

Clinical Activities

Rationale for measurement

Demonstrates the volume of clinical activity in each organisation and information is reported on the total number of mothers delivered, the total numbers of births, the number of multiple pregnancies, and transfers in and out to hospitals.

Measurement methodology and data sources:

Local extracts submitted monthly and extrapolated for analysis and publication.

Target

These figures are not formatted in a way to support comparison with other hospitals or aggregation with other data.

Performance

Hospital	Activity	2023 August	2023 Year to date
Cavan Hospital	Total Mothers delivered $\geq 500g$ (n)	108	801
	Multiple pregnancies (n)	2	10
	Total births $\geq 500 g$ (n)111	110	811
	In utero transfer – admitted (n)	0	1
	In utero transfer – sent out (n)	1	9
Drogheda Hospital	Total Mothers delivered $>500g$ (n)	230	1789
	Multiple pregnancies (n)	3	19
	Total births $>500 g$ (n)	233	1809
	In utero transfer – admitted (n)	1	11
	In utero transfer – sent out (n)	5	29
Rotunda	Total Mothers delivered $>500g$ (n)	713	5421
	Multiple pregnancies (n)	11	103
	Total births $>500 g$ (n)	724	5527
	In utero transfer – admitted (n)	(Reported Quarterly)	13 for Q2 2023
	In utero transfer – sent out (n)	(Reported Quarterly)	0 for Q2 2023

HOME BIRTHS

Introduction

Currently in Ireland there is a National Domiciliary Midwifery service available to eligible expectant mothers who wish to avail of a home birth service under the care of a self employed community midwife (SECM). This service is provided by the SECM on behalf of the HSE¹.

Rationale for measurement

Research shows that a planned home birth is an acceptable and safe alternative to a planned hospital birth for some pregnant women. The expectant mother, in consultation with her midwife and other Medical advisors of her choice, can decide whether home birth is a safe option for her and her baby¹.

Target

These figures are not formatted in a way to support comparison with other hospitals or aggregation with other data.

Performance

Geographic area associated with the Rotunda Hospital	Month	N= Booked	N= Delivered at Home
	April	4	0
	May	3	2
	June	4	4
	July	3	3
	August	2	0
Geographic area associated with Drogheda Hospital	Month	N= Booked	N= Delivered at Home
	April	1	1
	May	0	0
	June	1	1
	July	1	1
	August	4	3
Geographic area associated with Cavan Hospital	Month	N= Booked	N= Delivered at Home
	April	0	0
	May	0	0
	June	0	0
	July	0	0
	August	1	0

MIDWIFERY LED UNITS (MLUS)

Introduction

Midwife-led maternity care is shown to be safe for women with low-risk during pregnancy. In Ireland, two midwife-led units (MLUs) were introduced in 2004. These are based in the RCSI HG in Drogheda and Cavan Hospitals. In the MLU a small team of midwives provide care for women throughout their pregnancy, during labour and in the postnatal period.

Rationale for measurement

A number of studies have found that midwife-led care leads to a number of positive outcomes with no adverse effects for mothers and their babies. In fact, midwifery care for women at low-risk for complications during pregnancy is associated with various benefits, such as increased rates of maternal satisfaction and a decrease in unnecessary medical intervention¹⁻³.

Target

These figures are not formatted in a way to support comparison with other hospitals or aggregation with other data.

Performance

Births – Drogheda Hospital	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Total number of mothers who gave birth within the month	217	200	247	204	222	239
Number of mothers who gave birth in the MLU	20	15	19	6	18	19
% of mothers who gave birth in MLU within the month	9.2%	7.5%	7.7%	3%	8.1%	7.9%

Births – Cavan Hospital	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Total number of mothers who gave birth within the month	107	88	94	111	99	95
Number of mothers who gave birth in the MLU	6	4	6	6	4	3
% of mothers who gave birth in MLU within the month	5.6%	4.5%	6.3%	5.4%	4.0%	3.0%

PERINATAL MORTALITY RATE (ADJUSTED)

Definition

The Adjusted Perinatal Mortality Rate is defined as Stillbirth and early neonatal death > 2500 grams excluding lethal congenital defects/1000 deliveries.

Rationale for measurement

The perinatal mortality rate is recognised as an indicator of the quality and safety of antenatal and perinatal care

Measurement methodology and data sources:

Local data extracts submitted monthly and extrapolated for analysis and publication.

Target

The figures beneath are not formatted in a way to support comparison with other hospitals or aggregation with other data. Context is provided in the graph in section 'Perinatal Deaths \geq 2.5kg without a Congenital Anomaly (Perinatal Adjusted)'.

Performance

Hospital	2023 August	2023 Year to date
Cavan General Hospital	0	0
Drogheda Hospital	4.29 (n=1)	2.21 (n=4)
Rotunda Hospital	(Reported Quarterly)	0.95 (n=2) for Q2 2023

- August 2023 Perinatal Mortality Rate (Adjusted) for Cavan (0) was below the national rate of 0.83 (95% CI \pm 0.60-1.06, IMIS 2021). August 2023 Perinatal Mortality Rate (Adjusted) for Drogheda Hospital (4.29) was above the national rate of 0.83 (95% CI \pm 0.60-1.06, IMIS 2021). Q2-2023 Perinatal Mortality Rate (Adjusted) for Rotunda Hospital (0.95) was within the Confidence Interval of 95% \pm 0.60-1.06 (IMIS 2021).

PERINATAL DEATHS $\geq 2.5\text{KG}$ WITHOUT A CONGENITAL ANOMALY (PERINATAL ADJUSTED)

Rationale for measurement

Perinatal mortality Rate – Adjusted (PNMR-A) is defined as the number of perinatal deaths (stillbirths and early neonatal deaths) weighing 2.5kg or more without physiological or structural abnormalities that develop at or before birth and are present at the time of birth per 1,000 births. PNMR-Adjusted is an important indicator of the quality of care provided in Irish maternity services.

Measurement methodology and data sources:

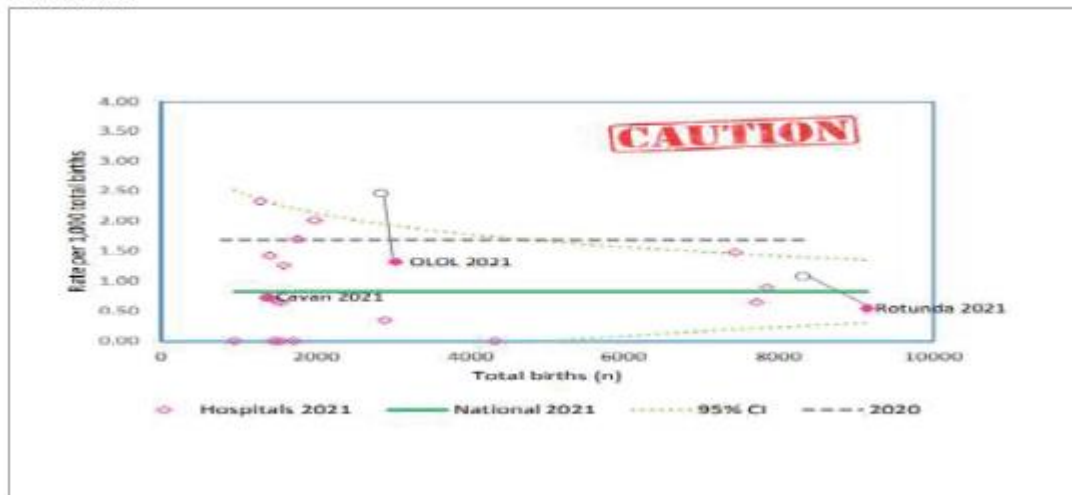
Maternity Units in the Rotunda, Drogheda and Cavan Hospitals submit perinatal mortality data on a monthly basis to the RCSI HG, which in turn is made available to the National Women and Infants Health Programme Clinical Programme *Irish Maternity Indicator System (IMIS)*. The IMIS report is published on an annual basis and allows scrutiny of individual hospital processes and outcomes for women and infants, while bench marking them against national performance.

Variations in PMR – Adjusted between maternity units could potentially be due to random chance or reflect differences in baseline characteristics of the childbearing population. For this reason, funnel plots are used to assess performance outcomes for individual maternity units in comparison to the overall average. The funnel plot is a scatter diagram of individual maternity unit mortality rates against the total number of births within that unit.

In the funnel graph below:-

- The national rate for PNMR-A is indicated by the solid straight green line for 2021 and by a dashed grey line for 2020
- The curved dashed lines (the 95% confidence interval for 2021) represent the limits within which 95% of units are expected to lie
- Solid diamond-shaped markers represent the RCSI HG maternity hospitals/units
- The width of the confidence interval is adjusted to allow for meaningful comparison between unit-specific rates and the national rate. The confidence interval is wider for smaller units reflecting the lack of precision in rates calculated based on small numbers. The confidence interval narrows for larger maternity units, giving the diagram a 'funnel' shape.

Performance



NEONATAL ENCEPHALOPATHY (NE)

Rationale for measurement

Neonatal encephalopathy (NE) is a complex disease of a new-born infant and can be defined as clinical findings in three or more of the following domains: level of consciousness, spontaneous activity when awake or aroused, posture, tone, primitive reflexes, and autonomic system. NE can result from a wide variety of causes. Hypoxic Ischaemic Encephalopathy (HIE) is a subset of NE and is the most common cause of NE; however not all encephalopathies have a HIE.

Measurement methodology and data sources:

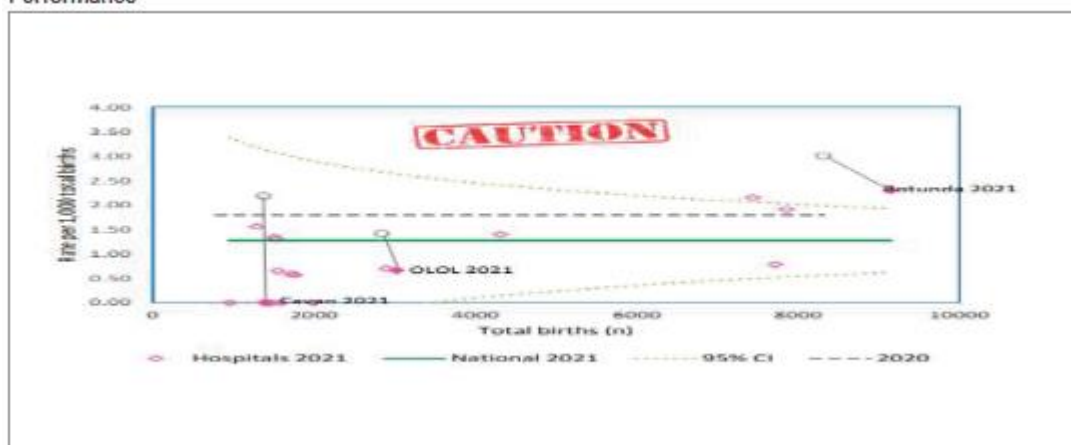
Maternity Units in the Rotunda, Drogheda and Cavan Hospitals submit perinatal mortality and morbidity data on a monthly basis to the RCSI HG, which in turn is made available to the National Women and Infants Health Programme Clinical Programme *Irish Maternity Indicator System (IMIS)*. The IMIS report is published on an annual basis and allows scrutiny of individual hospital processes and outcomes for women and infants, while benchmarking them against national performance.

Variations in Neonatal Encephalopathy (NE) rates between maternity units could potentially be due to random chance or reflect differences in baseline characteristics of the childbearing population. For this reason, funnel plots are used to assess performance outcomes for individual maternity units in comparison to the overall average. The funnel plot is a scatter diagram of individual maternity unit mortality rates against the total number of births within that unit.

In the funnel graph below:-

- The national rate NE is indicated by the solid straight green line for 2021 and by a dashed grey line for 2020
- The curved dashed lines (the 95% confidence interval for 2021) represent the limits within which 95% of units are expected to lie
- Solid diamond-shaped markers represent the RCSI HG maternity hospitals/units
- The width of the confidence interval is adjusted to allow for meaningful comparison between unit-specific rates and the national rate. The confidence interval is wider for smaller units reflecting the lack of precision in rates calculated based on small numbers. The confidence interval narrows for larger maternity units, giving the diagram a 'funnel' shape.

Performance



BREASTFEEDING RATES

Introduction

Breastfeeding, also called nursing, is the process of feeding human breast milk to a child, either directly from the breast or by expressing (pumping out) the milk from the breast and bottle-feeding it to the infant. The World Health Organization (WHO) recommends that breastfeeding begin within the first hour of a baby's life and continue as often and as much as the baby wants.⁽¹⁾

Rationale for measurement

Breastfeeding has many health benefits for both the mother and infant. Breast milk contains all the nutrients an infant needs in the first six months of life. Breastfeeding protects against diarrhoea and common childhood illnesses such as pneumonia and may also have longer-term health benefits for the mother and child, such as reducing the risk of overweight and obesity in childhood and adolescence. WHO recommends that infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health.

IMIS Rates

Measurement methodology and data sources

Maternity Units in the Rotunda, Drogheda and Cavan Hospitals submit perinatal data on a monthly basis to the RCSI Hospital Group, which in turn is made available to the National Women and Infants Health Programme Clinical Programme *Irish Maternity Indicator System (IMIS)*. The IMIS report is published on an annual basis and allows scrutiny of individual hospital processes and outcomes for women and infants, while bench marking them against national performance.

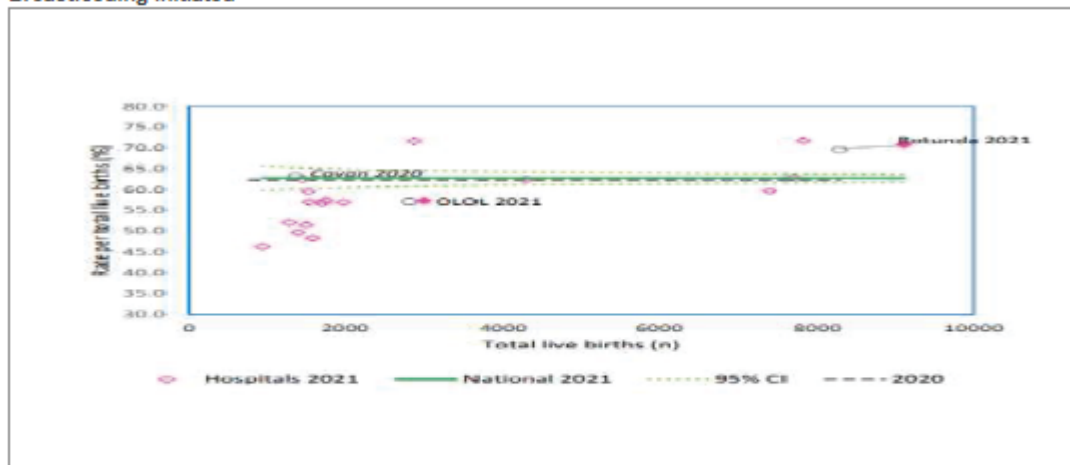
Variations in breast feeding rate between maternity units could potentially be due to random chance or reflect differences in baseline characteristics of the childbearing population. For this reason, funnel plots are used to assess breast feeding rates for individual maternity units in comparison to the overall average. The funnel plot is a scatter diagram of individual maternity unit breast feeding rates against the total number of births within that unit.

In the funnel graph below:

- the national rate for breast feeding in 2021 is indicated by the solid straight green line
- the curved dashed lines (the 95% confidence interval for 2021) represent the limits within which 95% of units are expected to lie.
- the width of the confidence interval is adjusted to allow for meaningful comparison between unit-specific rates and the national rate. The confidence interval is wider for smaller units reflecting the lack of precision in rates calculated based on small numbers. The confidence interval narrows for larger maternity units, giving the diagram a 'funnel' shape.
- Cavan Hospital has missing/incomplete data in 2021. Cavan Hospital is represented by an unfilled dot (2020 data)

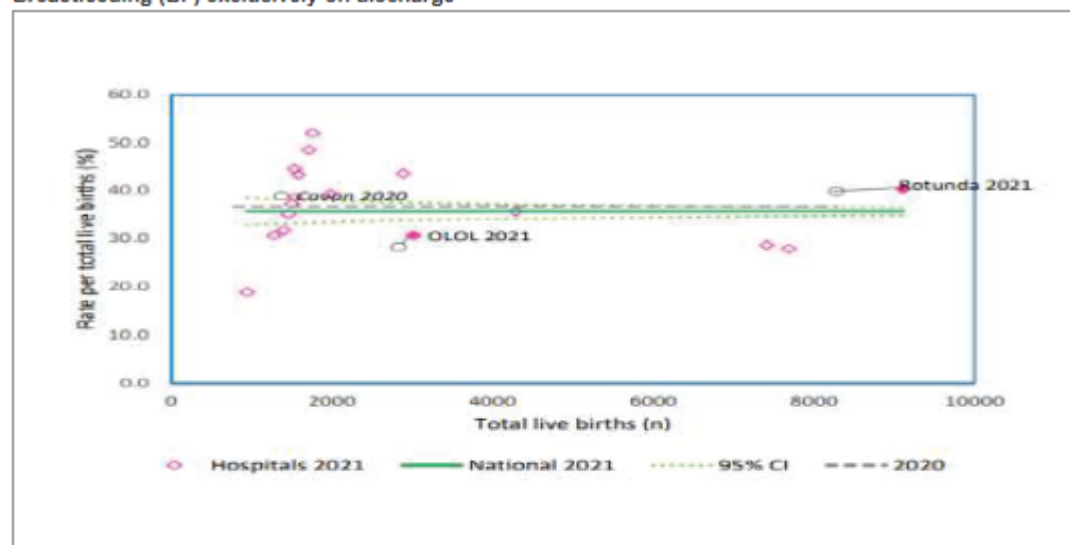
Performance

Breastfeeding initiated



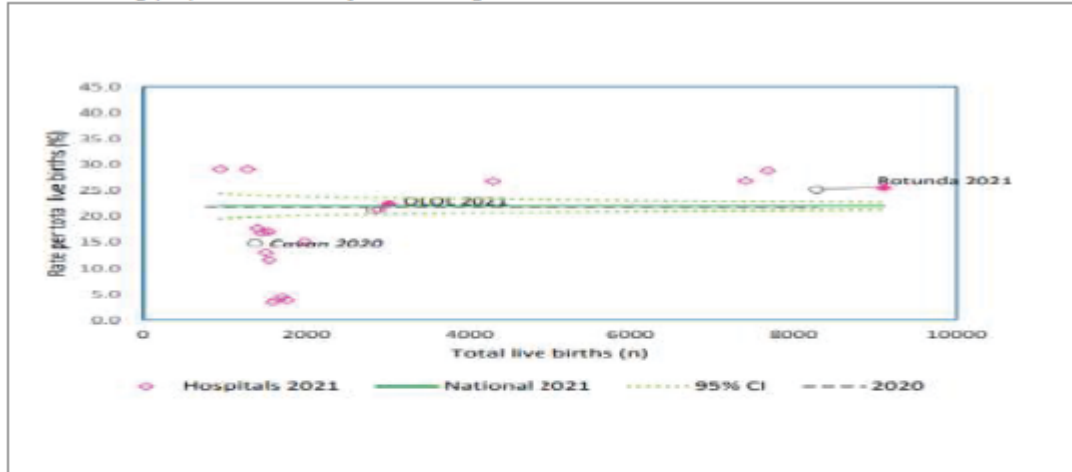
- nationally, in 2021, 62.7% of woman initiated breastfeeding at their baby's first feed
- Rotunda Hospital had a rate of 70.8% which is above the national average
- Drogheda had a rate of 58.3% which is below the national average
- Cavan Hospital has missing/incomplete data in 2021. Cavan Hospital is represented by an unfilled dot (2020 data)

Breastfeeding (BF) exclusively on discharge



- nationally, in 2021, 35.6% of women were breast-feeding exclusively on discharge
- within the RCSI Hospital Group, Rotunda had a rate of 40.4% which is above the national average
- Drogheda had a rate of 30.6% which was below the national average
- Cavan Hospital has missing/incomplete data in 2021. Cavan Hospital is represented by an unfilled dot (2020 data)

Breastfeeding (BF) non-exclusively on discharge



- nationally, in 2021, 22% of women were breast-feeding exclusively on discharge
- within the RCSI Hospital Group, both the Rotunda (25.5%) and Drogheda (22.4%) are both above the national average for breast-feeding non-exclusively on discharge.
- Cavan Hospital has missing/incomplete data in 2021. Cavan Hospital is represented by an unfilled dot (2020 data)

RCSI Hospital Breast Feeding Rates

Measurement methodology and data sources

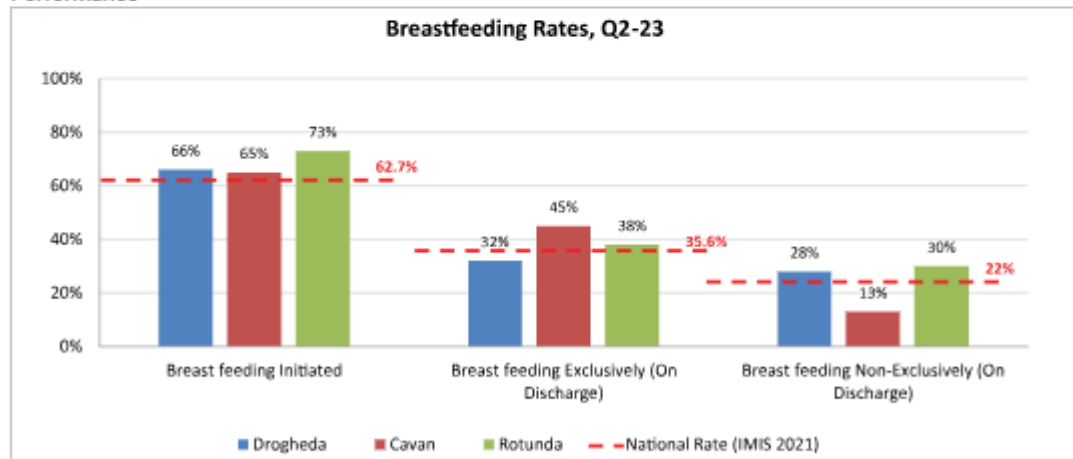
Breastfeeding initiated: Numbers of babies breastfed at first feed following birth, i.e., direct from the breast or expressed. Rate is calculated per total live births. Nationally, in 2021, 62.7% of woman initiated breastfeeding at their baby's first feed (IMIS 2021).

Breastfeeding (BF) exclusively on discharge: Numbers of babies who receive only breast milk without any additional food or drink, not even water, prior to discharge. Rate is calculated per total live births. Nationally, in 2021, 35.6% of woman were breast-feeding exclusively on discharge (IMIS 2021).

Breastfeeding (BF) non-exclusively on discharge: Number of babies who were breastfed and had other food or drink prior to discharge. Rate is calculated per total live births. Nationally, in 2020, 22% of woman were breast-feeding non-exclusively on discharge (IMIS 2021).

Maternity Units in the Rotunda, Drogheda and Cavan Hospitals submit perinatal data on a monthly basis to the RCSI Hospital Group. This data is also made available to the National Women and Infants Health Programme Clinical Programme *Irish Maternity Indicator System (IMIS)*.

Performance



- Drogheda, Cavan and Rotunda Hospitals are above the national rate for breast feeding initiated
- Cavan and Rotunda Hospitals are performing above the national rate for breast feeding exclusively on discharge. Drogheda Hospital is performing below the national rate
- Drogheda and Rotunda Hospitals are performing above the national rate for breast feeding non-exclusively on discharge. Cavan Hospital is performing below the national rate