Health Information and Quality Authority

An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

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

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

Dates of inspection: 7 August 2019 and 8 August 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 units and hospitals 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 and hospitals 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 birth, 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 units and hospitals 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 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 units and hospitals could effectively identify women at higher risk of complications in the first instance. It also examined how each maternity unit and hospital 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.

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

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

1.1 Information about this inspection

Letterkenny 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 and 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 1,716 births at the hospital in 2018.

To prepare for this inspection, inspectors reviewed a completed self-assessment tool[‡] and preliminary documentation submitted by Letterkenny 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
7 August 2019	09:00hrs to 18:45hrs	Denise Lawler Sean Egan Aileen O' Brien Dolores Dempsey Ryan
8 August 2019	08:00hrs to 15:30hrs	

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

- representatives of the hospital's Executive Board; the General Manager and Director of Midwifery
- the hospital's lead consultants in each of the clinical specialties of obstetrics, anaesthesiology and paediatrics.

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

- Assessment areas where pregnant and postnatal women who presented to the hospital with pregnancy-related and postnatal concerns were assessed. This

[†] 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.

included the Emergency Department and the admission room located in the Maternity Unit.
- 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
- Antenatal and postnatal ward where women were cared for during pregnancy and in the immediate postnatal period
- Neonatal Unit where babies requiring additional monitoring and support were cared for.

Information was gathered through speaking with midwifery and nursing managers, and staff midwives in these clinical areas and doctors assigned to the maternity service. In addition, inspectors looked at the clinical working environment and reviewed hospital documentation and data pertaining to the maternity service during the inspection.

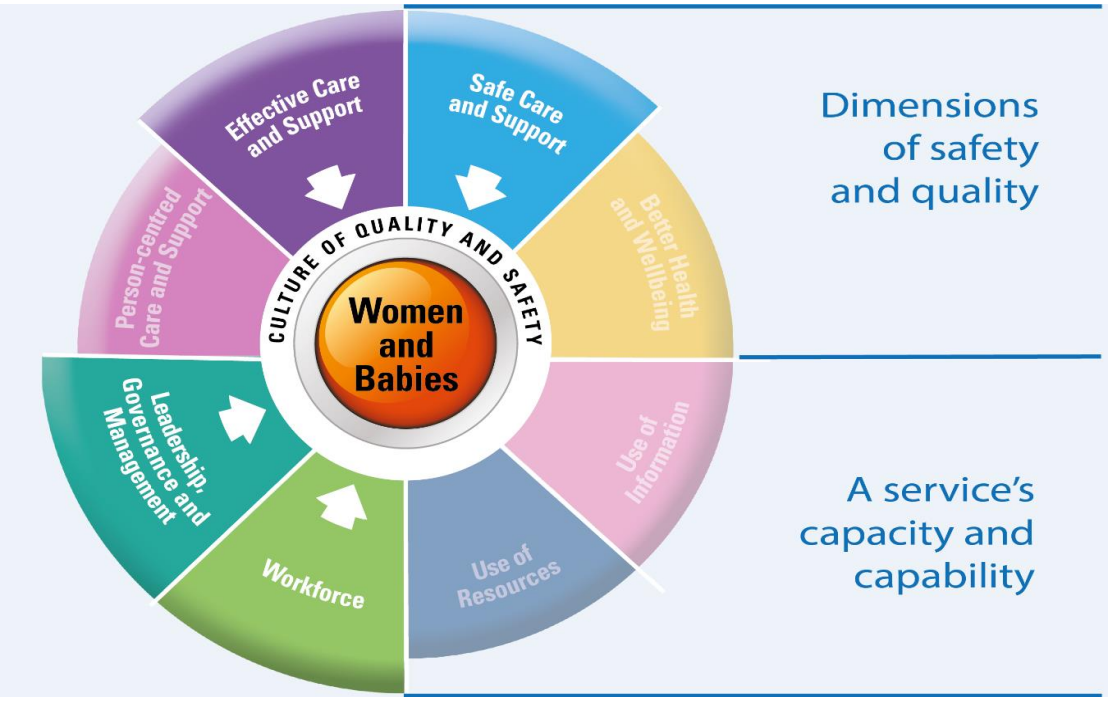
HIQA would like to acknowledge the cooperation of the hospital management team and all staff who facilitated and contributed to this unannounced inspection.

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 structure and corresponding National Standards and Lines of Enquiry

Report sections	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 and 5.11	LOE 1
	Workforce	6.1, 6.3, 6.4	LOE 3
Section 3: Dimensions of Safet 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 twenty-four hours a day.

During this inspection, inspectors looked at 10 National Standards in relation to leadership, governance and management and workforce. Of these, Letterkenny University Hospital was compliant with seven National Standards and substantially compliant with three National Standards.

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.

2.0 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 service 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 Letterkenny 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, inspectors were told that the Saolta University Health Care Group was actively progressing the integration of the maternity services within the hospital group under a single governance structure through the implementation of a women's and children's managed clinical and academic network.

In the interim, while progressing with the implementation of the managed clinical network, the hospital group had established a management structure called the Women's and Children's Directorate to facilitate effective collaborative workings of the five maternity units[§] within Saolta University Health Care Group. The Women's and Children's Directorate will be integrated into the managed clinical and academic network when established. This Directorate was led by a Clinical Director, who reported to the Chief Clinical Director of the hospital group.

An Associate Clinical Director for the Women's and Children's Directorate was appointed at Letterkenny University Hospital. This person represented the hospital at Directorate level and provided clinical oversight at local hospital level.

The Women's and Children's Directorate had established a Serious Incident Management Team which included representation from the five maternity units within the hospital group. The Associate Clinical Director and Director of Midwifery at Letterkenny University Hospital were members of this team. The team met every month to review serious incidents, serious reportable events and timelines relating to closing out reviews and recommendations relating women and children's services in the hospital and across the hospital group.

Letterkenny 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, clinical handover and shoulder dystocia.

[§] The five maternity units in the Saolta University Health Care Group were Letterkenny University Hospital, Sligo University Hospital, Mayo University Hospital, Portiuncula University Hospital and University Hospital Galway.

The Director of Midwifery at Letterkenny University Hospital was a member of the hospital group's Maternity Services Strategic Group. This group oversaw the implementation of recommendations from national reviews and reports into maternity services. In addition, the Director of Midwifery attended the Directors of Midwifery Forum meeting held every month where issues such as nursing and midwifery recruitment and retention, clinical incidents and practice changes were discussed across the five maternity units within the hospital group.

At the time of inspection, inspectors were informed that transfer and referral protocols for the 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. Letterkenny University Hospital did not have a formalised referral pathway for women requiring specialist care with University Hospital Galway. Women requiring this model of care were referred to the National Maternity Hospital in Dublin. This is discussed further in section 3.1.2 of this report.

The hospital group was working towards expanding neonatal service capacity across the hospital group by progressing the development of neonatal services at University Hospital Galway. It is envisaged that this increased capacity would enable babies from Letterkenny University Hospital requiring a higher level of neonatal care to be cared for in University Hospital Galway.

There were no joint appointments in the specialities of obstetric or paediatrics between Letterkenny University Hospital and Galway University Hospital. The hospital group did not hold joint perinatal mortality and morbidity meetings or maternal morbidity and mortality meetings. However, there was some sharing of learning across the hospital group through the grand rounds** meeting held every week. Staff at Letterkenny University Hospital could join the grand rounds meeting by using video conferencing facilities. Critical care nurse managers from all seven hospitals in the hospital group met regularly to discuss issues relating to critical care.

Following this inspection, Saolta University Health Care Group now needs to complete the implementation of the women's and children's managed clinical and academic network in order to enable the establishment of a single governance framework for maternity services within the hospital group in line with the National Maternity Strategy.

** 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.

Letterkenny University Hospital leadership, governance and management

HIQA found that Letterkenny 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 the hospital group management team meetings every month where the hospital's clinical performance, audit findings and learning from the implementation of quality improvement was reviewed and discussed. The Director of Midwifery was responsible for the organisation and management of the midwifery service in the hospital.

The Hospital Executive Board, led by the General Manager, was responsible for ensuring that services at the hospital were delivered within the clinical and corporate governance framework established by the hospital group. Membership of the Hospital Executive Board included the Associate Clinical Director for the Women's and Children's Directorate, Director of Midwifery, Associate Clinical Directors for the five clinical directorates[††] within the hospital group, Quality and Patient Safety manager and other senior operational managers. The Hospital Executive Board met every two weeks to monitor and review operational issues, clinical outcomes, service user feedback, clinical incidents and progress made on the implementation of quality improvement initiatives. This team, through the General Manager, reported to Saolta University Health Care Group.

Clinical governance and strategic direction for the maternity service at Letterkenny University Hospital was overseen and led by the General Manager, the Director of Midwifery and the Associate Clinical Director for the Women's and Children Health Directorate who was the lead consultant paediatrician at the hospital at the time of inspection.

The hospital had appointed clinical leads in the specialities of obstetrics, anaesthesiology and paediatrics. These clinicians were appointed on a rotational basis. They provided clinical oversight and 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 Quality and Patient Safety Committee had oversight of quality and safety in the hospital. This multidisciplinary committee, chaired by the Director of Nursing, met

[††] The five clinical directorates established by the Saolta University Health Care Group were the Women's and Children's Directorate, Perioperative Directorate, Medical Directorate, Radiology Directorate and Laboratory Directorate.

every month to review the hospital's performance. The committee was accountable to and provided assurance on known risks to the Hospital Executive Board.

The hospital had a statement of purpose that outlined the specific services provided at the Letterkenny University Hospital. It set out the hospital's vision, mission statement, guiding values and provided information on the organisational structure of the hospital. This statement of purpose should be publicly available in line with National Standards. 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.

Overall, HIQA found that the hospital had formalised leadership, governance and management arrangements in place with 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.

Table 3 on the next page 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, were not fully developed or 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. **Judgment:** 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
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 is 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 infants using the maternity service. This 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 staff

At the time of inspection the hospital did not meet the HSE's national benchmark for midwifery staffing outlined in the HSE's Midwifery Workforce Planning Project.[4] The maternity unit was funded for 54.5 whole-time equivalent (WTE)[‡‡] permanent midwife positions. Inspectors were informed that the maternity unit had 51.5 WTE midwife positions filled on a permanent basis. The hospital was actively working to recruit additional midwives, both nationally and internationally, to fill vacant midwife positions. In the interim, the hospital employed agency midwifery staff when needed.

Inspectors were told that an experienced midwife shift leader was in place for each shift in the Labour Ward during and outside core working hours.[§§] However, when activity was high in the Labour Ward, the shift leaders took a caseload so they were not always supernumerary. One-to-one support from a midwife was prioritised for women in labour. The Special Care Baby Unit met the recommended nursing ratios of one nurse to two babies in higher dependency care and one nurse to four babies in special care.[5] Internal rotation of midwifery staff through the different clinical areas in the maternity unit enabled the redeployment of midwives to different clinical areas during times of high activity.

Outside core working hours, one nursing team comprising of three nurses were on call for the operating theatre from 20:00hrs to 08:00hrs to manage emergency surgery including caesarean sections. When a second nursing team was required in the operating theatre for coinciding surgical emergencies out-of-hours, nursing

[‡‡] 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.

administration deployed staff from other areas in the hospital. In August 2019 the hospital had just started to audit the number of times that a coinciding surgical emergency occurred.

Staff who spoke with inspectors were clear about their role and responsibilities, and the 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

The hospital had sufficient numbers of trained fetal ultrasonographers to offer fetal ultrasound scans in line with National Standards. This is discussed further in section 3.1.1 of this report.

The hospital did not have a midwifery Clinical Skills Facilitator, as recommended in the National Standards, to provide clinical support, education and instruction to midwives in developing skills and competencies in order to fulfil their roles and responsibilities. Staff told inspectors that multidisciplinary practical training sessions for staff, such as clinical skills and drills in obstetric emergencies, were conducted irregularly.

At the time of inspection, the hospital was in the process of recruiting a perinatal mental health midwife.

2.2.2 Medical staff

Medical staff availability

Consultants in the specialities of obstetrics, anaesthesiology and paediatrics were employed in the hospital on permanent or locum contracts. Inspectors were informed that the use of locum and agency medical staff was kept to a minimum and any locum or agency staff employed were very familiar with the hospital. All consultants obstetricians, anaesthesiologists and paediatricians employed in the hospital were registered as specialists in their speciality with the Medical Council in Ireland. The hospital was also staffed with non-consultant hospital doctors at registrar and senior house officer grade in the specialties of obstetrics, anaesthesiology and paediatrics. Rapid response teams were available on site 24 hours a day, seven days a week to attend to emergencies such as obstetric and neonatal emergencies and cardiac arrests.

Obstetrics

The hospital had approval for five WTE permanent consultant obstetrician positions. At the time of inspection, three consultant obstetrician positions were filled on a permanent basis, one was filled by a locum consultant and one was vacant.

At the time of inspection, a consultant obstetrician was rostered to be on call for the Labour Ward during and outside core working hours. 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.

Outside core working hours, the hospital had a rota where one consultant obstetrician was on call from home one in every four nights. Two non-consultant hospital doctors were on call onsite in the hospital. 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.

Obstetric anaesthesiology

Nine WTE consultant anaesthesiologists were employed at the hospital. Eight consultant anaesthesiologist positions were filled on a permanent basis and one was filled on a locum consultant. A consultant anaesthesiologist with experience in obstetric anaesthesia led the obstetric anaesthetic service. The anaesthetic team worked to respond to obstetric emergencies and calls from the Labour Ward in a timely manner. Outside core working hours the anaesthetic team on call were responsible for the provision of care in the Intensive Care Unit, the Emergency Department, general wards, the Operating Theatre Department for both general and obstetric cases and epidural anaesthesia for women in labour.

In line with relevant guidelines,[6] a duty anaesthesiologist was immediately available to attend women in the labour ward 24 hours a day, seven days a week. The hospital had an on-call rota outside of core working hours for consultant anaesthesiologists whereby consultants were on call from home usually one in every seven nights. A rota of two non-consultant hospital doctors in anaesthesiology, one at registrar grade and one at senior house officer grade were onsite at the hospital 24 hours a day with the registrar covering the maternity unit.

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 five WTE consultant paediatricians. Four consultant paediatrician positions were filled on a permanent basis 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 home one in every four nights. Two non-consultant hospital doctors in paediatrics, one at registrar grade and one at senior house officer grade were on call onsite in the hospital to provide emergency care and manage neonatal emergencies. 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.

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.

National Standards recommend that staffing levels are maintained at adequate and nationally accepted levels to meet service need and that workforce planning takes into account annual leave, study leave, maternity leave and sick leave. Inspectors were informed that the hospital found it difficult to recruit consultant staff and this was despite a continual recruitment campaign. The prolonged recruitment process within the HSE's National Recruitment Service and geographic location of the hospital were two of the main challenges identified as impacting on the successful recruitment of staff to the hospital. The hospital group should ensure that the hospital is further supported to address such challenges.

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 and midwifery staff were required to undertake multidisciplinary training in the management of obstetric emergencies and electronic fetal monitoring every two years. In addition, medical staff in obstetrics and midwifery staff received training in the Irish Maternity Early Warning System and sepsis screening when commencing employment in the hospital and were expected to attend update sessions and workshops on the Irish Maternity Early Warning System and sepsis when scheduled. Medical staff in paediatrics were required to undertake training in neonatal resuscitation every two years thereafter.

Midwifery and nursing staff were required to undertake training in neonatal resuscitation and basic adult resuscitation every two years.

Uptake of mandatory training

Training records were stored electronically and were accessible by all clinical midwife and nurse managers in the clinical areas inspected.

Training records reviewed by inspectors showed that 92% of midwives and 82% of medical staff in obstetrics were up to date with electronic fetal monitoring training. All medical staff in paediatrics, 94% of midwives and 89% of nurses were up to date with training in neonatal resuscitation. Sixty-four per cent of medical staff in obstetrics and 73% of midwives were up to date with multidisciplinary training in the management of obstetric emergencies. Half of the midwifery staff, 45% of nursing

staff and 76% of medical staff in obstetrics were up to date with training in basic life support.

In order to be compliant with National Standards, hospital management should ensure that all midwifery, nursing and medical staff is facilitated to undertake mandatory and essential training, appropriate to their scope of practice.

Orientation and training of new staff

New midwifery, nursing and medical staff in the specialities of obstetrics, anaesthesiologysia and paediatrics employed at the hospital were provided with a comprehensive, corporate and speciality specific orientation and induction. This included a one week orientation and induction programme supplemented with a number of lunchtime sessions.

Other training and education opportunities for staff

The hospital was recognised as a site for undergraduate midwifery training and basic specialist training for doctors in the speciality of obstetrics.

Medical staff in the different specialities of obstetrics, anaesthesiology and paediatrics told inspectors they received very good support from consultants and that they had no hesitation about contacting a consultant during or outside core hours to discuss a clinical case or to ask for advice and support.

Grand rounds were held every week in the hospital and all medical, midwifery and nursing staff were encouraged to attend. Cardiotocography tracings were reviewed at the perinatal morbidity and mortality meetings every month; this is discussed further in section 3.2 of this report.

Electronic fetal heart monitoring workshops were conducted four times a year for medical staff in obstetrics and midwifery. Fifty-six staff had attended this workshop in the first two months of 2019.

The hospital employed a neonatal resuscitation officer to provide training and support in neonatal resuscitation to medical, midwifery and nursing staff. One third of staff in the Operating Theatre Department had undertaken perioperative nursing course and over 50% of nursing staff in the Neonatal Unit had a specialist qualification in neonatal intensive care.

Midwives were facilitated to maintain the necessary clinical skills and competency through regular rotation to the Labour Ward, antenatal and postnatal wards. However, medical, midwifery or nursing staff did not rotate between the five maternity services in the Saolta University Health Care Group.

Staff told inspectors that multidisciplinary practical training sessions for staff, such as clinical skills and drills in obstetric emergencies, were conducted irregularly.

Table 4 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 midwifery and consultant obstetrician positions 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. **Judgment:** Substantially 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 National Standards in relation to safe and effective care. Of these, Letterkenny General 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

Letterkenny University Hospital provided a range of general and specialist maternity services for women with normal 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 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:

- an admission room in the antenatal and postnatal ward
- medical-led antenatal clinics
- Fetal Assessment Unit and Early Pregnancy Clinic
- Emergency Department
- combined antenatal and endocrine clinic for women with diabetes mellitus and gestational diabetes.

At the time of the inspection, hospital management informed inspectors that a supported care pathway[***] as outlined in the National Maternity Strategy for normal risk women was being implemented at the hospital. All pregnant women who attended the hospital for their first antenatal appointment were risk assessed by a consultant obstetrician. Women at high risk of developing complications and those who had complex obstetric or medical needs were identified and care was planned by the multidisciplinary team and provided in the most appropriate setting.

The hospital provided a combined obstetric and endocrine clinic for women with pre-pregnancy or gestational diabetes mellitus.

The hospital had an Early Assessment Unit and Early Pregnancy Clinic with clearly documented pathways where women in early pregnancy with suspected complications were reviewed and assessed by the obstetric team. The unit was open Monday to Friday from 08:00hrs to 18:00hrs. Women were referred to the unit by

[***] 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.

their general practitioner or obstetric team. The unit was staffed by midwives trained in ultrasonography supported by the multidisciplinary team.

The hospital provided access to fetal ultrasound scanning services at intervals recommended in the National Standards. Fetal ultrasound scans were conducted by midwives trained in ultrasonography, senior registrars with specific qualifications in ultrasonography and consultant obstetricians.

Admission pathways

There were established pathways for the assessment, management and admission of women who attended the hospital with pregnancy related complications 24 hours a day, seven days a week. Pregnant women of any gestation could be reviewed in the Emergency Department 24 hours a day, seven days a week.

Pregnant women less than 16 weeks' gestation who presented to the Emergency Department outside of scheduled appointments with suspected complications during or outside core working hours were triaged using the Manchester Triage System,[†††] reviewed by a member of the obstetric team at senior house officer or registrar grade and, if required, admitted to the Gynaecological Ward.

Pregnant women greater than 16 weeks' gestation who presented to the Emergency Department outside of scheduled appointments with suspected complications during or outside core working hours were triaged using the Manchester Triage System, reviewed by a member of the obstetric team at senior house officer or registrar grade and, if required, admitted to the Maternity Unit.

An ultrasound scanner was available in the Emergency Department. An obstetric registrar with the requisite qualification in ultrasonography conducted ultrasound scans on pregnant women attending the Emergency Department.

Pregnant women presenting to the hospital could also be reviewed by a member of the obstetric medical team at senior house officer grade in the Admission Room located in the Maternity Unit.

Pregnant women presenting to the Emergency Department in advanced labour during and outside core working hours were transferred directly to resuscitation room 4. This room was equipped with the necessary equipment for a birth and neonatal resuscitation.

The hospital had a formal pathway for pregnant women who presented to the Emergency Department with surgical or medical conditions. Pregnant women who

[†††] The Manchester Triage System is one of the most commonly used triage systems in Europe. It enables nurses to assign a clinical priority to patients, based on presenting signs and symptoms, without making any assumption about the underlying diagnosis.

self-referred or were referred by their general practitioner with a clinical condition not pregnancy related were reviewed by the medical senior house officer grade or surgical senior house officer grade. Women were also reviewed by a member of the obstetric team at senior house officer or registrar grade.

Admission room

Women greater than 16 weeks gestation requiring observation were admitted to the Admission Room located in the Maternity Unit. The Admission Room was staffed by midwives supported by the multidisciplinary team. Women could self-refer to this unit or were referred by their general practitioner, from the Emergency Department, obstetric antenatal clinic, fetal assessment unit or the combined obstetric and diabetic antenatal clinic. Women were also admitted to the unit for monitoring of blood pressure, fetal wellbeing or administration of iron infusions.

3.1.2 Access to specialist care and services for women and newborns

Access to clinical specialists

As the maternity unit was co-located with a general hospital, pregnant or postnatal women who booked for maternity care at the hospital with a surgical or medical condition unrelated to pregnancy or who developed medical or surgical complications during pregnancy had access to general surgeons and to specialists in cardiology, respiratory medicine, endocrinology and psychiatry when required.

Women who booked for maternity care in the hospital with a history of diabetes mellitus were referred by obstetric team at their first antenatal appointment to a combined obstetric and specialist clinic in endocrinology. This clinic comprised of consultant obstetricians, endocrinologist and a clinical nurse specialist in diabetes. Women requiring clinical specialists in fetal medicine were referred to a tertiary maternity hospital in Dublin.

Women presenting to the hospital with complications such as major cardiac problems or placental complications or any condition where there is a risk to the baby were transferred to a tertiary referral hospital in Dublin.

Clinical staff had access to and advice from consultant microbiologists and haematologists located in the general hospital 24-hours a day, seven days a week. The hospital also accessed radiology services such as computerised axial tomography and interventional radiology in Cork University Hospital.

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.

The obstetric anaesthetic service at the hospital was led by a consultant anaesthesiologist. This person was responsible and accountable for the organisation and management of the obstetric anaesthetic service in the hospital. Non-consultant hospital doctors assigned to the obstetric and gynaecology rota were free from other duties and were immediately available for maternity services. The anaesthetic team were given sufficient notice of women at high risk of potential complications. A nurse led anaesthetic pre-assessment clinic was established in the general hospital but pregnant women were not referred to this clinic. Pregnant women who presented with risk factors for anaesthesia or with a history of previous complications during anaesthesia were referred to the anaesthetic team by the obstetric team or midwifery staff referred, on a case by case basis, during pregnancy or when admitted to the Labour Ward. Inspectors were told that it was established practice that the registrar in anaesthesiology on call visited the Labour Ward every day to determine if there were women who may require anaesthetic input in their care. The hospital implemented a guideline in 2018 to standardise the process of referral of pregnant woman to the anaesthetic team during the antenatal period.

Critical care

The National Standards recommend that specialised birth centres have a high-dependency or observation unit to manage a clinically deteriorating woman. The hospital had a one bedded High Dependency room located in the Labour Ward. Pregnant or postnatal women who required invasive monitoring or closer observation because of complications such as pre-eclampsia or obstetric haemorrhage were cared for in the High Dependency room.

Critical care facilities at the hospital included a five bedded Level 3 Intensive Care Unit.[§§§] Pregnant and postnatal women who required intensive 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 intensive care. Women admitted to the Intensive Care Unit were reviewed jointly by the consultant obstetrician and consultant anaesthesiologist every day or more frequently if needed. Midwifery review and care was provided by midwives from the Labour Ward as needed. Women requiring more

[‡‡‡] 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.
[§§§] 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.

advanced critical care were transferred via the National Ambulance Service to a tertiary hospital in Dublin. If the woman was critically ill, transfer was via the Mobile Intensive Care Ambulance Service.

Neonatal care

The hospital had a level 1 Special Care Baby Unit where high dependency and special care for babies born at or greater than 32 weeks gestation, and sick babies born at term where cared for. Babies requiring more specialist care were transferred to a level 3 Neonatal Unit[****] in the National Maternity Hospital, Dublin.

Where there was a risk of premature delivery of a baby at less than 32 weeks gestation, the hospital arranged for in-utero transfer to a tertiary maternity hospital in line with the HSE's Model of Care for Neonatal Services in Ireland.[5]

If babies were born at less than 32 weeks gestation at the hospital they were stabilised and transferred soon after birth to a maternity hospital that could provide level 3 neonatal care. The hospital had an up-to-date guideline that guided the transfer of pregnant women to another hospital. The transfer was organised through the National Neonatal Transport Programme. Newborns that required therapeutic cooling[††††] for neonatal encephalopathy [‡‡‡‡] had passive cooling commenced at the hospital before transfer to a specialist maternity hospital where therapeutic cooling was provided.[§§§§] The Special Care Baby Unit in the hospital provided ongoing care for babies transferred back from tertiary level Neonatal Units.

3.1.3 Communication

The hospital had formal arrangements in place for clinical handover among midwifery, nursing and medical staff in all clinical areas inspected. Clinical information was shared using the Identify-Situation-Background-Assessment-Recommendation communication tool[*****] in line with national guidelines.[†††††8] The hospital audited compliance with this communication tool.

[****] Level 3 (tertiary units) provide the full spectrum of neonatal care to term and pre-term infants who are critically unwell. There should be sufficient clinical throughput to maintain clinical skills and expertise, with a minimum of 100 infants BW <1500g and/or 100 infants requiring assisted ventilation/CPAP.
[††††] 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 provided in the large tertiary maternity hospitals in Dublin and Cork.
[‡‡‡‡] Neonatal encephalopathy, also known as neonatal hypoxic-ischemic encephalopathy, is defined by signs and symptoms of abnormal neurological function in the first few days of life in a baby born at term.
[§§§§] The ISBAR (Identify -Situation-Background-Assessment-Recommendation) technique is a way to plan and structure communication. It allows healthcare staff an easy and focused way to set expectations for what will be communicated and to ensure they get a timely and appropriate response.

Letterkenny University Hospital had implemented the Irish Maternity Early Warning System to assess, monitor and detect clinical deterioration in pregnant and postnatal women up to 42 days post birth. The hospital audited compliance with the use of this tool. Staff who spoke with inspectors were clear about who was the most senior doctor to be called in line with the Irish Early Maternity Warning System escalation process.

The hospital had a system for informing medical, midwifery and nursing staff about safety alerts in relation to medical devices and medicines, and providing feedback on clinical incidents, perinatal mortality and morbidity meetings. All information about safety alerts were shared at clinical handover and documented in ward communication books.

Emergency response teams

The hospital had emergency medical response teams in place 24 hours a day, to provide an immediate response to obstetric and neonatal emergencies. At the time of inspection, there was an established procedure and process to contact emergency on-call teams for obstetric and neonatal emergencies and cardiac arrest. The hospital also had a system in place whereby staff contacted the operating theatre nursing staff whenever an emergency operating theatre was required.

Staff in the clinical areas were very clear and consistent in their response on how to respond to obstetric and neonatal emergencies. However, information about summoning an emergency response team needs to be clear for staff coming to work at the hospital for the first time. Inspectors observed that the signage in relation to emergency phone numbers for emergency response teams in the clinical areas inspected could be improved and standardised.

Staff who spoke with inspectors stated that the response times for an obstetric or neonatal emergency were appropriate. However, emergency response times were not audited at the hospital. 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.

Multidisciplinary handover

Consultant-led multidisciplinary clinical handover took place every morning Monday to Friday at 08.45hrs in the Education Room in the Maternity Unit. These meetings were attended by consultant obstetricians, obstetric registrars and senior house officers going off call and coming on call, the director of midwifery, the assistant director of midwifery, the clinical midwifery managers from the Maternity Unit and the clinical nurse manager from the neonatal unit.

A formal multidisciplinary clinical handover book was used to record attendance at these meetings and information shared from the different clinical areas. Medical staff and clinical midwifery managers shared information about women at higher risk of complications in the Labour Ward, Antenatal ward, Postnatal Ward and Gynaecological Ward. The clinical nurse manager from the Special Care Baby Unit provided an update on activity in the unit. At the time of inspection, the hospital had recently implemented a new clinical guideline relating to clinical handover and was in the process of training all staff on its use.

Inspectors were informed that anesthetic and or paediatric medical staff did not attend these clinical handover meetings. It is important that there is an input from the full multidisciplinary team at clinical handover. Following this inspection, the hospital should review the arrangements in place for multidisciplinary clinical handover to ensure that all specialties 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.

Safety huddles[‡‡‡‡‡7] were conducted, immediately after the multidisciplinary handover. Information shared at the safety huddle included information on staffing levels, safety alerts, staff training and policies, procedures and guidelines.

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

Other findings relevant to communication

The hospital had identified specific situations were consultant obstetricians should attend at birth. Such situations included maternal collapse, caesarean section for placental complications, births less than 32 weeks gestation, all cases of haemorrhage, breech presentations, multiple pregnancy, seriously ill women and severe eclampsia or pre-eclampsia.

Medical, midwifery and nursing staff who spoke with inspectors said that they had 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.

[‡‡‡‡‡] Safety huddles involving the multidisciplinary team improve communication, situational awareness, and care for women and babies.

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. Staff also had access to National Clinical Effectiveness Committee§§§§§ guidelines in relation to sepsis and the Irish Maternity Early Warning System. The hospital had also adopted the following hospital group policies, procedures and guidelines for local use:

- venous thromboembolism in pregnancy
- management of shoulder dystocia
- massive/acute haemorrhage
- transfer of neonate to another hospital/Neonatal Intensive Care Unit.

Inspectors were told that the hospital was developing a massive obstetric haemorrhage policy.

Policies, procedures and guidelines were available electronically to all staff in the clinical areas visited 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.

3.1.5 Maternity service infrastructure, facilities and resources

Assessment areas

The Emergency Department was a new modern purpose build department, located on the ground floor of the hospital. It comprised of 12 separate cubicles, two toilets, a designated spacious triage room, a large open plan resuscitation area with four resuscitation spaces, four single rooms with no ensuite facilities and a relative's room. Pregnant or postnatal women who presented for an unscheduled visit or a pregnant woman in advanced labour were reviewed and assessed in a dedicated area in the resuscitation area. This dedicated area was spacious and was equipped with the necessary emergency equipment for a birth and maternal or neonatal resuscitation. A mobile neonatal resuscitaire was stored close to the resuscitation room. Staff in the Emergency Department who spoke with inspectors reported that the hospital planned to provide neonatal resuscitation training to staff in the department.

§§§§§ Guidelines produced by the National Clinical Effectiveness Committee have been formally mandated by the Minister for Health.

Admission Room

The admission room was located in the Maternity Ward and comprised of two assessment areas. Inspectors observed that the Admission Room had limited space for the assessment and provision of care to women who attended this clinical area. The room was small, space was limited and the infrastructure was outdated and not in line with recommended infrastructural guidelines for an assessment room for pregnant women. While there was an ensuite shower and toilet facility, this space was also very restricted. Essential equipment such as a cardiac monitor and a mobile cardiotocography machine were readily available.

Antenatal and postnatal ward

The Maternity Ward comprised of 34 beds allocated into 10 antenatal beds and 24 postnatal beds. Some postnatal beds were often used as antenatal beds if needed. The postnatal section of the ward comprised of three six-bedded wards, one four-bedded ward and two single rooms with ensuite facilities. The antenatal section comprised of one six bedded and one four bedded.

Inspectors observed that storage space on the ward was limited and the infrastructure of the ward was outdated and did not meet international design standards needed to provide safe, high-quality care in a modern maternity service.[9]

Labour Ward

The Labour Ward was built 10 years ago and is spacious and more modern in design than other areas of the Maternity Unit. The Labour Ward comprised of four birthing rooms and one of these rooms also functioned as a High Dependency room. The High Dependency room was a large, spacious room with a wall mounted cardiac monitor. It also had ensuite and toilet facilities. The obstetric operating theatre adjacent to the Labour Ward was not in use at the time of inspection. Hospital management told inspectors that the executive management team of Saolta University Health Care Group had approved the recruitment of additional staff to open the operating theatre adjacent to the Labour Ward but recruitment of staff had not occurred because national recruitment controls applied. No additional national funding was received by the hospital group or the hospital to facilitate this initiative.

Intensive Care Unit

Pregnant and postnatal women who required Level 3 critical care[******] were managed in the hospital's five-bedded Intensive Care Unit. Overall the infrastructure of the

[******] 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.

Intensive Care Unit was outdated and did not meet the specifications of a modern critical care facility.[9,10]

Operating theatres for obstetrics and gynaecology

There was 24 hour access to emergency obstetric surgery at the hospital. National Standards recommend that an obstetric operating theatre is in or adjacent to the labour ward. The Operating Theatre Department at the hospital was located three floors above the Maternity Unit. Staff in the Maternity Unit had a system in place whereby women could be transferred rapidly to the Operating Theatre Department if there was a requirement for emergency obstetric surgery such as caesarean section. Staff had an override key that provided priority access to the lifts when transferring emergency obstetric surgery cases to the operating theatre. In addition, midwifery staff in the labour wards would telephone the nursing staff in the operating department to tell them that an emergency obstetric surgery case was on the way. The Operating Theatre Department comprised of four operating theatres and a recovery room. Inspectors were told that it was established policy that an operating theatre was always ready and available for emergency obstetric surgical cases 24 hours a day, seven days a week.

There were contingency arrangements in place at the hospital to manage two concurrent emergency surgical cases. The Operating Theatre Department staff worked to ensure that elective surgical work on weekdays was completed, where possible, during core working hours and nursing staff were rostered to enable this. In addition, emergency cases that occurred outside of core working hours were performed when possible when there were more staff on duty. Outside core working hours the Operating Theatre Department was staffed with three nursing staff, one staff nurse was on on-site and two staff nurses were on call from home.

Inspectors were informed that there was regular communication between the Operating Theatre Department and the Labour Ward to identify any potential emergency obstetric cases and facilitate the management of the operating theatre schedule.

A safe surgery checklist,[††††††11] in accordance with best practice recommendations, was used for all elective and emergency surgical procedures in the hospital's operating theatres and compliance with the checklist was audited at the hospital.

[††††††] 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.

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 which included two intensive care cots and eight high dependency or special care cots. On the day of inspection there were four babies in the Special Care Baby Unit.

Laboratory services

Blood and blood replacement products were accessible when required in an emergency for women and babies. Platelets, if needed, were ordered from Dublin and staff informed inspectors that there were no delays experienced in obtaining them. Microbiology and haematology services were available during and outside core working hours, at weekends and public holidays.

Overall, the infrastructure in the Maternity Unit, specifically the Maternity Ward and the Assessment Room was outdated and in need of refurbishment if it is to comply with international design standards for maternity services. Infrastructure was a risk recorded on the corporate risk register and hospital management told inspectors that there was no funding available to address the infrastructural deficits.

3.1.6 Maternity service equipment and supplies

The clinical areas visited by inspectors had emergency resuscitation equipment for women and newborns. Inspectors found that checklists confirmed that emergency equipment was checked as specified per hospital policy.

Labels on electronic fetal heart monitoring machines viewed by inspectors in the Maternity Ward and the Labour Ward showed they were serviced every year. There was a designated trolley in the Operating Theatre Department which had been equipped with supplies and equipment for difficult airway management in line with best practice guidelines.[12]

Emergency supplies and essential medications to manage obstetric emergencies such as maternal haemorrhage, eclampsia and neonatal resuscitation were readily available in the clinical areas inspected.

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. Obstetric operating theatre for emergency cases was not adjacent to the Labour Ward. **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 infants, 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

Letterkenny University Hospital had systems in place to identify and manage risks. Clinical staff used HSE risk assessment forms to document identified risks and the controls implemented to mitigate the risks. Risks in relation to the maternity service and agreed risk control measures were recorded on the corporate risk register which 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 Management Team at hospital group level. Risks escalated to the hospital group were recorded in the Saolta University Health Care Group corporate risk register.

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

- medical, nursing and midwifery staff
- infrastructure
- obstetric theatre location in Labour Ward
- staff training and education.

Inspectors were informed that the hospital was continuously recruiting at national and international level to address the risk in relation to medical, nursing and midwifery shortages for the maternity unit. Redeployment of staff and sanctioning of overtime, where appropriate, were measures undertaken by hospital management to address staffing deficits. In addition, to assist in the recruitment of consultant staff, the hospital increased the number of fixed term locum consultant positions and decreased the number of agency locum consultants employed at the hospital.

The hospital had implemented some controls to mitigate the risk of not having a dedicated operating theatre adjacent to the maternity unit. These included the use

of a key to secure the elevator and the implementation of a policy to ensure rapid transport of women from the maternity unit to the operating theatre. The hospital had received funding to open the operating theatre adjacent in the Labour Ward Monday to Friday, during core hours. An operational plan to proceed was this was being developed at hospital group level.

Hospital managers told inspectors that financial constraints had impacted on the hospital's ability to release staff to attend training and education appropriate to their scope of practice. Hospital management had implemented several measures to address this risk; including arranging several training programmes out-of-hours and the appointment of a resuscitation officer to provide training to staff on site.

Clinical incident reporting

Inspectors found that there was an established system for reporting clinical incidents in the hospital. Staff who spoke with inspectors could describe the process for reporting clinical incidents and all were aware of their responsibility to report such incidents. Clinical staff used the National Incident Management System‡‡‡‡‡‡ form to report clinical incidents. The hospital collected and investigated trends in the reporting of clinical incidents in the maternity unit. All clinical incidents were reported on a document reporting system. The Hospital Executive Board and Quality and Patient Safety Committee had oversight of all clinical incidents, serious incidents and serious reportable events reported in the hospital.

All clinical incidents that occurred in the maternity unit were reviewed, discussed and any required actions agreed each month at the clinical incident implementation meeting. This meeting was attended by a clinical midwifery manager from the maternity unit and special care baby unit, the assistant director of midwifery, the director of midwifery, the risk manager and a consultant obstetrician and paediatrician.

All serious incidents and serious reportable events were uploaded to the National Incident Management System within the required 30 day time frame[13] and escalated to the Women and Children's Directorate's Serious Incident Management Team.

Staff who spoke with inspectors reported that they received individual feedback on clinical incidents from the clinical midwifery manager.

Feedback from women

There was a formalised process at the hospital to monitor compliments and respond to complaints received from women who used the maternity service. The hospital used the HSE 'Your service, Your say' process to capture and manage women's experiences of

‡‡‡‡‡‡ The State Claims Agency's National Incident Management System is a risk management system that enables public hospitals to report incidents in accordance with their statutory reporting obligations.

the maternity services.[14] Complaints and feedback were reviewed and discussed at the Quality and Patient Safety Executive Committee and Hospital Executive Board meetings.

A postnatal reunion group established by the hospital and facilitated by the antenatal education coordinator provided women who had used the maternity services in the hospital to provide feedback about their maternity care experiences.

3.2.2 Maternity service monitoring and evaluation

A range of different clinical measurements in relation to the quality and safety of maternity care were gathered at the hospital each month in line with national HSE Irish Maternity Indicator System§§§§§§ reporting requirements. This data is gathered nationally by the HSE's Office of the National Women and Infants Health Programme and the National Clinical Programme for Obstetrics and Gynaecology.[15] This information also allows individual maternity units and maternity hospitals to benchmark performance against national rates over time.

The hospital, through the Quality and Patient Safety Committee, proactively monitored, analysed and responded to information from multiple sources including serious incidents and serious reportable events, 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 was reviewed every two weeks at the Hospital Executive Board meeting and every month at the Quality and Patient Safety Committee 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.

Inspectors were informed that the hospital's performance data including data submitted for the Irish Maternity Indicator System and National Perinatal Epidemiology Centre were reviewed, considered, discussed and compared with

§§§§§§ This Irish Maternity Indicator System encompasses a range of multidisciplinary metrics, including hospital management activities, deliveries, serious obstetric events, neonatal, and laboratory metrics. It provides within-hospital tracking of both monthly and annual data. It also provides national comparisons across all maternity units, allowing hospitals to benchmark themselves against national average rates and over time.
******* The Maternity Patient Safety Statement contains information on 17 metrics covering a range of clinical activities, major obstetric events, modes of delivery and clinical incidents that are reported on by each of the 19 maternity hospitals or units and published each month on the Health Service Executive (HSE) website.
††††††† Robson Classification is a system that classifies women into 10 groups based on their obstetric characteristics (parity, previous CS, gestational age, onset of labour, fetal presentation and the number of fetuses).

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 units of a similar size outside the hospital group.

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 rates of obstetric blood transfusion. To address this, inspectors were told that the hospital had drafted a massive obstetric haemorrhage policy which would be implemented when ratified by the Hospital Executive Board.

Clinical audit

The hospital had a clinical audit plan. Audits were completed by medical, nursing and midwifery staff with support from the hospital's Clinical Audit Facilitator. The Quality and Safety Patient Committee had oversight of the audit activity at the hospital. Audits conducted in the hospital followed a prescribed structure.

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

- postpartum haemorrhage
- blood transfusion for caesarean section
- caesarean section surgical site infection surveillance
- maternal sepsis

Audits planned for 2019 included:

- postpartum haemorrhage
- audit of concurrent emergencies in the Operating Theatre Department
- Making every contact count – women were asked about smoking

Although there was evidence of audit activity at the hospital, the audit plan provided to inspectors for 2019 showed that the planned audit activity regarding obstetric emergencies audits was limited. At the time of inspection, the hospital were establishing a database to record audit activity at the hospital, this together with an increased focus on audit activity will help provided assurances to hospital managers and clinicians that the care delivered in the maternity units is safe and effective.

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 in the hospital. Staff advised inspectors that maternal morbidity was discussed at these meetings too. 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

At the time of inspection the hospital did not have a structured and resourced quality improvement programme in place but they had implemented a number of quality improvement initiatives aimed at improving the quality and safety of the maternity services at the hospital. Inspectors were informed about a planned Saolta University Health Care Group initiative to pilot a quality improvement programme at the hospital.

Quality improvement initiatives implemented in the hospital included:

- difficult airway management trolley in the Operating Theatre Department which was shared with the Intensive Care Unit.
- postnatal reunion group which provided a forum for women to provide feedback on their experience
- multidisciplinary clinical handover booklet
- visitation by members of the local La Leche League group to maternity ward to assist women breastfeeding their baby
- updated policy on visitors and visiting to the maternity

While there was some evidence of quality improvement initiatives being implemented to improve maternity services at the hospital, this is something that could be developed further. Inspectors were told that Saolta University Health Care Group had selected Letterkenny University Hospital as the pilot site for its quality improvement programme initiative. Following this inspection, the hospital group should progress with implementing the quality improvement programme initiative and should, in line with National Standards, report publically on programme.

Table 6 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

Maternity services should have effective leadership, governance and management arrangements in place to ensure best practice and safe service provision. These arrangements should be underpinned by risk management and audit, multidisciplinary guidelines, adequate staffing resources, adequate equipment, and sufficient training and education for clinical staff, to facilitate the delivery of safe care and the effective management of obstetric emergencies.

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

There were clearly defined and effective leadership, governance and management structure at the hospital. There was good oversight of the quality and safety of maternity 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 clinic outcomes, service user feedback and clinical incidents and benchmarked 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, while there was some evidence that there were collaborative working arrangements between Letterkenny University Hospital and the other maternity units in the Saolta University Health care Group which enabled the sharing of expertise and clinical services, a formalised network with a single governance structure, as recommended in the National Maternity Strategy, was not fully implemented.

The hospital employed medical staff in the specialties of obstetrics, paediatrics, neonatology and anaesthesiologists that were available on site to provide care to women and babies on a 24 hour, seven day a week basis. The hospital had clearly defined training requirements for midwifery, nursing and medical 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 is completed by midwifery, nursing and medical staff within recommended timeframes.

Letterkenny 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. Fetal ultrasound scans were offered to all pregnant women in accordance with the National Standards. 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.

Although there was evidence of audit activity at the hospital, the audit activity, especially in relation to obstetric emergencies, could be improved. Increasing the focus on audit activity will help provided assurances to hospital managers and clinicians that the care delivered in the maternity units is safe and effective.

There was evidence that quality improvement initiatives had been implemented in the hospital but the hospital should, with support from the hospital group and in line with National Standards, implement a structured and resourced quality improvement programme to further enhance quality and safety.

Following this inspection the hospital 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 Letterkenny University Hospital.

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For further information please contact:

Health Information and Quality Authority
Dublin Regional Office
George's Court
George's Lane
Smithfield
Dublin 7

Phone: +353 (0) 1 814 7400
Email: qualityandsafety@hiqa.ie
URL: www.hiqa.ie