the women who use the services and the people who fund and support it. Good governance arrangements acknowledge the interdependencies between organisational arrangements and clinical practice and integrate these to deliver safe, high-quality care.

Inspection findings in relation to leadership, governance and management are described next.

Inspection findings

2.1.1 Maternity service leadership, governance and management

Maternity network

At the time of inspection HIQA found that Sligo University Hospital did not function as part of a managed clinical maternity network under a single governance structure, as recommended in the National Maternity Strategy. However, HIQA does acknowledge the preparatory work advanced by the Saolta University Health Care Group. The hospital group were through the establishment of the women's and children's managed clinical and academic network progressing with the implementation of an integrated governance structure for maternity services.

In the interim, while the implementation of the managed clinical network was being progressed, the hospital group had established a management structure called the Women's and Children's Directorate. The Directorate led by a Clinical Director, met every month, reported to and were accountable to the Chief Clinical Director of the hospital group. In each of the five maternity units in the hospital group there were Associate Clinical Directors appointed on a rotational basis. The Associate Clinical Director for Sligo University Hospital represented the hospital at Directorate level and provided clinical oversight at the hospital. The hospital's clinical performance, audit findings and learning from the implementation of quality improvement were shared and discussed at Directorate meetings.

The Women's and Children's Directorate had established and implemented a maternity Serious Incident Management Team that met every month to review serious incidents, serious reportable events, timelines relating to closing out reviews and recommendations to enhance women and children's services within the Directorate. The Women's and Children's Directorate Serious Incident Management Team was a multidisciplinary team that comprised of representatives of the core disciplines from the five maternity units and relevant persons from the hospital group. Members of this team also attended the larger hospital group Serious Incident Management Team meeting where incidents and events from all seven hospitals within the hospital group were reviewed and considered.

Sligo University Hospital implemented policies, procedures and guidelines developed at hospital group level. A hospital group multidisciplinary policies, procedures, guidelines and pathway committee, comprising of staff from the five maternity units in the hospital group, met every month to develop and standardise clinical policies, procedure, guidelines and pathways in maternity, neonatal and gynaecology for use across the hospital group. Examples of guidelines relevant to this monitoring programme used across the hospital group included electronic fetal monitoring, birth after caesarean section and resuscitation of the newborn.

The implementation of national recommendations from reviews and reports in relation to maternity services were overseen by the Maternity Services Strategic Group at hospital group level and the hospital management team at hospital level.

At the time of inspection, inspectors were informed that transfer and referral protocols for Sligo University Hospital were being formalised at hospital group level so that a standardised process governed the transfer of a woman or a baby who required care from another service or in another hospital, either within or outside the hospital group. The hospital group was working towards expanding neonatal service capacity across the group by progressing the development of neonatal services at University Hospital Galway. It was anticipated that this expansion of neonatal services would facilitate the transfer of babies requiring a higher level of neonatal care from Sligo University Hospital to University Hospital Galway.

Following this inspection, Saolta University Health Care Group now needs to complete the implementation of a managed maternity network in order to facilitate a single governance framework in relation to maternity services.

Sligo University Hospital leadership, governance and management

HIQA found that Sligo University Hospital had effective leadership, governance and management structures to ensure the quality and safety of the maternity services provided at the hospital.

The General Manager at the hospital had overall managerial responsibility and executive accountability for the maternity service at the hospital and reported to the Chief Executive Officer of Saolta University Health Care Group. The General Manager attended performance meetings, held every month with the hospital group management team. The Executive Management Team, led by the General Manager, were responsible for ensuring that services at the hospital were delivered within the clinical and corporate governance framework established as part of the hospital group. Membership of the team included the Associate Clinical Director for the Women's and Children's Directorate and the Director of Midwifery. The team met every two weeks to monitor and review operational issues, clinical outcomes, service user feedback, patient safety incidents and progress made on the implementation of quality improvement initiatives.

Clinical oversight for maternity services in the hospital was overseen by a local management structure, the Women's and Infant's Directorate team. This multidisciplinary team met every month and were responsible for the operation and management of the obstetric and gynaecology speciality. The Women's and Infant's Directorate team were accountable to the Executive Management Team.

Clinical leads, known as Special Co-ordinators in the specialities of obstetrics, anaesthesiology and paediatrics were appointed on a rotational basis in Sligo University Hospital. These clinicians provided clinical oversight of their specialty, were responsible for the operation and management of the services within their speciality and for the training and supervision of non-consultant hospital doctors. The Director of Midwifery was responsible for the organisation and management of midwifery services. At the time of inspection the position of Special Co-ordinator in obstetrics had been recently vacated and measures were being taken by the hospital's General Manager and Executive Management Team to appoint a person to the role.

The Quality and Safety Executive Committee had oversight of quality and safety in Sligo University Hospital. This multidisciplinary committee was chaired by a consultant in emergency medicine. This committee was responsible for the development, implementation and evaluation of quality and safety including maternity services in the hospital. The committee met every four to six weeks. It had oversight of the hospital's performance and provided assurance on known risks to the hospital's Executive Management Team. This committee was operationally accountable to the Executive Management Team.

Recommendations arising from the hospital group Maternity Services Strategic Group and any serious incident reviews at the hospital were implemented by the multidisciplinary local maternity implementation group, which met every two months. This group was also responsible for the implementation of national clinical guidelines, policies, procedures, guidelines and care pathways developed by the hospital group. The local maternity implementation group reported to the Women's and Infant's Directorate team and Executive Management Team at Sligo University Hospital and to the Maternity Services Strategic Group at hospital group level.

All seven hospitals[§] in the Saolta University Health Care Group had an integrated electronic system for recording incidents, complaints and audits. This system was also used to manage policies, procedures and guidelines.

The hospital had a statement of purpose that detailed the specific services provided at the hospital. It included the hospital's vision, mission statement, guiding values and information relating to the organisational structure of the hospital. To be compliant with National Standards, this statement of purpose should be publicly available. The hospital group had an operational plan that set out how the plans contained within the hospital group's strategic plan would be implemented across the services.

[§] The seven hospitals in the Saolta University Health care Group are Letterkenny University Hospital, Sligo University Hospital, Mayo University Hospital, Roscommon University Hospital, Portiuncula University Hospital, Ballinasloe, Marlin Park Hospital and University Hospital Galway.

Documentation reviewed by inspectors identified how the hospital had received funding to employ four additional midwives for the community services, one ultrasonographer and a Clinical Midwife Specialist in perinatal mental health.

Overall, HIQA found that Sligo University Hospital had formalised leadership, governance and management arrangements in place with clearly defined reporting structures within the maternity service and through the Saolta University Health Care Group to ensure the quality and safety of the services provided at the hospital. However, a vacancy in the key leadership position of Special Co-ordinator in obstetrics could significantly impact on the overall organisation, management and strategic direction of obstetric services in the hospital in the short term. This position should be filled as soon as possible so that a named person is responsible for the organisation and management of obstetric services at the hospital.

Table 3 on the following pages lists the National Standards relating to leadership, governance and management focused on during this inspection and key findings in relation to the hospital's level of compliance with the National Standards monitored during this inspection.

Table 3: HIQA's judgments against the National Standards for Safer Better Maternity Services for leadership, governance and management that were monitored during this inspection
Standard 5.1 Maternity service providers have clear accountability arrangements to achieve the delivery of safe, high-quality maternity care. **Judgment:** Compliant
Standard 5.2 Maternity service providers have formalized governance arrangements for assuring the delivery of safe, high-quality maternity care. **Key findings:** Maternity network arrangements, with a single governance structure, not formalised at time of inspection. **Judgment:** Substantially compliant
Standard 5.3 Maternity service providers maintain a publicly available statement of purpose that accurately describes the services provided to women and their babies, including how and where they are provided. **Judgment:** Compliant
Standard 5.4 Maternity service providers set clear objectives and have a clear plan for delivering safe, high-quality maternity services. **Judgment:** Compliant
Standard 5.5 Maternity service providers have effective management arrangements to support and promote the delivery of safe, high-quality maternity services. **Key findings:** At the time of on-site inspection the hospital did not have a lead consultant (Special Co-ordinator) in obstetrics that had overall responsibility for and oversight of the organisation and management of obstetric services. **Judgment:** Substantially compliant
Standard 5.8 Maternity service providers systematically monitor, identify and act on opportunities to improve the safety and quality of their maternity services. **Judgment:** Compliant

Table 3: HIQA's judgments against the National Standards for Safer Better Maternity Services for leadership, governance and management that were monitored during this inspection

Standard 5.11 Maternity service providers act on standards and alerts, and take into account recommendations and guidance issued by relevant regulatory bodies.

Judgment: Compliant

2.2 Workforce

Effective maternity services need to ensure that there are sufficient staff available at the right time, with the right skills to deliver safe, high-quality care. Training specific to maternity care is required to enable staff to acquire the skills and knowledge to detect and respond to obstetric emergencies. This inspection looked at the number of nursing and midwifery staff who provided care to women and babies using the maternity service. The inspection also looked at the number and grade of medical staff who worked in the specialities of obstetrics, paediatrics and obstetric anaesthesiology at the hospital. Inspectors also reviewed the uptake and provision of training and education of staff relevant to obstetric emergencies.

Inspection findings in relation to workforce are described next.

Inspection findings

2.2.1 Midwifery and nursing staffing

The maternity unit, including Special Care Baby Unit, were funded for 61.61 whole time equivalent (WTE)[**] permanent midwife positions. Inspectors were informed that the maternity unit, including Special Care Baby Unit, had 59.61 WTE midwife positions filled on a permanent basis. The hospital did not employ agency midwifery staff. If needed, existing midwifery staff worked extra shifts in the unit. An experienced midwife shift leader was in place for each shift in the Labour Ward during and outside of core working hours.[††] However, when activity was high shift leaders took a caseload so they were not always supernumerary. Inspectors were informed that staffing of the assessment unit outside core working hours was challenging because of the small number of midwives rostered to work in that area. The Special Care Baby Unit met the recommended nursing ratios of 1:1 in intensive care, 1:2 in higher dependency care and 1:4 in special care. Inspectors were informed that women in labour in the Labour Ward had one to one support from a midwife.

Outside core working hours, the on-call nursing team comprising of three nurses were rostered to theatre from 20:00hrs to 08:00hrs to manage emergency cases for both general surgery and obstetrics. If a second nursing team was required for the operating theatre out-of-hours, nursing administration deployed staff from the Intensive Care Unit or from other areas in the hospital. Internal rotation of midwifery staff around the different clinical areas of the maternity unit ensured midwives deployed to areas of high activity when required where familiar with those areas. Staff who spoke with inspectors were clear about their role and responsibilities, and the

[**] Whole-time equivalent: one whole-time equivalent employee is an employee who works the total number of hours possible for their grade. WTEs are not the same as staff numbers as many staff work reduced hours.
[††] For the purpose of this monitoring programme core working hours are considered to be 09.00am-05.00pm.

reporting structure to be used if they had any concerns or issues that would impact on the provision of safe, high-quality care.

Specialist support staff

Sligo University Hospital, in line with National Standards, offered fetal ultrasound scans during the first and second trimester of pregnancy to all pregnant women attending the hospital. This is discussed further in section 3.1.1. of this report.

The hospital had one Advanced Midwife Practitioner[‡‡] who worked on supported[§§] and assisted care[***] pathways as described in the National Maternity Strategy, providing care for normal risk women during pregnancy, birth and the postnatal period.

The hospital employed a neonatal resuscitation trainer one day per week to provide training and support in neonatal resuscitation to medical, midwifery and nursing staff. At the time of inspection the hospital was in the process of recruiting a perinatal mental health midwife.

The hospital did not have a Clinical Skills Facilitator to plan, co-ordinate and conduct regular clinical training sessions in the clinical areas so as to help nurses and midwives maintain essential clinical skills and competencies. HIQA notes that the hospital plans to recruit and appoint a Clinical Skills Facilitator in 2019. In advance of this appointment, the hospital should work to increase the frequency of clinical skills and drills conducted in key clinical areas in the maternity unit.

2.2.2 Medical staff

Medical staff availability

Consultants in the specialties of obstetrics, anaesthesiology and paediatrics were employed on permanent or locum contracts. The use of locum and agency medical staff was kept to a minimum. The majority of consultants in obstetrics, anaesthesiology and paediatrics, were registered as specialists in their speciality with the Medical Council in Ireland. One consultant was not. The hospital was staffed with

[‡‡] An Advanced Midwife Practitioner is defined by the Nursing and Midwifery Board of Ireland (NMBI) as a registered midwife who engage in continuing professional development and clinical supervision to practise as expert practitioners and demonstrate exemplary clinical leadership.
[§§] This care pathway is intended for normal-risk women and babies, with midwives leading and providing care within a multidisciplinary framework. Responsibility for the co-ordination of a woman's care is assigned to a named Clinical Midwife Manager, and care is provided by the community midwifery team, with most antenatal and postnatal care being provided in the community and home settings. The woman can exercise a choice with her healthcare professional with regard to the birth setting, which may be in an Alongside Birth Centre in the hospital, or at home.
[***] The Assisted Care Pathway is intended for mothers and babies considered to be at medium-risk, and for normal-risk women who choose an obstetric service. Responsibility for the co-ordination of a woman's care is assigned to a named obstetrician, and care is provided by obstetricians and midwives, as part of a multidisciplinary team. Care is provided across both the hospital and community, and births take place within a hospital setting in a Specialised Birth Centre. Postnatal care starts in the hospital and transitions to the community on discharge from hospital.

non-consultant hospital doctors at specialist registrar, registrar and senior house officer grade in the specialties of anaesthesiology and paediatrics, and registrar and senior house officer grade in the speciality of obstetrics. Non-consultant hospital doctors were available on site to provide care to women and babies during and outside of core working hours. Rapid response teams were available 24 hours a day, seven days a week to attend for obstetric emergencies, neonatal emergencies and cardiac arrests.

Obstetrics

The hospital had approval for four WTE permanent consultant obstetrician positions. At the time of inspection, three consultant obstetrician positions were permanently filled and one was filled by a locum consultant. Inspectors were informed that the hospital was recruiting one additional consultant obstetrician. HIQA acknowledges the support Sligo University Hospital provided to locum consultant staff to attain the requisite skills and competencies to be eligible for registration on the specialist register with the Medical Council in Ireland. This support included the rotation of locum consultant staff to a larger tertiary hospital to gain experience.

At the time of the inspection, a consultant obstetrician was rostered to be on call for the Labour Ward Monday to Friday, during core working hours. This person was not free from other duties as they covered outpatient clinics but they did not have an allocated operating theatre list when on call for the Labour Ward. A rota of two non-consultant hospital doctors in obstetrics, one at registrar grade and one at senior house officer grade was in place in the Labour Ward 24 hours a day, seven days a week. The hospital held external antenatal clinics in Manorhamilton every Wednesday and Ballyshannon, and Carrick on Shannon every Thursday.

Outside core working hours the hospital had a rota where one consultant obstetrician was on call from outside the hospital and two non-consultant hospital doctors, one at senior house officer grade and one at registrar grade were onsite on call. Consultant obstetricians were on call one in every four nights. HIQA is of the view that this level of consultant obstetrician staffing at the hospital should be reviewed to ensure that it enables a sustainable on call rota. The appointment of a fifth consultant obstetrician would help alleviate some of the demands of a 1:4 rota.

Obstetric anaesthesiology

There were sufficient numbers of consultant anaesthesiologists at the hospital to provide a dedicated obstetric anaesthesiology service as recommended in the National Standards. Thirteen WTE consultant anaesthesiologists were employed at the hospital. Almost three quarters (9.5 positions) WTE consultant anaesthesiology positions were permanently filled and the remaining (3.5 positions) WTE were filled by locum consultants. During core working hours an anaesthesiologist was available 24 hours a

day, seven days a week, for emergency work in the Labour Ward.[4] There was also anaesthetic cover immediately available 24 hours, seven days a week to manage any obstetric emergency occurring in the operating theatre.

Outside core working hours the hospital had a rota whereby two consultant anaesthesiologists and two registrars in anaesthesiology were on call for the hospital with responsibility for intensive care, trauma, general and maternity service including the management of obstetric emergencies. The two registrars in anaesthesiology were onsite in the hospital. One registrar was rostered to the Intensive Care Unit and one was rostered to the Operating Theatre Department and Maternity Unit. The two consultant anaesthesiologists were on call from outside the hospital. Consultant anaesthesiologists were on call one in every six nights.

Inspectors were informed that it was practice in Sligo University Hospital for a consultant obstetrician and consultant anaesthesiologist to be present in the Operating Theatre Department for any obstetric emergency case during and outside core working hours.

Paediatrics

Senior clinical decision makers in paediatrics were available in the hospital 24 hours a day, seven days a week. Care of babies in the hospital was shared by four WTE consultant paediatricians. Three consultant paediatrician positions were permanently filled and one was filled by a locum consultant. Outside core working hours the hospital had a rota where one consultant paediatrician was on call from outside the hospital. Consultant paediatricians were on call one in every four nights. HIQA is of the view that this level of consultant paediatric staffing at the hospital should be reviewed to ensure that it enables a sustainable on call rota.

A rota of two non-consultant hospital doctors in paediatrics, one at registrar grade and one at senior house officer grade was in place to provide emergency care and manage neonatal emergencies in the hospital 24 hours a day, seven days a week. HIQA note and commend the proactive practice of rotating non-consultant doctors in paediatrics with limited exposure and experience in intubation to a tertiary maternity hospital where they sustain the necessary skills and competencies needed in intubation.

Medical, midwifery and nursing staff who spoke with inspectors confirmed that all consultants in the speciality of obstetrics, anaesthesiology and paediatrics were accessible during and outside core working hours. Hospital management should consider the sustainability of a 1:4 rota for consultant staff going forward.

2.2.3 Training and education of multidisciplinary staff

Mandatory training requirements

The hospital had defined mandatory training requirements for all midwifery, nursing and medical staff. Medical staff in obstetrics were required to undertake multidisciplinary training in the management of obstetric emergencies every two years and fetal monitoring every year. In addition, medical staff in obstetrics received training in the Irish Maternity Early Warning System and sepsis screening when starting employment in the hospital. All medical staff in obstetrics were expected to attend update sessions and workshops in relation to the Irish Maternity Early Warning System and sepsis when scheduled. Medical staff in paediatrics were required to undertake training in neonatal resuscitation prior to staffing the on call paediatric rota and every two years thereafter.

Midwifery and nursing staff were required to undertake training in neonatal resuscitation and basic adult resuscitation every two years. Midwives were also required to undertake multidisciplinary training in the management of obstetric emergencies every two years and fetal monitoring every year. Nurses in the Special Care Baby Unit were required to undertake training and education relevant to the post in resuscitation and pre-transport stabilisation care of sick babies (S.T.A.B.L.E. programme[†††]) every two years. All nurses and midwives received training in the Irish Maternity Early Warning System and sepsis screening when starting employment at the hospital. All nursing and midwifery staff were expected to attend update sessions and or workshops in relation to the Irish Maternity Early Warning System and sepsis when scheduled. Mandatory training requirements for midwives were clearly identified and documented in the midwifery training passport, a document all midwives working in the hospital maintained.

Uptake of mandatory training

Training records were stored electronically and were accessible by all clinical nurse and midwife managers in the clinical areas inspected. Training records provided to inspectors in relation to fetal monitoring indicated that 72% of midwives and 100% of medical staff in obstetrics were up to date with training in fetal monitoring. A

[†††] The National Neonatal Transport Programme conducts the S.T.A.B.L.E. programme in maternity hospitals nationally. It is an education tool developed for healthcare providers to organise care during post resuscitation/pre-transport stabilisation period. The aim of the programme is to enhance the knowledge and skills of all staff involved in providing care to the sick infant following resuscitation with a focus on Sugar, Temperature, Artificial breathing, Blood pressure, Lab work and Emotional support.

cardiotocographs review meeting was held every month where cardiotocography[‡‡‡] tracings were reviewed.

All medical staff and 96% of midwives were up to date with training in neonatal resuscitation. All nursing staff in the Special Care Baby Unit were up to date with training in neonatal resuscitation. Sixty-seven percent of medical staff were up to date with multidisciplinary training in the management of obstetric emergencies. However, only 20% of midwives were up to date with this training. Ninety-five percent of nurses, 43% of midwives and 64% of medical staff were up to date with training in basic life support.

It is essential that hospital management ensures that staff are facilitated to meet mandatory training requirements in accordance with the National Standards and that the uptake of training by midwifery, nursing and medical staff is documented. Hospital management should ensure that midwifery, nursing and medical staff undertakes mandatory and essential training, appropriate to their scope of practice. During the inspection, inspectors were informed that multidisciplinary training for the management of obstetric emergencies was a key priority being implemented by the hospital in 2019 and plans were in place to provide and increase compliance with this and other training requirements. Multidisciplinary training in obstetric emergencies will be provided in the hospital every two months for the remainder of 2019.

Overall, inspectors found that the hospital was not compliant with standard 6.3 of the National Standards for Safer Better Maternity Services.

Orientation and training of new staff

New staff employed in Sligo University Hospital were provided with a corporate and specialty specific orientation and induction. Inspectors were informed that medical, nursing and midwifery staff were supernumerary for the first two or three weeks which helped them become familiar with the physical infrastructure and layout of the hospital, hospital activity and their speciality. During this period clinical staff completed an informal assessment of competence before being rostered on call or on night duty.

In the Operating Theatre Department, new nursing staff completed a supernumerary period of six weeks. During this time and before they were rostered on call, they had specific learning objectives to be achieved under the supervision of a named mentor. In the Special Care Baby Unit, new nursing staff was supernumerary for the first three

‡‡‡ Cardiotocography: an electronic means of recording the fetal heart beat and the uterine contractions during pregnancy. A cardiotocograph machine produces a trace known as a cardiotocograph which illustrates the fetal heart rate and uterine activity.

weeks. During this time, they completed a period of orientation and assessment under the supervision of a named mentor.

Other training and education opportunities for staff

The hospital was recognised as a site for undergraduate midwifery training and higher specialist training for doctors in the specialties of anaesthesiology and paediatrics. Non-consultant doctors informed inspectors that they received good support from consultants in all specialities and that they had no hesitation about contacting the consultant on call to discuss a clinical case or to seek advice and support.

At the time of inspection, 53% of nursing staff in the Special Care Baby Unit had undertaken postgraduate training in neonatal intensive care nursing and the remaining 47% had a paediatric qualification. Fifty-nine percent of nursing staff in the Operating Theatre Department had completed postgraduate training in perioperative nursing. In addition, a number of midwifery and nursing staff had undertaken further education in other areas relevant to maternity services. Grand rounds[§§§] were held at the hospital every Friday and all staff was encouraged to attend them.

Staff informed inspectors that practical training sessions for nurses and midwives in the form of clinical skills and drills occurred infrequently in the Labour Ward and Maternity Ward. Clinical based scenario training and drills for medical staff were provided every week by non-consultant hospital doctors in the Special Care Baby Unit. The neonatal resuscitation trainer conducted regular training, skills and drills in resuscitation of the newborn.

The Advanced Midwife Practitioner conducted clinical skills and drills in obstetric emergencies such as shoulder dystocia and umbilical cord prolapse in the Labour Ward but these were infrequent. In addition, the Advance Midwife Practitioner provided education on complications such as pre-eclampsia toxaemia and clinical drills on major obstetric haemorrhage and other obstetric emergencies to staff in the Operating Theatre Department.

Inspectors were informed that midwives in Sligo University Hospital rotated between the Labour Ward and Maternity Ward annually, providing them with the opportunity to maintain clinical competence and essential skills but medical, nursing or midwifery staff did not rotate between the five maternity units in the Saolta University Health Care Group.

[§§§] Grand rounds are methods of medical education and inpatient care, consisting of presenting the medical problems and treatment of a particular patient to an audience consisting of doctors, residents, and medical students.

Table 4 on the next page lists the National Standards relating to workforce focused on during this inspection and key findings in relation to the hospital's level of compliance with the National Standards monitored during this inspection.

Table 4: HIQA's judgments against the National Standards for Safer Better Maternity Services for Workforce that were monitored during this inspection
Standard 6.1 Maternity service providers plan, organize and manage their workforce to achieve the service objectives for safe, high-quality maternity care **Key findings:** This inspection identified staffing deficiencies in relation to consultant positions in obstetrics and paediatrics at the hospital. **Judgment:** Substantially compliant
Standard 6.3 Maternity service providers ensure their workforce has the competencies and training required to deliver safe, high-quality maternity care. **Key findings:** Not all midwifery and medical staff were up to date with mandatory training requirements relating to obstetric emergencies. The hospital did not have a Clinical Skills Facilitator and regular skills and drills were not conducted in the maternity or Special Care Baby Units. **Judgment:** Non-compliant
Standard 6.4 Maternity service providers support their workforce in delivering safe, high-quality maternity care. **Judgment:** Compliant

3.0 Safety and Quality

Inspection findings in relation to safety and quality will be presented under the themes of the National Standards of Effective Care and Support and Safe Care and Support. The following section outlines the arrangements in place at the hospital for the identification and management of pregnant women at greater risk of developing complications. In addition, this section outlines the arrangements in place for detecting and responding to obstetric emergencies and for facilitating ongoing care to ill women and newborns.

During this inspection, inspectors looked at 11 of the National Standards in relation to Effective Care and Support and Safe Care and Support. Of these, Sligo University Hospital was compliant with nine National Standards, substantially compliant with one National Standard and non-compliant with one National Standard.

Inspection findings leading to these judgments and key findings in relation to the hospital's level of compliance with the National Standards monitored during this inspection are included in Table 5 and Table 6 within this section.

3.1 Effective Care and Support

The fundamental principle of effective care and support is that it consistently delivers the best achievable outcomes for women and their babies using maternity services. This can be achieved by using evidence-based information. It can also be promoted by ongoing evaluation of the outcomes for women and their babies to determine the effectiveness of the design and delivery of maternity care. Women and their babies should have access to safe, high-quality care in a setting that is most appropriate to their needs. How this care is designed and delivered should meet women's identified needs in a timely manner, while working to meet the needs of all women and babies using maternity services.

In relation to obstetric emergencies, this inspection included aspects of assessment and admission of pregnant women; access to specialist care and services; communication; written policies, procedures and guidelines; infrastructure and facilities; and equipment and supplies.

Inspection findings in relation to effective care and support are described next.

Inspection findings

Sligo University Hospital provided a range of general and specialist maternity services for women with low and high risk pregnancies. In line with the National Standards, each woman and infant had a named consultant with clinical responsibility for their care.

3.1.1 Assessment, admission and or referral of pregnant and postnatal women

The hospital had confirmed pathways for the assessment, management and or admission of pregnant and postnatal women presenting with obstetric complications 24 hours a day, seven days a week. This ensured that women who were at risk of developing complications during pregnancy, at birth and in the postnatal period were cared for in the most appropriate setting. Assessment services for pregnant and postnatal women included:

- Antenatal clinics – medical-led and midwife-led
- Early Pregnancy Assessment Unit
- Fetal Assessment Unit
- Assessment unit located in the surgical gynaecology ward

The hospital had developed a supported care pathway as recommended in the National Maternity Strategy for women at lower risk of developing pregnancy-related complications. All pregnant women who attended the hospital for their first antenatal appointment were risk assessed and were referred to one of two care pathways, medical-led or midwifery-led care. Women at high risk of developing complications or who had complex obstetric or medical needs were identified at their first antenatal appointment, and their care was planned by the multidisciplinary team and provided in the most appropriate setting.

- Midwifery-led care: Women with normal risk were cared for by midwives. Women who met the criteria for care in the assisted care pathway as outlined in the National Maternity Strategy could attend midwifery care which was led by an Advanced Midwife Practitioner. If women developed complications during pregnancy, birth or the postnatal period they were transferred to medical-led care. Antenatal care was provided in the hospital or in outreach clinics in the community. Women gave birth in the hospital and postnatal care was provided in the Maternity Ward.
- Medical-led care: Care in this pathway was led by consultant obstetricians. Women at greater risk of experiencing pregnancy-related complications were cared for by midwives and obstetricians within a multidisciplinary team framework. Women had a named consultant obstetrician and antenatal care

was provided in the hospital or in outreach clinics in Ballyshannon, Manorhamilton and Carrick on Shannon. Women gave birth in the hospital and postnatal care was provided in the Maternity Ward.

Documentation reviewed by inspectors detailed hospital management's plans to develop and expand the number of midwifery-led clinics in 2019. This facilitation of choice of different care pathways, based on women's risk profile is in line with the National Standards.

The hospital had an Early Pregnancy Assessment Unit with clearly documented pathways. The Early Pregnancy Assessment Unit was open Monday to Friday from 07:30hrs to 10:00hrs. Women were referred to the unit by their general practitioner or obstetric team. The Early Pregnancy Assessment Unit was staffed by three Clinical Midwife Specialists in sonography and two midwife sonographers supported by the multidisciplinary team.

The Fetal Assessment Unit provided a service for pregnant women of all gestations requiring assessment and evaluation of fetal and maternal wellbeing. The Fetal Assessment Unit was open Monday to Friday from 07:30hrs to 16:30hrs. Outside of these opening hours women were seen in the Labour Ward. Women self-referred to the Fetal Assessment Unit or were referred to the unit by their general practitioner or obstetric team. The unit was staffed by three Clinical Midwife Specialists in sonography who performed routine and emergency pregnancy ultrasound scans during core working hours. If a woman needed an ultrasound scan outside of core working hours, it was completed by the on call consultant obstetrician or, if not urgent, it was performed the following day by the ultrasonographers in the Fetal Assessment Unit. Non-consultant hospital doctors with appropriate training in ultrasonography conducted ultrasound scans on women presenting to the hospital outside core working hours.

Fetal ultrasound scans were offered to all pregnant women at intervals recommended in the National Standards.

Admission pathways

There were established pathways for the assessment, management and admission of pregnant and postnatal women who attended the hospital with obstetric complications 24 hours a day, seven days a week. Depending on the gestation, pregnant women presented to the Emergency Department, assessment unit or Labour Ward. Pregnant women less than 18 weeks gestation who presented outside of scheduled appointments or as an emergency during and outside core working hours attended the Emergency Department or the assessment unit located in surgical gynaecology ward. Women self-referred, were referred by their general practitioner or presented via

ambulance. On presentation to the Emergency Department, pregnant women were triaged by a nurse. Thereafter, the woman was transferred to the Gynae Assessment Unit on the sixth floor where the woman was reviewed by a member of the obstetric team, at registrar grade or above.

Pregnant women greater than 18 weeks gestation who presented outside of scheduled appointments or as an emergency to the Emergency Department were triaged by a nurse and transferred thereafter to the Labour Ward, where they were reviewed and assessed by a member of the obstetric team at registrar grade or above. These women could also present directly to the Labour Ward. Pregnant women presenting to the Emergency Department in labour during and outside core working hours were transferred directly to the Labour Ward.

The hospital had arrangements in place for the assessment of pregnant and postnatal women who presented to the Emergency Department with surgical or medical conditions unrelated to pregnancy. As the maternity unit was co-located with a general hospital, pregnant or postnatal women who presented with a surgical or medical condition unrelated to pregnancy were referred to medical or surgical specialists. All pregnant and postnatal women who presented to the Emergency Department following a trauma were always reviewed by a member of the obstetric team at registrar grade or above.

Inspectors were informed that pregnant or postnatal women were not assessed or admitted in the Emergency Department unless their clinical presentation necessitated emergency care as there was no designated assessment room in the Emergency Department. The majority of pregnant or postnatal women who presented to the Emergency Department were triaged and transferred to the Gynae Assessment Unit or Labour Ward for review by the obstetric team.

Sligo University Hospital had implemented the Irish Maternity Warning System for pregnant and postnatal women up to 42 days post birth. Staff had a clear understanding that the obstetric senior house officer and registrar were the designated persons to call in line with the escalation process for the Irish Maternity Warning System.

Women who required complex or specialist maternity care and those who presented with or who developed significant medical conditions and complications such as pre-eclampsia,**** intrauterine growth restriction and preterm birth less than 32 weeks gestation were transferred to a tertiary maternity hospital in Dublin or Galway for specialist care. Documentation reviewed by inspectors revealed that eight pregnant

**** Pre-eclampsia is a medical condition where high blood pressure and protein in the urine develop during pregnancy. If left untreated, it may result in seizures at which point it is known as eclampsia.

women were transferred to a tertiary maternity hospital in Dublin or Galway for specialised care in 2018.

3.1.2 Access to specialist care and services for women and newborns

Access to clinical specialists

Women booked for maternity care in Sligo University Hospital were referred by the obstetric team at their first antenatal appointment to a number of specialised clinics in the hospital or at another hospital. The hospital did not have a high-risk clinic or combined obstetric and specialist clinics, such as a maternity diabetic clinic. Minutes of hospital governance meetings reviewed by inspectors identified that space and staffing were key issues that impacted on the establishment of a specialist clinic in diabetes. Hospital management informed inspectors that the hospital planned to establish a specialist clinic in diabetes and appoint a Clinical Midwife Specialist in diabetes in 2019.

Specialised clinics in Sligo University Hospital included endocrinology, cardiology, nephrology, respiratory and neurology.

General surgeons were accessible in the hospital. Specialists in vascular surgery, fetal medicine, perinatal mental health, perinatal pathology services and intervention radiology were accessed in University Hospital Galway.

Obstetric anaesthesiology services

Obstetric anaesthesiologists are required to assist with the resuscitation and care of women who become critically ill due to pregnancy-related conditions, for example, haemorrhage and pre-eclampsia. They are also responsible for providing pain relief such as epidural anaesthesia for women in labour and anaesthesia for women who require caesarean section and other surgery during and post birth.

Sligo University Hospital had a designated obstetric anaesthesiology service in accordance with the National Standards. The service was led by a consultant anaesthesiologist. This person was responsible and accountable for the organisation and management of the obstetric anaesthesiology service in the hospital. Non-consultant hospital doctors in anaesthesiology rotated every week between obstetrics and gynaecology and general specialities to maintain essential skills and competencies. Those assigned to the obstetrics and gynaecology rota were free from other duties and were immediately available for maternity services.

Consistent with guidelines and the National Standards, the anaesthesiology service was given sufficient notice of women at high risk of potential complications. An anaesthetic pre-assessment clinic was held every week for pregnant women who presented with risk factors for anaesthesia or with a history of previous complications

during anaesthesia. Documentation reviewed by inspectors identified that in 2018 there were 119 referrals to the anaesthetic pre-assessment clinic, including women presenting with increased body mass index, chronic lower back pain and bleeding disorders. In accordance with best practice recommendations a safe surgery checklist[††††] was used for all emergency and elective surgical procedures in the hospital's operating theatres.

Staff informed inspectors that it was established practice that the registrar on-call in anaesthesiology visited the Labour Ward every day to determine if there were women who might require anaesthetic input in their care. In January 2019 an acute pain service was established in the hospital where all women post caesarean section, those who received intrathecal morphine and women with any anaesthetic concerns were routinely reviewed by the anaesthetic team. This is further discussed in section 3.2.3.

Critical care

The National Standards recommend that specialised birth centres have a high-dependency or observation unit to manage the clinically deteriorating woman. The Irish Maternity Early Warning System was used to assess, monitor and detect clinical deterioration in pregnant and postnatal women. The use of the Irish Maternity Early Warning System was audited at the hospital.

Critical care facilities at Sligo University Hospital included a Level 3[‡‡‡‡] Intensive Care Unit.[5] Pregnant and postnatal women who required intensive or high dependency care were transferred to the Intensive Care Unit. The hospital had formal arrangements in place for the transfer of women to the Intensive Care Unit. Inspectors were informed that the admission of these women was prioritised and there was no reported delay transferring women needing critical care. Women requiring more specialised critical care were transferred to a tertiary hospital in Dublin or Galway. The process of accessing a critical care bed in the hospital or in another general hospital was controlled and standardised. The National Ambulance Service was used to transfer women. If the woman was critically ill, the Mobile Intensive Care Ambulance service was used.

The hospital had documented criteria for the admission of pregnant and postnatal women to the Intensive Care Unit. Staff who spoke with inspectors stated the majority of pregnant and postnatal women admitted to the unit were admitted for high

†††† A surgical safety checklist is a patient safety communication tool that is used by operating theatre nurses, surgeons, anaesthesiologists and others to discuss together important details about a surgical case so that everyone is familiar with the case and that important steps are not forgotten. Surgical checklists work to improve patient safety during surgery.

‡‡‡‡ Level 3 critical care is the level of care required for patients who need advanced respiratory support (mechanical ventilation) alone or basic respiratory support along with support of at least one additional organ.

dependency care. Pregnant women were admitted for the management of eclampsia, pre-eclampsia and postpartum haemorrhage. Care of the woman was shared between the obstetric and anaesthetic teams, with both the consultant obstetrician and consultant anaesthesiologist sharing clinical responsibility for the woman's care. Women admitted to the Intensive Care Unit were reviewed a number of times a day by the consultant obstetrician. Midwifery care was provided every six hours or more frequently if required by midwives from the Labour Ward or Maternity Ward.

Documentation reviewed by inspectors showed that in 2018, 24 pregnant or postnatal women were admitted to the Intensive Care Unit for specialist care. Women requiring a higher level of critical care were transferred to Galway University Hospital or to another tertiary level hospital.

Nursing staff in the Intensive Care Unit had sought additional training and education on caring for a woman with a severe obstetric haemorrhage. This training was provided by the Advanced Midwife Practitioner.

Neonatal care

Sligo University Hospital had a level 1 regional Special Care Baby Unit which provided high dependency and special care for babies born at or greater than 32 weeks gestation, and sick babies born at term. There was good collaboration with hospitals within the regional and wider neonatal network to facilitate the provision of care for babies in the most appropriate setting. Women at risk of preterm birth less than 32 weeks gestation were transferred to a tertiary maternity unit within or outside the hospital group. Documents provided to inspectors indicated that a total of seven pregnant women were transferred to a tertiary maternity hospital in 2018. Reasons for transfer included women with a multiple pregnancy and placental complications. The hospital had an up-to-date guideline that informed and guided the management of pregnant women transferred within and outside the hospital group.

Premature babies born less than 32 weeks gestation at Sligo University Hospital were, in line with the National Model of Care for Neonatal Services[6] stabilised and transferred to a tertiary maternity hospital that had a level three Neonatal Intensive Care Unit. The National Neonatal Transport Programme[§§§§] was used to transfer babies to a level three Neonatal Intensive Care Unit. Newborns that required therapeutic cooling [*****] for neonatal encephalopathy had passive cooling commenced

[§§§§] The National Neonatal Transport Programme is a retrieval service for the stabilisation and transportation of premature and sick neonates up to the age of six weeks corrected gestational age, who require transfer for specialist care within Ireland and abroad. The service operates 24 hours a day, seven days a week.

[*****] Whole body neonatal cooling (WBNC) or therapeutic cooling is 'active' (not passive) cooling administered during the current birth episode as a treatment for Hypoxic Ischemic Encephalopathy (HIE). WBNC is only conducted in the four large tertiary maternity hospitals in Dublin and Cork.

at the hospital and were then transferred to a specialist maternity hospital where therapeutic cooling was provided.[†††††] The hospital provided ongoing care for babies transferred back from tertiary level maternity hospitals.

3.1.3 Communication

The hospital had formal arrangements in place for clinical handover among midwifery, nursing and medical staff in all the clinical areas inspected. Inspectors observed that the clinical areas inspected had daily handover notebooks used to disseminate and share information. Information was shared using the Identify-Situation-Background-Assessment-Recommendation communication tool. Clinical handover was also used to provide feedback on any clinical incidents, midwifery and multidisciplinary meetings including the:

- perinatal mortality and morbidity meeting held every two months
- Women's and Infant's Directorate team meeting held every month
- senior nursing and midwifery management meeting held every two months
- multidisciplinary paediatric meeting held every two months.

Safety pauses were conducted daily in the Special Care Baby Unit, assessment unit and maternity unit. The hospital had a clear process in place to inform midwifery, nursing and medical staff of external and internal safety alerts relating to medications and medical equipment. The hospital's biomedical engineer communicated safety alerts in relation to medical devices and medicines to clinical midwife managers who subsequently shared the information with staff in the clinical area. All information about safety alerts were shared at clinical handover, documented in communication books and displayed on noticeboards in clinical areas. Inspectors observed examples of these in the different clinical areas inspected.

Emergency response teams

The hospital had emergency medical response teams in place 24 hours a day, to provide an immediate response for obstetric, cardiac and neonatal emergencies. At the time of inspection, there was no centralised system in place. Clinicians for an obstetric emergency such as a category one caesarean section were contacted on their individual bleeps. Hospital management informed inspectors that the hospital was implementing a new obstetric emergency bleep system with four different call options in June 2019. For example, one option will be a category one caesarean section where all the relevant staff are notified of the emergency within a specified time. This new system would eliminate the need to call different people on individual bleeps.

[†††††] Therapeutic cooling for neonatal encephalopathy was provided in the Coombe Women and Infant's University Hospital, Rotunda Hospital, National Maternity Hospital and Cork University Maternity Hospital.

In the case of a neonatal emergency, the paediatric registrar and paediatric senior house officer were contacted. Consultant anaesthesiologists, obstetricians and paediatricians on call were contacted to attend for obstetric and neonatal emergencies. Staff who spoke with inspectors stated that response times for an obstetric or neonatal emergency were appropriate. However, emergency response times were not audited at the hospital. Following this inspection the hospital should audit the timeliness and effectiveness of the emergency response systems to provide assurance that the hospital can provide an effective timely response to obstetric and neonatal emergencies.

Inspectors were informed that formal and informal debriefing sessions occurred after an emergency or clinical incident. Formal debriefing sessions occurred through the After Action Review[‡‡‡‡‡] process.

Multidisciplinary handover

There were formal arrangements in place for multidisciplinary clinical handover. On the day of inspection, inspectors observed the multidisciplinary safety huddle[§§§§§7] which was held every day at 08:00hrs. The huddle was led by the obstetric registrar on call and items discussed included activity in the Labour Ward and Maternity Ward, women admitted to the hospital in the previous 24 hours, pregnant and postnatal women at risk of complications, maternity related transfers in and out of the Intensive Care Unit and staffing issues relevant to the maternity unit. Staff who spoke with inspectors stated that the anaesthesiology and paediatric teams did not attend the daily huddle. It is vital that the huddle is multidisciplinary with input from obstetric, anaesthesiology, paediatric, midwifery, operating theatre and support staff. Following this inspection the hospital should review the arrangements in place for multidisciplinary clinical handover to ensure that all specialities involved in the care of pregnant and postnatal women share information to identity potential clinical concerns and to improve the safety of care provided in the maternity unit.

Inspectors were informed that the on call consultant obstetricians conducted daily ward rounds with members of the obstetric team in the Labour Ward and Maternity Ward during and outside of core working hours including Saturdays, Sundays and public holidays. The consultant obstetricians not on call also conducted ward rounds every day to review women for who they were clinically responsibility for.

[‡‡‡‡‡] After Action Review (AAR) is an intervention that is undertaken before or soon after the event occurs and seeks to understand the expectations and perspectives of all those staff involved. It generates insight from the various perspectives of the multidisciplinary team, leads to greater safety awareness, changes team behaviours and assists in identifying actions required to support safety improvement.
[§§§§§] Safety huddles involving the multidisciplinary team when used improve communication, situational awareness, and care for women and babies.

During and outside core hours the obstetric team discussed anticipated births and transfers to other hospitals with the paediatric team. Obstetric and midwifery staff informed the anaesthesiologist on duty when women with known anaesthetic risks were admitted to the Labour Ward and Maternity Ward.

Other findings relevant to communication

Sligo University Hospital had a clear guideline detailing when on call consultant obstetricians should attend at birth. Consultant obstetricians attended if there was a maternal collapse, caesarean section, preterm birth less than 32 weeks gestation, trial of vaginal birth in theatre, all cases of haemorrhage where the blood loss was greater than 1,000mls, breech presentations, multiple pregnancy, seriously ill women and severe eclampsia/pre-eclampsia.

Medical midwifery and nursing staff who spoke with inspectors said that they would have no hesitation about contacting a consultant if they had concerns about the wellbeing of a woman or baby or when advice or additional support was needed. The hospital had an agreed process for staffing an operating theatre for emergency surgery during and outside core working hours. Contingency plans were in place to manage two coinciding emergencies 24 hours a day, seven days a week.

3.1.4 Written policies, procedures and guidelines

The hospital had a number of policies, procedures and guidelines in relation to obstetric emergencies, for example major obstetric haemorrhage, shoulder dystocia, umbilical cord prolapse and pre-eclampsia. The hospital had guidelines based on the National Clinical Effectiveness Committee[******] guidelines in relation to sepsis, clinical handover in maternity services and the Irish Maternity Early Warning System.

Policies, procedures and guidelines were available electronically to all staff in the clinical areas via a controlled document management system. However, inspectors found that during the inspection some staff could not access relevant policies, procedures and guidelines on the document management system. The hospital needs to ensure that all staff has the necessary training and skills to access relevant policies and procedures and guidelines when required. Members of the anaesthetic team used a specific application available on their mobile phones that acted as a quick reference guide to policies, procedures and guidelines relating to obstetric emergencies.

[******] Guidelines produced by the national clinical effectiveness committee have been formally mandated by the Minister of Health.

3.1.5 Maternity service infrastructure, facilities and resources

Assessment areas

The Emergency Department was located on the ground floor of the hospital. There was no designated room in the Emergency Department for reviewing pregnant and postnatal women. Women were transferred to the assessment unit in the Surgical Gynaecology Ward or the Labour Ward for review and assessment. The assessment unit was a single room located in the 28 bedded Surgical Gynaecology Ward. Inspectors observed that space in the unit was limited with no natural light and ventilation and one examination bed. Staff who spoke with inspectors stated that providing care in such a confined space was challenging and if two women needed care at the same time, one woman would be accommodated in the ward treatment room. The range of women presenting with different and varied needs to the surgical gynaecology ward and the impact this had on the ability to provide quality care was a risk the hospital had included on their corporate risk register. Hospital management had proposed to mitigate the risk using various measures including the recruitment of a Clinical Midwife Manager for the assessment unit. At the time of the inspection a Clinical Midwife Manager had not been appointed.

Antenatal and postnatal ward

Care was provided to antenatal and postnatal women and babies in the Maternity Ward. The Maternity Ward consisted of 30 beds in total which comprised of a six-bedded antenatal ward, a two-bedded induction of Labour Ward and 22 postnatal beds with the equivalent number of baby cots. The postnatal beds were divided into a six-bedded high risk room, where women post caesarean section; post postpartum haemorrhage or women requiring closer observation were cared for. On the day of the inspection there were 15 women and five babies in the ward, equating to an occupancy rate of 50%.

The overall design and infrastructure of the Maternity Ward required improvement and updating to provide a more appropriate clinical environment where safe, high-quality, care could be provided for women and their babies. Inspectors observed limited space between beds in the six-bedded ward, which could be challenging when trying to gain access and provide care in an obstetric and or neonatal emergency. Overall, the physical infrastructure and environment in the Maternity Ward was restrictive and outdated. It did not meet recommended design and infrastructural specifications needed to provide safe, high-quality care in a modern maternity service.[8]

Labour ward

The Labour Ward comprised of three single birth rooms and a two bedded early labour room. None of the birthing rooms had en-suite toilet or shower facilities. There was

one bathroom with a toilet and bath available to labouring and postnatal women. Women in early labour who required monitoring and observation were cared for in the two bedded assessment room that did not have en-suite facilities. Modern delivery rooms should all be single occupancy with en-suite facilities. Overall, the physical infrastructure and environment in the Labour Ward was restrictive and outdated. It did not meet recommended design and infrastructural specifications needed to provide safe, high-quality care in a modern maternity service.

Intensive Care Unit

The Intensive Care Unit was a six bedded unit with one single room used for isolation. While the unit had six beds the hospital was only resourced to staff five of the six beds.

Operating theatres for obstetrics and gynaecology

There was 24 hour access to an operating theatre at Sligo University Hospital. The hospital had eight operating theatres located over three different levels of the hospital. Three operating theatres were located on level eight, two on level five and three on level six of the hospital. There was no designated obstetric emergency operating theatre but obstetric surgery mainly took place in the Operating Theatre Department on level eight which comprised of a three operating theatres and a five-bedded recovery area. Each operating theatre had an anaesthetic room. Elective operating procedures were conducted in two of the three operating theatres on level eight Monday to Friday; the third operating theatre was kept free for all emergency cases including obstetric emergencies during and outside core working hours. Inspectors observed there was sufficient space in each operating theatre on level eight to attend to women and babies during an emergency.

The hospital had conducted a risk assessment on the proximity of the Labour Ward located on level four of the hospital to the operating theatres located on level eight of the hospital. The findings indicated that it took approximately two minutes to transfer woman to the operating theatre. Hospital management told inspectors that if all operating theatres on level eight were in use the operating theatres on level six could be used for an obstetric emergency case. To date the hospital has not used this operating theatre for an obstetric emergency. Nonetheless, staff had conducted simulated training involving the transfer of a pregnant woman to the operating theatres on level six to ensure that all staff were familiar with the process and clinical environment there. This is evidence of good practice.

Special Care Baby Unit

The hospital had a Level 1 Special Care Baby Unit that provided special care to babies greater than 32 weeks gestation and sick babies at term. The unit had capacity for ten

cots in total which included two intensive care or high dependency cots and eight special care cots.

The unit consisted of an open planned area with one isolation room. On the day of inspection there were seven babies in the Special Care Baby Unit. Records reviewed by inspectors showed that the unit had an occupancy rate of 35%-59% during 2018. Inspectors observed that the unit was small with minimal space between cots and incubators. There was inadequate office space for staff to plan and discuss care. The unit had no clean or dirty utility room and there was a lack of adequate storage space for medical equipment and supplies. Equipment for the Special Care Baby Unit was stored outside the unit. Overall, the physical infrastructure and environment in the Special Care Baby Unit was restrictive and outdated. It did not meet recommended design and infrastructural specifications needed to provide high quality, safe care in a modern Special Care Baby Unit.[9]

Laboratory services

Blood and blood replacement products were accessible when required in an emergency for women and babies. Staff informed inspectors that two units of O Rhesus negative blood were stored in a blood fridge located at the entrance to the Operating Theatre Department on level eight of the hospital. An additional two units of O Rhesus negative blood were kept in a designated fridge in the Emergency Department. One pool of platelets was available for emergency use onsite in Sligo University Hospital. Additional platelets, if needed, were ordered from Dublin and staff informed inspectors that there were no delays experienced in obtaining the same. Microbiology and haematology services were available during and outside core working hours, at weekends and public holidays.

3.1.6 Maternity service equipment and supplies

The clinical areas visited by inspectors had emergency resuscitation equipment for women and babies. Checklists confirmed that emergency equipment was checked as specified per hospital policy. The contents of resuscitation trolleys were checked every week with defibrillators and suction machines checked daily. Emergency supplies and medications were readily available to manage obstetric emergencies such as haemorrhage, eclampsia and neonatal resuscitation in all the clinical areas inspected. Fetal monitoring equipment including cardiotocography machines viewed by inspectors were labelled to indicate that they had been serviced.

Inspectors observed that paediatric resuscitation trolleys had been standardised across all units in the hospital. This quality improvement initiative contributed to the provision of safe and effective management of neonatal emergencies. Inspectors also observed a major obstetric haemorrhage trolley in the Operating Theatre Department had all

the necessary supplies, equipment and documentation readily available to help staff effectively manage a major obstetric emergency.

Table 5 on the next page lists the National Standards relating to effective care and support focused on during this inspection and key findings in relation to the hospital's level of compliance with the National Standards monitored during this inspection.

Table 5: HIQA's judgments against the National Standards for Safer Better Maternity Services for Effective Care and Support that were monitored during this inspection

Standard 2.1 Maternity care reflects best available evidence of what is known to achieve safe, high-quality outcomes for women and their babies. **Judgment:** Compliant
Standard 2.2 Maternity care is planned and delivered to meet the initial and ongoing assessed needs of women and their babies, while working to meet the needs of all women and babies using the service. **Judgment:** Compliant
Standard 2.3 Women and their babies receive integrated care which is coordinated effectively within and between maternity and other services. **Judgment:** Compliant
Standard 2.4 An identified lead healthcare professional has overall clinical responsibility for the care of each woman and that of her baby. **Judgment:** Compliant
Standard 2.5 All information necessary to support the provision of effective care, including information provided by the woman, is available at the point of clinical decision-making. **Judgment:** Compliant
Standard 2.7 Maternity care is provided in a physical environment which supports the delivery of safe, high-quality care and protects the health and wellbeing of women and their babies. **Key findings:** The hospital had an outdated and restrictive physical infrastructure that did not meet the recommended design and infrastructural specifications for contemporary maternity services. **Judgment:** Non-compliant
Standard 2.8 The safety and quality of maternity care is systematically monitored, evaluated and continuously improved. **Judgment:** Compliant

3.2 Safe Care and Support

A maternity service focused on safe care and support is continually looking for ways to be more reliable and to improve the safety and quality of its service. In relation to obstetric emergencies, this inspection sought to determine how risks to the maternity service were identified and managed, how patient safety incidents were reported and if learning was shared across the service. The inspectors also looked at how the hospital monitored, evaluated and responded to information and data relating to outcomes for women and babies, and feedback from service users and staff.

Inspection findings in relation to safe care and support are described next.

Inspection findings

3.2.1 Maternity service risk management

Sligo University Hospital had systems in place to identify and manage risks. Risk assessment forms were used by staff in the clinical areas visited to assess any identified risks and implement the necessary controls to mitigate such risks. Risks in relation to the maternity service were recorded on local and corporate risk registers together with agreed risk control measures. The corporate risk register was reviewed and updated quarterly by hospital management. Risks that could not be managed at hospital level were escalated to the Women's and Children's Directorate at hospital group level.

Inspectors reviewed local risk registers in the Maternity Ward, Special Care Baby Unit, Operating Theatre Department and Assessment Unit. Risk registers reviewed detailed the impact of the risks identified, existing control measures in place to limit the impact of the risk and associated actions required to mitigate against the risk. Identified risks were rated as high, medium or low. Risks recorded on the local risk registers included:

- increased workload
- skill mix and staffing issues
- physical infrastructure
- difficulty in releasing staff for mandatory training
- absence of a Clinical Skills Facilitator to support ongoing staff education and training.

Risks recorded in the hospital's corporate risk register relevant to this monitoring programme included risks associated with:

- the difficulty in maintaining safe standards in specialist areas such as Intensive Care Unit and Special Care Baby Unit due to the lack of suitably qualified and experienced staff

- a lack of capacity in the Intensive Care Unit and insufficient numbers of high dependency beds
- multiple operating theatre sites and coinciding emergencies across these multiple sites
- age of the hospital and the suitability of the infrastructure for the provision of maternity and neonatal services
- difficulty in accommodating the range of women presenting to the surgical gynaecology ward and assessment unit with gynaecological and obstetrical complications.

Clinical incident reporting

Inspectors found that there was a well established system for reporting clinical incidents which staff reported on the hospital's document management system. Staff who spoke with inspectors described the process for reporting and all were aware of their responsibility to report such incidents. The hospital had compiled a list of suggested clinical incidents relating to maternal, neonatal and environmental events to guide staff in the reporting of incidents.

Clinical incidents, serious incidents, serious reportable events where discussed every month at hospital group level at the Women's and Infant's Directorate team meeting. The Saolta University Health Care Group's Serious Incident Management Team had oversight of the serious incidents that occurred in the hospital. Staff in the clinical areas visited informed inspectors that feedback from review of clinical incidents was not always shared and discussed with staff.

Inspectors were provided with examples of a practice change as a consequence of a clinical incident. For example, the Maternity Ward had introduced the use of antiseptic wipes pre-operatively in response to increasing readmission rates of women experiencing wound infection post caesarean section.

Feedback from women

The hospital had a formalised process to monitor compliments and respond to complaints received from women who used the maternity service. Service user complaints were reviewed and discussed at the Executive Management Team meetings. Documentation reviewed by inspectors showed that all complaints received by the hospital in 2018 relating to the maternity service were managed in a timely manner, within the timeframe of thirty days as specified in the 'Your service, Your say' guideline.[10]

3.2.2 Maternity service monitoring and evaluation

Clinical outcome and activity measurements in relation to the maternity service were gathered at the hospital each month in line with national HSE Irish Maternity Indicator System reporting requirements.[11] Irish Maternity Indicator System data provides important information in relation to maternity service activities and outcomes and it facilitates managers conducting within-hospital analyses of monthly and annual data. However, this data alone does not provide an overall picture of the quality and safety of maternity services for all women receiving maternity care.

The hospital, through the Executive Management Team and the Quality and Safety Executive Committee, proactively monitored, analysed and responded to information from multiple sources including serious reportable incidents, incident reviews, legal cases, risk assessments, complaints, audits and patient experience surveys to be assured about the effectiveness of the maternity service. The Irish Maternity Indicator System data were reviewed every week at the Executive Management Team meeting and every month at the Quality and Safety Executive Committee and Women's and Infant's Directorate team meetings.

The hospital compared and benchmarked their performance against national rates for a variety of metrics. The hospital collected and published data every month on the 17 metrics included in the Maternity Patient Safety Statements. This data measured clinical activity, major obstetric events, mode of birth and clinical incidents. The hospital used the Robson 10-Group Classification[††††††] for assessing, monitoring and comparing caesarean sections rates in the maternity unit and with other maternity hospitals and units.

Hospital management informed inspectors that the hospital's performance data including data submitted for the Irish Maternity Indicator System, National Perinatal Epidemiology Centre[‡‡‡‡‡‡] and, where relevant, Vermont Oxford Network[§§§§§§] were reviewed, considered, discussed and compared with similar data from the other five maternity units at the hospital group's Women's and Children's Directorate meeting. This information was used to benchmark the hospital against other maternity hospitals and units of a similar size outside the hospital group.

[††††††] The Robson classification is a system of classifying birth into 10 groups based on five obstetric characteristics that are routinely collected in all maternity hospital and units (parity, previous caesarean section, gestational age, onset of labour, fetal presentation and the number of fetuses).
[‡‡‡‡‡‡] The National Perinatal Epidemiology Centre conducts on-going national audits of perinatal mortality, maternal morbidity and home births in Ireland.
[§§§§§§] The Vermont Oxford Network is a voluntary collaborative group of health professionals committed to improving the effectiveness and efficiency of medical care for newborn infants and their families through a coordinated program of research, education, and quality-improvement projects.

Progress on the progression and implementation of key performance indicators such as caesarean section rates, maternal transfers to a level 2 or 3 critical care unit, neonatal metrics, infection control rates, serious reportable events and medication incidents were reported and discussed at the hospital's Quality and Safety Executive Committee meeting.

The hospital used information on clinical outcomes to identify potential risks to the safety of women and babies and opportunities for improvement. For example, the 2017 Irish Maternity Indicator System report identified the hospital was an outlier[*******] for the rate of general anaesthesia for caesarean section. Consequently, the Special Co-ordinator in anaesthetics conducted a prospective case review of all women who received general anaesthesia for caesarean section. Measures implemented to reduce the numbers of women having general anaesthesia for caesarean sections included education sessions on regional anaesthesia, epidural administration and use, and a standardised top-up procedure for epidural analgesia.

Clinical audit

Sligo University Hospital had a comprehensive clinical audit plan. Planned audits were included in the hospital's annual clinical audit plan and were overseen by the Clinical Audit Co-ordinator. Audits were completed by medical, nursing and midwifery staff. Audits conducted in the hospital followed a prescribed structure. The audit report template identified the action plans to address any opportunities for improvement and learning in practice. Clinical audit reports were presented and discussed at the hospital's Quality and Safety Executive Committee meeting.

Audits completed in 2018, relevant to this monitoring programme included:

- cardiotocograph proforma
- medical handover in obstetrics
- failed induction of labour that progressed to caesarean section
- blood transfusion in obstetric patients
- surgical site infection surveillance
- Irish Maternity Early Warning System
- sepsis.

Re-audits completed in 2018 included:

- shoulder dystocia
- postpartum haemorrhage

[*******] An outlier is an observation that lies an abnormal distance from other values in a random sample from a population.

- surgical site infection following caesarean section
- Irish Maternity Early Warning System.

Audits planned for 2019 included Vaginal Birth after Caesarean Section, resuscitation guideline, induction of labour, sepsis, cardiotocograph and shoulder dystocia. Feedback on audit results was provided to staff in the clinical areas.

Annual clinical report

The hospital did not publish an annual report but information about the activity and performance and outcomes about the maternity services was included in the comprehensive annual clinical report published by the Women's and Children's Directorate at hospital group level. This report included clinical data from all five maternity units in the hospital group. It provided a detailed description of the maternity services provided at the hospital, service activity, maternal and neonatal outcomes and quality improvement initiatives.

Maternal and perinatal morbidity and mortality multidisciplinary meetings

Multidisciplinary perinatal mortality and morbidity meetings were held every month. Staff advised inspectors that maternal morbidity was discussed at these meetings too. A record of those who attended the meeting was maintained and records of the meetings held in 2018 were reviewed by inspectors. Learning from perinatal mortality and morbidity meetings was shared with staff at clinical handover. The hospital did not participate in regular multidisciplinary perinatal morbidity and mortality meetings at hospital group level.

3.2.3 Quality improvement initiatives

The hospital did not have a structured and resourced quality improvement programme but they had implemented a number of quality improvement initiatives aimed at improving the quality and safety of the maternity services at Sligo University Hospital.

Quality improvement initiatives implemented in the hospital included:

- The 'Fresh Eyes' initiative was introduced in the Labour Ward in August 2018. It provided a formalised approach to cardiotocograph interpretation. A second midwife, at Clinical Midwife Manager grade or the midwife in charge, reviewed the care and cardiotocograph, every two hours, for all women having continuous fetal monitoring during labour. A template was used to document the interpretation of the cardiotocograph of both midwives. If there was a discrepancy in the two interpretations, this was escalated to the obstetric registrar or consultant obstetrician.
- Great expectations initiative used the LEAN approach to reduce waiting times in the antenatal clinics.

- Safe Surgery Checklist: this initiative was introduced to improve the safety of women undergoing caesarean section or other surgical procedures related to birth. The hospital modified the World Health Organisation's Safe Surgery Checklist for use in the hospital. The hospital won an award at the annual Irish Healthcare Awards for this initiative.
- Standardisation of obstetric haemorrhage and neonatal resuscitation trolleys: this initiative resulted in the standardisation of all supplies and equipment for the management of obstetric haemorrhage and neonatal resuscitation across all clinical areas in the maternity and Special Care Baby Unit.
- Change in visiting times initiative: introduced in July 2017, this initiative evolved from the findings of another project where midwifery staff identified that the policy of not restricting visiting times or visitor numbers impacted on the care provided and rest periods for pregnant and postnatal women. Visiting in the maternity unit was restricted to partners only with others only permitted to visit between the specified time of 18:30hrs and 20:30hrs.
- After Action Review: the hospital adopted the after action review process developed by the HSE. This process was undertaken soon after an event and sought to understand the expectations and perspectives all staff involved in the event.
- Acute pain service: this service was introduced in January 2019 by the anaesthetic team where all women post caesarean section, those who received intrathecal morphine and women with any anaesthetic concerns were routinely reviewed by the anaesthetic team.
- New referral pathway: introduced in February 2019, this initiative was introduced to standardise the care pathways of women presenting as an emergency in early pregnancy. During core working hours, general practitioners faxed referrals for women experiencing mild pain or mild bleeding/spotting to the Fetal Assessment Unit. The midwife in the Fetal Assessment Unit contacted the woman directly and arranged an appointment. Where possible, a same day appointment was organised. All referrals received outside of the operating hours for the Fetal Assessment Unit went to the obstetric registrar on call.

Table 6 on the next page lists the National Standards relating to safe care and support focused on during this inspection and key findings in relation to the hospital's level of compliance with the National Standards monitored during this inspection.

Table 6: HIQA's judgments against the National Standards for Safer Better Maternity Services for Safe Care and Support that were monitored during this inspection
Standard 3.2 Maternity service providers protect women and their babies from the risk of avoidable harm through the appropriate design and delivery of maternity services. **Judgment:** Compliant
Standard 3.3 Maternity service providers monitor and learn from information relevant to providing safe services and actively promote learning, both locally and nationally. **Judgment:** Compliant
Standard 3.4 Maternity service providers implement, review and publicly report on a structured quality improvement programme. **Key findings:** Undertaking quality improvement work but did not have a structured and resourced quality improvement programme. **Judgment:** Substantially compliant
Standard 3.5 Maternity service providers effectively identify, manage, respond to and report on patient safety incidents. **Judgment:** Compliant

4.0 Conclusion

Women and their babies should have access to safe, high-quality care in a setting that is most appropriate to their needs. Overall, inspectors found that Sligo University Hospital was compliant with the majority of the National Standards that were focused on during this inspection.

There were clearly defined and effective leadership, governance and management structures at the hospital and with Saolta University Health Care Group to ensure the safety and quality of maternity services. There was good oversight of the quality and safety of services by senior managers at the hospital who used multiple sources of information to identify opportunities for improvement. The hospital's senior management team monitored performance data including patient outcomes, service user feedback and patient safety incidents and benchmarked the hospital's performance against other similar sized hospitals. Hospital management was actively working to optimise maternal care and to progress implementation of the National Standards. At the time on the inspection, the key leadership position of Special Co-ordinator in obstetrics was vacant. HIQA recommends that this position be filled as soon as possible so that a named person has responsibility for the organisation and management of obstetric services at the hospital.

The hospital had developed strong collaborative working arrangements with other hospitals providing maternity services in the Saolta University Health Care Group but this was not a formally managed clinical maternity network. The implementation of such a network needs to be progressed by the hospital group and the HSE in line with the National Standards and the National Maternity Strategy.

The hospital employed medical staff in the specialties of obstetrics, paediatrics and anaesthesiology that were available on site to provide care to women and babies on a 24 hour, seven days a week basis. In line with National Standards and national guidelines, the hospital provided a dedicated obstetric anaesthetic pre-assessment clinic. Fetal ultrasound scans were offered to all pregnant women and this is in accordance with the National Standards and key priorities of the national maternity strategy implementation plan. The hospital had clearly defined training requirements for clinical staff in relation to fetal monitoring, adult and neonatal resuscitation and multi-professional training for the management of obstetric emergencies. However, the hospital needs to ensure that mandatory training completed by medical, midwifery and nursing staff within recommended timeframes and the uptake of training by all staff is documented.

Sligo University Hospital had procedures and processes in place to identify women at high risk of complications and to ensure that their care was provided in the most appropriate setting. Effective arrangements were in place to detect and respond to obstetric emergencies and to provide or facilitate on-going care to ill women and their babies. Specialist support around perinatal mental health needs to be sufficiently resourced at the hospital.

The hospital had an outdated and restrictive physical infrastructure that did not meet the recommended design and infrastructural specifications for contemporary maternity services.

Following this inspection the hospital, with the support of the Saolta University Health Care Group and the HSE, needs to address the opportunities for improvement identified in this report and to continue to progress with the transition to a maternity network for the enhancement of a safe, high-quality maternity services at Sligo University Hospital.

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