



GUIDELINES AND AUDIT  
IMPLEMENTATION NETWORK

# **Is a perinatal in-patient unit needed in Northern Ireland?**

**September 2013**

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## Introduction

It is currently recommended that all women in late pregnancy or the postpartum period requiring admission to acute psychiatric care should be admitted to a Mother and Baby Unit (MBU), and not an acute general adult in-patient ward. (Royal College of Psychiatrists, 2000<sup>1</sup>; Department for Education and Skills, Department of Health, 2004<sup>2</sup>; National Institute for Health and Care Excellence, 2007<sup>3</sup>; The Sainsbury Centre for Mental Health, 2007<sup>4</sup>; The Centre for Maternal and Child Enquiries (CMACE), 2011<sup>5</sup>; Joint Commissioning Panel for Mental Health, 2012<sup>6</sup>).

‘All mental health trusts should have specialised community perinatal mental teams to care for pregnant and postpartum women. These should be closely integrated with regional mother and baby units so that all women requiring psychiatric admission in late pregnancy and the postpartum period can be admitted together with their infants’ The Centre for Maternal and Child Enquiries (CMACE), 2011

Northern Ireland at the time of data collection was the only region in the United Kingdom that did not have a dedicated MBU. There is no unit in any other part of Ireland.

In 2005 the Bamford Review of Mental Health and Learning Disability in Northern Ireland<sup>7</sup> stated that the requirement for inpatient mother and baby facilities should be the subject of a regional needs assessment. The work presented here is to inform the current situation within Northern Ireland.

## Background

Northern Ireland has a population of over 1.8 million and an annual birth figure of over 25,000 (Northern Ireland Statistics and Research Agency, 2011<sup>8</sup>). (Table 1)

Table 1: Births in Northern Ireland and by Trust

	All Births	Birth rate per 100 females population age 15-44yrs
Northern Ireland	25273	68.32
BHSCT	4840	67.21
NHSCT	6048	65.93
SEHSCT	4595	67.32
SHSCT	5522	73.39
WHSCT	4268	68.11

Table 2: Rates of perinatal psychiatric disorder per thousand maternities

Postpartum psychosis:	2/1000
Chronic serious mental illness:	2/1000
Severe depressive illness	30/1000

If the rates of perinatal psychiatric disorder per thousand maternities are applied (Table 2) to the Northern Ireland birth figures then Table 3 provides an estimated representation for Northern Ireland.

If we apply these epidemiological figures to Northern Ireland this means there may be around 860 women per year with a serious perinatal mental health disorder, either newly arising in association with childbirth or who already have a serious mental illness which deteriorates in the perinatal period. (Table 3)

Table 3: Applying these figures to Northern Ireland

	All Births	Postpartum psychosis	Chronic Serious mental illness	Severe depressive disorder	Total
Northern Ireland	25,273	51	51	758	860
BHSCT	4840	10	10	145	165
NHSCT	6048	12	12	181	205
SEHSCT	4595	9	9	138	156
SHSCT	5522	11	11	166	188
WHSCT	4268	9	9	128	146

As the admission rate for puerperal psychosis, non-psychotic post-partum psychiatric disorder and chronic psychiatric disorder is up to 6 per 1000 deliveries (in total) (Royal College of Psychiatrists, 2000) then the expected number of admissions to acute psychiatric care in a 32 week period could be up to 87 admissions as reflected in this audit sample.

## Aim

It has long been said that Northern Ireland figures may not justify a dedicated MBU and services have always been challenged to provide evidence to support this claim. Therefore the aim of this project is to collect data to identify women that would have been admitted to a MBU if this provision had been available in Northern Ireland. This would aid in assessing if a MBU is indeed justified.

## Objectives

Identify all women admitted to acute psychiatric care in Northern Ireland over the specified audit period.

## Best practice/evidence base

Listed below are the documents that informed/identified the standard used for the basis of this report

- Centre for Maternal and Child Enquiries (2011). Saving Mothers' Lives: reviewing maternal deaths to make motherhood safer: 2006–08. The Eighth Report on Confidential Enquiries into Maternal Deaths in the United Kingdom. British Journal of Obstetrics and Gynaecology. 118 (Suppl. 1). p.1–203.
- Department for Education and Skills, Department of Health (2004). National Service Framework for Children, Young People and Maternity Services: Maternity Services. Department of Health, London.
- Joint Commissioning Panel for Mental Health (2012). Guidance for Commissioners of Perinatal Mental Health Services. Volume 2: Practical Mental Health Commissioning. Joint Commissioning Panel for Mental Health, London

- National Institute for Health and Care Excellence (2007). Antenatal and postnatal mental health: Clinical management and service guidance. NICE, London.
- Royal College of Psychiatrists (2000). Perinatal Maternal Mental Health Services. Royal College of Psychiatrists, London.
- The Sainsbury Centre for Mental Health (2007). Delivering the Governments' Mental Health Policies: Services, staffing and costs. The Sainsbury Centre for Mental Health, London.

## **Methodology**

### **Sample**

All patients admitted to acute psychiatric care (i.e. to Hospital Treatment Teams (HTTs), acute in-patient wards or Psychiatric Intensive Care Units [PICUs]) in Northern Ireland from 08/03/2013 to 18/10/13 (a 32 week period). The initial sample was 87 admissions. Twelve of these admissions were excluded as either the women were between 4 and 34 weeks pregnant, or were duplicate admissions recorded due to step-up or step-down treatment. This left a final sample of 75 admissions to acute psychiatric care.

### **Data source**

The data for this project was identified from HTTs caseload data and current in-patient ward lists and PICUs.

### **Audit type**

After reviewing demographic, epidemiological and published information the audit team initially proposed to collect data retrospectively. However due to difficulty with this method of collection i.e. there are no specific codes in ICD-10 to indicate that disorders occurred in the perinatal period it was decided that a prospective audit was more appropriate. This highlights the difficulty with the coding of perinatal disorders.

Inclusion criteria:

- Pregnant women ( $\geq 35$  weeks gestation recorded)
- Mothers with children under 1 year of age

Exclusions criteria:

- Women who were  $< 35$  weeks gestation (not included as they most likely would not have been admitted to a MBU if one was available).

### **Data proforma**

The project team developed an audit proforma and once agreed data collection proceeded in all HSC Trusts.

## Data collection

The data was collected prospectively by staff with the appropriate knowledge of the service area using the agreed inclusion and exclusion criterion. Weekly phone calls to all acute psychiatric services (i.e. to HTTs, acute in-patient wards or PICUs) in Northern Ireland were made over the 32 week period (08/03/2013 to 18/10/13) and inputted on to an excel database.

Data collected included;

- date of admission
- date of discharge
- weeks of gestation

All data was either gathered or followed up by telephone calls, all data was therefore available at the time of collection. The data was validated independently by two of the project members.

## Findings

- In the 32 weeks of data collection there were 87 admissions of women matching our inclusion criteria to acute psychiatric care in NI
- Twelve of these admissions were either of women between 4 and 34 weeks pregnant, or were duplicate admissions recorded due to step-up or step-down treatment and were, therefore, excluded
- This gave a final figure of 75 admissions to acute psychiatric care
- Of the 75 women admitted to acute care, 43 were admitted to acute psychiatric wards (i.e. Acute in-patient wards or PICUs) and 32 to HTTs

Extrapolating this figure of 75 admissions over a 52 week period would result

- in an annual acute psychiatric care admission figure of 122 women\*  
( $75 \times 1.625 = 122$ )

\*This figure was calculated by dividing the 32 week audit period into a 52 week year. The figure was then multiplied by the 75 admissions from the audit period to give a yearly projected total of 122 admissions

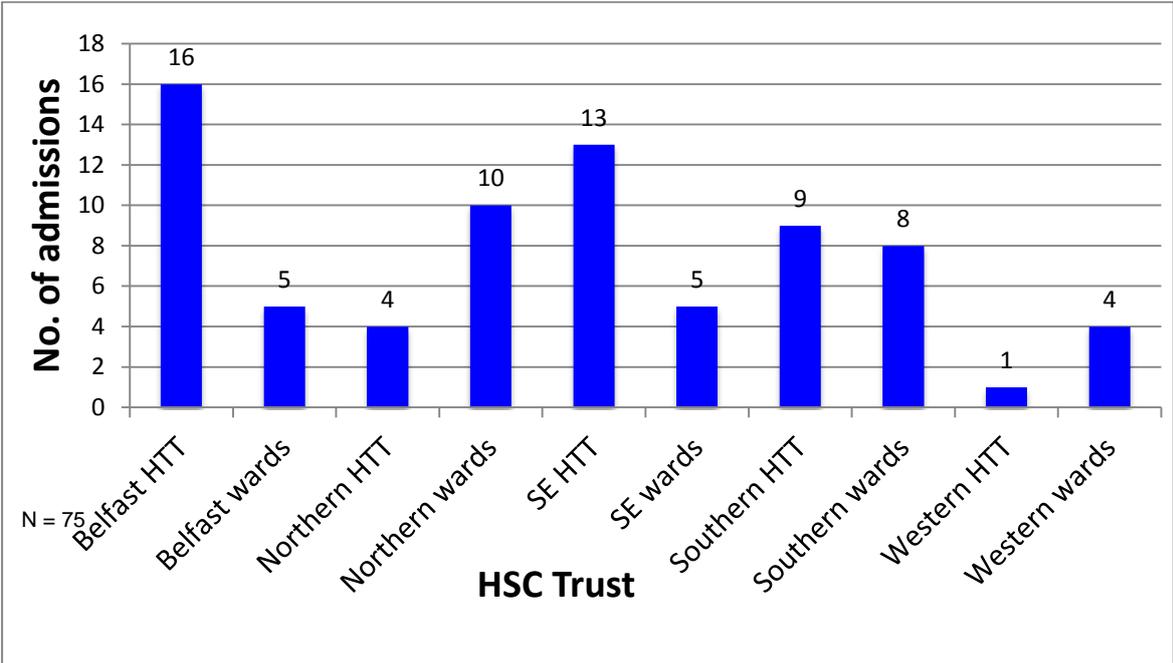
- 70 admissions to acute psychiatric wards and 52 to HTTs (Figure 1)



Figure 1:

Of note the West of Scotland MBU (which serves a similar number of births annually) has around 50 admissions annually.

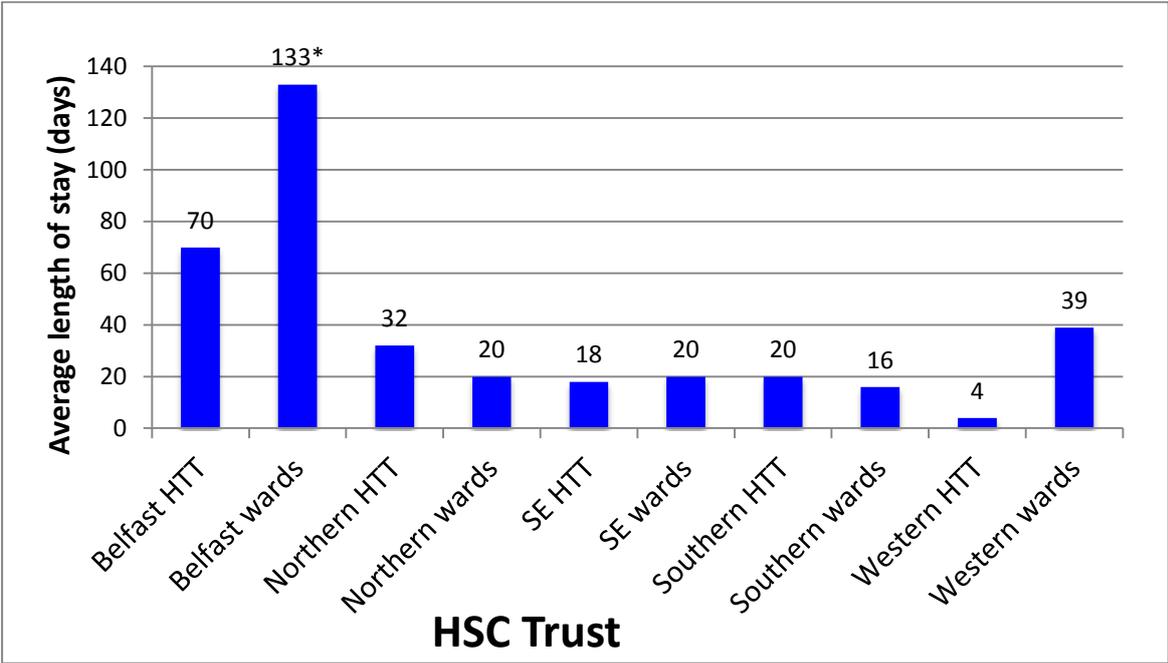
**Table 4: Number of admissions to within HSC Trust HTT and wards (Wards includes: acute inpatient wards and psychiatric care units (PICU))**



**Number of admissions**

- 28% (n=21) of women were admitted within the BHSCT (HTTs, acute inpatient wards or psychiatric intensive care units [PICUs])
- 24% (n=18) of women were admitted within the SEHSCT (HTTs, acute inpatient wards or psychiatric intensive care units [PICUs])
- 22% (n=17) of women were admitted within the SHSCT (HTTs, acute inpatient wards or psychiatric intensive care units [PICUs])
- 19% (n=14) of women were admitted within the NHSCT (HTTs, acute inpatient wards or psychiatric intensive care units [PICUs])
- 7% (n=5) of women were admitted within the WHSCT (HTTs, acute inpatient wards or psychiatric intensive care units [PICUs])

**Table 5: Average length of stay in days within HSC Trusts: HTT and wards (Wards includes: acute inpatient wards and psychiatric care units (PICU))**



**Length of stay (Table 5)**

- Average length of stay with HSC Trust wards ranged from 16 days to 133 days
- Average length of stay with HSC Trust HTTs ranged from 4 days to 70 days

\* N.B. length of stay recorded as 133 days was due to a complex case which required a lengthy admission due to slow response to treatment

**Compliance to standard**

**Standard**

All women requiring psychiatric admission in late pregnancy  $\geq 35$  week gestation should be admitted to MBU and or mothers requiring psychiatric admission within the year after delivery should be admitted together with their infant to a MBU. (These women/mothers should not be admitted to a general adult admission ward n=75).

- The Centre for Maternal and Child Enquiries, 2011\*\*
- Joint Commissioning Panel for Mental Health, 2012\*\*.

**Exceptions: None      Compliance: 0%      Non-compliance: 100%**  
 (As none of the women/mothers requiring psychiatric admission reflected this standard)

(\*\*35 weeks is not listed as a cut off in a reference - it came from the discussion among the team and expert knowledge of other units that women are unlikely to be admitted prior to 35 weeks gestation and agreed consensus).

## Recommendations

1. All women requiring psychiatric admission in late pregnancy ( $\geq 35$  week gestation) should be admitted to MBU
2. Mothers requiring psychiatric admission in the year after delivery should be admitted together with their infant to a MBU
3. Provision for a MBU facility should be made available within Northern Ireland.

## References

- 1 Royal College of Psychiatrists, 2000;
- 2 Department for Education and Skills, Department of Health, 2004;
- 3 National Institute for Health and Care Excellence, 2007;
- 4 The Sainsbury Centre for Mental Health, 2007;
- 5 The Centre for Maternal and Child Enquiries, 2011;
- 6 Joint Commissioning Panel for Mental Health, 2012.
- 7 Bamford Review of Mental Health and Learning Disability (N.I.) (2005). A Strategic Framework for Adult Mental Health Services (AMH) Report. [Online] Available from: <http://www.dhsspsni.gov.uk/index/bamford/published-reports.htm> [Accessed 16/02/13]
- 8 Northern Ireland Statistics and Research Agency (2011). 2011 Census. [Online] Available from: <http://www.nisra.gov.uk/census/2011Census.html> [Accessed 16/02/13]

## Project Team

Name	Job Title/Specialty	Trust	Role within Project (data collection, Supervisor etc)
Dr Janine Lynch	Consultant Psychiatrist	Belfast Health & Social Care Trust	Project Lead, presentation
Dr Orlagh McCambridge	Psychiatry specialty trainee	Belfast Health & Social Care Trust	Deputy Project Lead, data collection, presentation
Dr Laura Farrell	Psychiatry trainee	Belfast Health & Social Care Trust	Data Collection

## Clinical Audit Action Plan

<b>Project title</b>	Is a perinatal in-patient unit needed in Northern Ireland?
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<b>Action plan lead</b>	Name: Dr J Lynch	Title: Consultant Psychiatrist
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Recommendation	Actions Required	Action by Date	Person Responsible	Comments/Action Status
An MBU should be provided in Northern Ireland for All women requiring psychiatric admission in late pregnancy and the postpartum period should be admitted together with their infant to a MBU	Put case forward supporting development of regional perinatal services / MBU	Ongoing	Dr J Lynch, Dr O McCambridge, Dr Laura Farrell	Meetings with commissioners have occurred-await outcome of options appraisal paper for developing regional specialist services in perinatal mental health
Disseminate finding to wider audience	Identify opportunities to present findings within Northern Ireland and wider health community within United Kingdom	Completed	Dr J Lynch, Dr O McCambridge, Dr Laura Farrell	Presented at RCPsych of Perinatal Psychiatry Annual Scientific Meeting Manchester, 20/11/2013. Northern Ireland conference Riddell Hall in Belfast 12/2/2013

A copy of this Audit is available for download

[www.rqia.org.uk](http://www.rqia.org.uk)

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