

## 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 December	2023 Year to date
Cavan Hospital	Total Mothers delivered $\geq 500g$ (n)	104	1245
	Multiple pregnancies (n)	2	18
	Total births $\geq 500 g$ (n) 111	106	1263
	In utero transfer – admitted (n)	0	1
	In utero transfer – sent out (n)	1	19
Drogheda Hospital	Total Mothers delivered $>500g$ (n)	228	2737
	Multiple pregnancies (n)	3	32
	Total births $>500 g$ (n)	231	2770
	In utero transfer – admitted (n)	1	19
	In utero transfer – sent out (n)	3	38
Rotunda	Total Mothers delivered $>500g$ (n)	708	8283
	Multiple pregnancies (n)	16	157
	Total births $>500 g$ (n)	723	8439
	In utero transfer – admitted (n)	(Reported Quarterly)	15 for Q3 2023
	In utero transfer – sent out (n)	(Reported Quarterly)	0 for Q3 2023

(n) = number

Total mothers delivered  $>500g$ : Total number of women delivering a baby weighing 500g or more. The infant weight of 500g is an internationally recognised weight measurement for counting numbers of mothers delivered.

Multiple pregnancies: Number of mothers delivering more than one baby from a single pregnancy. This is a count of mothers, not numbers of babies delivered.

Total births  $>500g$ : Total number of babies born, including live births and stillbirths, weighing 500g or more. The weight of 500g is an internationally recognised weight measurement for counting numbers of babies born.

In-utero transfers admitted: Number of pregnant women admitted to a maternity hospital from another hospital prior to delivery for reasons in the fetal/maternal interest.

In-utero transfers sent out: Number of pregnant women transferred from a maternity hospital to another hospital prior to delivery for reasons in the fetal/maternal interest.

## 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 HSE<sup>1</sup>.

### 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 baby<sup>1</sup>.

### Target

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

### Performance

	Month	N= Booked	N= Delivered at Home
Geographic area associated with the Rotunda Hospital	April	4	0
	May	3	2
	June	4	4
	July	3	3
	August	2	0
	September	3	2
	October	7	5
	November	7	5
	December	3	1
	Geographic area associated with Drogheda Hospital	Month	N= Booked
April		1	1
May		0	0
June		1	1
July		1	1
August		4	3
September		0	0
October		2	0
November		1	1
December		0	0
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
	September	1	1
	October	0	0
	November	0	0
	December	0	0

#### References:

<sup>1</sup> HSE (2022) National Home Birth Services

## 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

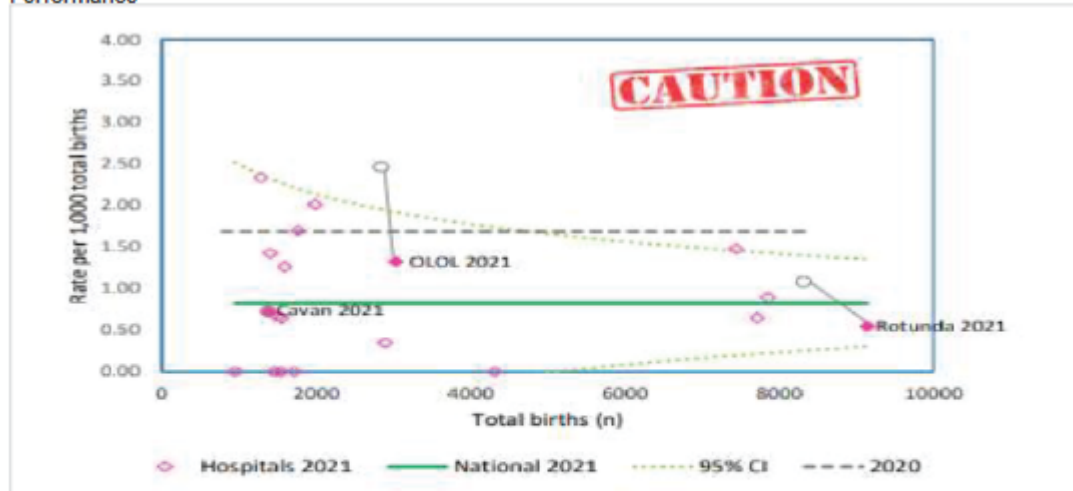
The figures beneath are not formatted in a way to support comparison with other hospitals or aggregation with other data. Context is provided in the graph in section 'Perinatal Deaths  $\geq 2.5\text{kg}$  without a Congenital Anomaly (Perinatal Adjusted)'.

### Performance

Hospital	2023 December	2023 Year to date
Cavan Hospital	9.4 (n=1)	0.79 (n=1)
Drogheda Hospital	0	1.81 (n=5)
Rotunda Hospital	(Reported Quarterly)	0 for Q3 2023

- December 2023 Perinatal Mortality Rate (Adjusted) for Cavan (9.4) was above the national rate of 0.83 (95% CI  $\pm 0.60-1.06$ , IMIS 2021). December 2023 Perinatal Mortality Rate (Adjusted) for Drogheda Hospital (0) was below the national rate of 0.83 (95% CI  $\pm 0.60-1.06$ , IMIS 2021). Q3-2023 Perinatal Mortality Rate (Adjusted) for Rotunda Hospital (0) was below the Confidence Interval of 95%  $\pm 0.60-1.06$  (IMIS 2021).

### Performance



### Note:

Maternity units include in their figures of perinatal deaths babies that are transferred in utero from other units and die in their hospital. Annual rates of perinatal deaths  $\geq 2.5\text{kg}$  without a congenital anomaly should be **Interpreted with caution**.

Drogheda, Cavan and Rotunda are all within the 95% confidence interval for 2021 (curved dashed lines).

## 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:

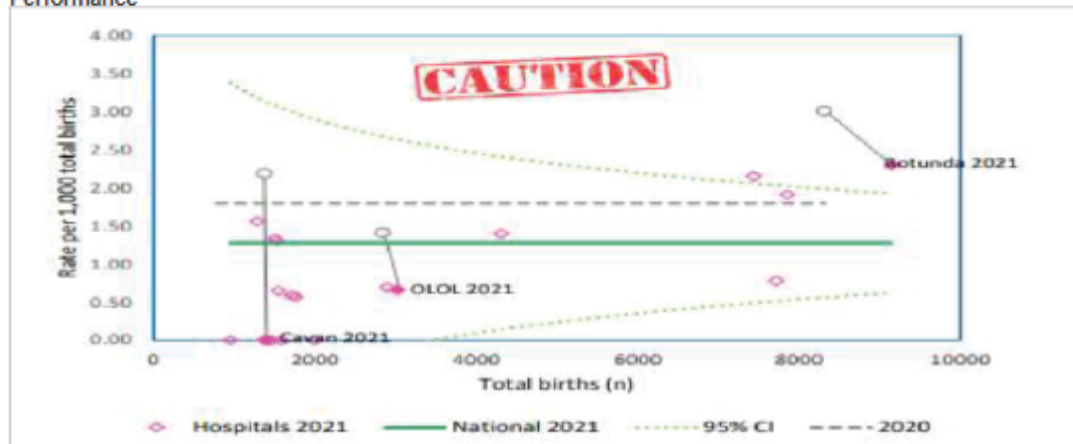
Maternity Units in the Rotunda, Drogheda and Cavan Hospitals submit perinatal mortality and morbidity data on a monthly basis to the RCSI HG, which in turn is made available to the National Women and Infants Health Programme Clinical Programme Irish Maternity Indicator System (IMIS). The IMIS report 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



Description: All infants with  $\geq 35$  weeks' gestation who, during the first week of life, have either seizures alone and/or signs of neonatal encephalopathy. Caution is advised when dealing with small values

Drogheda and Cavan are within the 95% confidence interval for 2021 (curved dashed lines)

Rotunda is outside the 95% confidence interval for 2021 (curved dashed line)