

SPECIALIST PERINATAL MENTAL HEALTH SERVICES

Model of Care for Ireland



Building a
Better Health
Service

Seirbhís Sláinte
Níos Fearr
á Forbairt



HSE Mental Health Services

Contents

Foreword.....	1
Working Group Membership.....	2
List of Tables and Figures.....	4
Executive Summary.....	5
Summary of Key Recommendations.....	6
1. Introduction.....	9
2. Background.....	12
3. Rationale and Scope.....	19
4. Aims and Objectives.....	23
5. Core Values and Principles	
➤ Service user Perspective.....	24
➤ Obstetrician Perspective.....	26
6. Proposed National Model of Care: Specialist Perinatal Mental Health Services:	
➤ Current service pathway/delivery and challenges.....	28
➤ Proposed model of service provision: an integrated service approach at national and maternity network levels.....	32
7. Requirements to deliver specialist perinatal mental health services	37
➤ Specialist Perinatal Mental Health Team	38
➤ Mother and Baby Unit.....	42
8. Proposed Clinical Pathway for Perinatal Mental Health Services (including Specialist component).....	48
9. Governance.....	58
10. Education/training/continuing professional development.....	60
11. Programme metrics and evaluation.....	64
Appendices	
<i>Appendix I – Mental Health Actions in the National Maternity Strategy to be implemented by the National Women’s and infants Health Programme.....</i>	<i>67</i>
<i>Appendix II – Health Research Board and HIPE Data 2016.....</i>	<i>68</i>
<i>Appendix III – Service Standards for Mother and Baby Units (4th Ed.).....</i>	<i>69</i>
<i>Appendix IV – Submissions.....</i>	<i>70</i>
<i>Appendix V –Perinatal Psychiatry Training for consultant and senior trainee psychiatrists.....</i>	<i>71</i>
<i>Glossary of Acronyms.....</i>	<i>72</i>
References.....	74

Foreword

It gives me great pleasure to present "Specialist Perinatal Mental Health Services: Model of Care for Ireland". The Health Service Executive's Mental Health Division prioritised this work in 2016 in recognition of the impact of mental health problems/illnesses on women and also on their babies. It is now known that, in economic terms, two thirds of the impact is on children in all areas of life: social, emotional, behavioural, cognitive with recurring lifelong difficulties in these domains.

This Model of Care specifically addresses the needs of women with moderate to severe mental health problems/illnesses through the provision of specialist teams, one based in each Hospital Group. The Mental Health Division has allocated Programme for Government funding in 2016 and 2017 to start three of these teams (Cork, Limerick and Galway) and augment the three very small existing teams based in the three Dublin maternity hospitals. Further funding to build up these teams will be sought next year.

On the prompting of its service user representative, Dr. Krysia Lynch of AIMS Ireland, to consider the needs of women with milder mental health problems, the Working Group took on the additional challenge of designing a comprehensive perinatal mental health clinical pathway. This will guide the National Women & Infants Health Programme. The latter has already acted by seeking funding for one to two mental health midwives for each of the nineteen maternity units in the country. These midwives will provide a response to women with milder mental health problems/illnesses attending maternity services. They and the specialist perinatal mental health teams will work in tandem to ensure women during pregnancy and the first year post delivery attending maternity services have an accessible, flexible and appropriately skilled response whether their mental health problem is mild or severe.

I would like to thank each member of the Working Group, the membership of which reflects the Mental Health Division's principles of an integrated team response guided by service user input. The Chair and Programme Manager of the Working Group have provided me with an Implementation Plan and key to this is to continue to work closely with the National Women & Infants Health Programme which I endorse fully.

Ms Anne O'Connor
National Director
Mental Health Division

Working Group

List of members:

Dr. Margo Wrigley (Chair): National Clinical Advisor and Clinical Programmes Group Lead - Mental Health (April 2014 – May 2017), HSE, Dr. Steevens' Hospital Dublin 8.

Ms. Fiona O'Riordan, Programme Manager, Mental Health Clinical Programmes, Clinical Strategy & Programmes Division, HSE.

Dr. Eugene Cassidy, Consultant Psychiatrist, Liaison Psychiatry Service, Cork University Hospital, Wilton, Cork.

Dr. Elizabeth Ann Dunne, Consultant Obstetrician Gynaecologist and Associate Professor UCD, Wexford General Hospital.

Dr. Joanne Fenton Consultant Psychiatrist, Coombe Women & Infants University Hospital

Ms. Nuala Gartland, Occupational Therapy Manager, Cavan/Monaghan Mental Health Service, St. Davnet's, Co. Monaghan.

Mr. Steve Lamb, Candidate Advanced Nurse Practitioner in Perinatal Mental Health, Waterford & Wexford Mental Health Services, HSE South.

Dr. Krysia Lynch, Chair AIMS Ireland, Association for Improvements in Maternity Services.

Ms. Deirdre Madden, Registered Advanced Nurse Practitioner in Perinatal Mental Health, National Maternity Hospital Dublin 2.

Dr. Cliona Murphy, Consultant Obstetrician Gynaecologist, Coombe Womens and Infants University Hospital and Tallaght Hospital.

Dr. John O'Mahony, Executive Clinical Director, CHO3, Mid-West Mental Health Services.

Ms. Ger O'Riordan, Principal Clinical Psychologist, CHO 8 (Louth), HSE.

Ms. Eileen Ní Shuilleabháin, Principal Social Worker, Galway Roscommon Mental Health Services, Galway.

Ms. Sheila Sugrue. National Lead Midwife, ONMSD, Clinical Strategy and Programmes Division, HSE.



Published in 2017 by National Mental Health Division, Health Service Executive

Contact information: Email: spec.perinatalmhs@hse.ie

This document is available online at:

http://www.hse.ie/eng/services/list/4/Mental_Health_Services/

ISBN: 978-1-78602-053-6

Copyright ©2017, HSE. All rights reserved.

List of Tables and Figures

Tables

Table 1: Rates of Perinatal Psychiatric Disorder per thousand maternities.....	13
Table 2: Number of Births in Ireland Nationally 2012 – 2016.....	28
Table 3: HSE Reported Births by Location 2012 – 2016.....	29
Table 4: Maternity Networks and Proposed Specialist Perinatal Mental Health Services.....	35
Table 5: Staffing for each Specialist Perinatal Mental Health Team: In Place/Required.....	41
Table 6: Number of Births by Hospital Group 2014 – 2016.....	42
Table 7: Integrated Perinatal Mental Health Pathway.....	52
Table 8: Whooley Questionnaire.....	53

Figures

Figure 1: Estimated number of women affected by perinatal mental illnesses in Ireland.....	17
Figure 2: 19 Maternity Units and Number of Births by Hospital Group 2016.....	30
Figure 3: Hub and Spoke example.....	34
Figure 4: Hub and Spoke Specialist Perinatal Mental Health Network Model.....	36
Figure 5: Proposed Access to a second Mother and Baby Unit.....	46
Figure 6: Perinatal Mental Health Referral Pathway – within Maternity Services.....	54
Figure 7: Mental Health Midwives, Mental Health Nurses and Community based Nurses – Working Together.....	55

Executive Summary

Perinatal mental health disorders are those which complicate pregnancy (antenatal) and the first postnatal year. They include both new onset and a relapse or reoccurrence of pre-existing disorders. Their unique aspect is their potential to affect the relationship between mother, child and family unit with consequent later development of significant emotional and behavioural difficulties in the child. In recognition of this, together with its awareness of the paucity of current services, the Mental Health Division included in its 2016 Service Plan a commitment to develop a Model of Care for the specialist component of a comprehensive perinatal mental health service response. This is in line with its responsibility for providing specialist mental health services.

A multidisciplinary working group with service user representation chaired by the then National Clinical Advisor in Mental Health was set up in 2016 and a Programme Manager appointed.

The Working Group considered the specialist (secondary and tertiary care) component of an overall perinatal mental health service. This ensuing document includes details on:

- The number of women likely to require a specialist service
- The range of disorders
- The philosophy underlying the model recommended
- The structure geographically
- Resources required
- Training and education to support the model
- Evaluation of its implementation clinically and from the women and their families perspective.

The details are summarised in the next section on recommendations.

The Working Group also took the opportunity to propose a design for an overall perinatal mental health clinical pathway. As well as setting the specialist component in context, it outlines the diversity of personnel and services required to meet the needs of women, their babies and their families from a mental health perspective. This spans promotion of good mental health during the perinatal period to responding to those women with severe mental illness all based on an integrated approach. Responsibility for overseeing the implementation of the non-specialist component rests with the National Women & Infants Health Programme with which the Mental Health Division will continue to work closely.

Summary of Key Recommendations

1. Specialist perinatal mental health services are vital because of the very negative consequences of perinatal mental health disorders for the mother, the baby, their relationship and that with the partner and other children. The specific circumstances of pregnancy, birth and early mother/infant bonding requires staff who are knowledgeable, skilled, sensitive and experienced.

Hence the philosophy underpinning this model of care is its focus on:

- (i) The mother
- (ii) The baby
- (iii) Their relationship

In the context of the family.

2. The Model is informed by national and international epidemiological evidence of need. In 2016, there were approximately 64,000 births in Ireland. Approximately 2,240 women are likely to have suffered from more serious mental illness and so would likely benefit from advice from or referral to a specialist perinatal mental health service.
3. Support for all other services involved with women in the perinatal period by the specialist perinatal mental health service is an important part of the role. This includes clinical advice, training and education.
4. The Model of Care is based on the maternity networks recommended in the National Maternity Strategy. This means the specialist perinatal mental health services will be aligned to hospital groups and developed in a hub and spoke format so all 19 maternity services are included in the model.
5. In each hospital group, the maternity service with the highest number of deliveries will be the hub. These are:
 - Dublin Midlands HG – Coombe Women & Infants University Maternity Hospital
 - Ireland East HG – National Maternity Hospital
 - RCSI HG – Rotunda Hospital
 - Saolta HG – Galway University Hospital
 - South/Southwest HG – Cork University Maternity Hospital
 - University of Limerick HG – University Maternity Hospital Limerick
6. Each hub within a hospital group should have a specialist perinatal mental health service. Its staffing will be multidisciplinary and led by a consultant psychiatrist in perinatal psychiatry. The norm for calculating staff is based on 0.1 WTE consultant time (1 Session) per 1,000 deliveries.

Where a full time consultant is required the team should comprise:

- NCHD (preferably Senior Registrar) – 1 WTE
- Mental Health Nurses (Clinical Nurse Specialist grade) – 2 WTE
If the role is to extend to community visits, additional nursing staff would be required
- Psychology (senior) - 1 WTE
- Occupational Therapy (senior) - 1 WTE
- Social Work (senior) - 1 WTE
- Administrator - 1 WTE per team

7. In the spoke hospitals, the liaison psychiatry team will continue to provide the input to the maternity service. This team will be linked to the hub specialist perinatal mental health team for advice, regular meetings, training and education.
8. The National Women & Infants Health Programme has committed to providing two of these midwives to the four larger hubs and one to the two smaller hubs and each spoke. The role of these midwives is crucial in ensuring parity between physical and mental health in maternity services. They will work with midwives across the maternity services to raise awareness of mental health problems, thereby increasing identification of and response to such problems.
9. At present it is recommended one Mother and Baby Unit should be provided as a national unit. It is recommended this is based in St. Vincent's University Hospital, Dublin since the Ireland East Hospital Group has the highest number of deliveries nationally and because this location is easily accessible via the M50 and N11. Its proximity to Dublin city centre also enables families visiting to find local accommodation and other facilities.
10. A clear governance structure for specialist perinatal mental health services is recommended and described in detail. While the specialist service is based in an acute/maternity hospital, there must be close links with the catchment area mental health service. This will ensure an integrated approach to assessment and treatment on a 24/7 basis.
11. In line with this, each Hospital Group and Community Health Organisation should develop a jointly agreed Integrated Perinatal Mental Health Clinical Pathway with all relevant service components, including the specialist perinatal mental health service, and their linkages.
12. Recommendations on the training and qualifications required for staff working in a specialist perinatal mental health service and also for mental health midwives are outlined.
13. Each specialist perinatal mental health service should be supported by an ongoing educational programme and clinical supervision as required. Likewise, each service

should provide training and education within maternity secondary care mental health and community services in line with the need for the service.

14. Evaluation of the implementation of this Model of Care will be important to ensure women have an effective service and a positive experience of such care. Standard data should be returned by each specialist perinatal (hub) and liaison psychiatry (spoke) team to enable service evaluation and re-evaluation on an on-going basis. Service user input will be vital in evaluating the service. This will also ensure resources are allocated to meet the needs of women during the perinatal period.

1. Introduction

Perinatal mental health disorders are those which complicate pregnancy (antenatal) and the first postnatal year. They include both new onset and a relapse or reoccurrence of pre-existing disorders. Their unique aspect is their potential to affect the relationship between mother, child and family unit with consequent later development of significant emotional and behavioural difficulties in the child. These may be exacerbated where the mental health disorder leads to the separation of the mother and child, for instance, during an inpatient admission. The full range of mental disorders may occur and there is an increased incidence of serious postnatal illness, particularly in those with a previous or family history of affective disorders.

Perinatal Mental Health Services are concerned with the prevention, detection and management of perinatal mental health problems that complicate pregnancy and the postnatal year. As outlined above, these problems include both new onset problems, reoccurrences of previous problems in women who have been well for some time and those with mental health problems before they became pregnant (Joint Commissioning Panel for Mental Health 2012). Given the range of disorders each of which may vary from mild to severe, the impact on mothers personally, their potential bonding with their infants and the documented evidence of adverse outcomes if disrupted together with the many settings in which pregnant women/mothers are seen, it is clear that many services/professionals are involved. These include health promotion; general practitioners; practice nurses; public health nurses; the primary care team; midwives; obstetricians; secondary care community and inpatient mental health services and specialist perinatal mental health services. Other services such as addiction and child protection may also be involved.

The Health Service Executive's Mental Health Division (MHD) is responsible for the provision of *specialist* mental health services. In recognition of the need for specialist perinatal mental health services, the MHD prioritised the development of this model of care in 2016. **Specialist Perinatal Mental Health Services** form one component of an integrated perinatal mental health service response (CR197:2015).

The MHD established a Specialist Perinatal Mental Health Working Group in 2016 chaired by the then National Clinical Advisor Group Lead Mental Health. The Working Group's task was to design a specialist model of care. The terms of reference encompassed both the strategy for and operation of a specialist perinatal mental health service for Ireland taking into account:

- The interests of women, infants and their families
- Relevant national and international research and evidence based practice and standards
- Relevant national and international policy documents and reports

The objectives were to design a plan for the development and operation of:

i) The three components of specialist perinatal mental health services

- specialist liaison psychiatry service to maternity units / hospitals
- specialist perinatal mental health teams
- specialist inpatient mother and baby units

ii) The interface of this specialist service with secondary care mental health services (specifically General Adult Psychiatry Community Mental Health Teams).

Whilst the focus of this specialist service will be women with moderate to severe mental illness, it will play a central role in educating and training all involved in the delivering of services to women during the antenatal and postnatal periods. This will ensure women with milder mental health problems will be both identified and receive appropriate help from skilled staff at primary care level in the community and within maternity services.

The plan was to be at all times cognisant of the relatively small and geographically dispersed population of Ireland and its large number of maternity units, two thirds of which have an average of 2,000 deliveries per year.

The members of the Working Group are listed on page 2 and include multidisciplinary and service user representation, in keeping with the principles outlined in A Vision for Change for service development (A Vision for Change 2006).

In drawing up this document members of the Working Group and a mental health midwife presented and/or submitted on their areas of expertise and these have in part informed the development of this Model of Care.

These presentations/submissions included:

- Literature review
- Overview of specialist perinatal mental health services
- Service user perspective
- Obstetrician perspective
- Advanced nurse practitioner role in perinatal mental health

- Mental health midwife role
- Occupational therapy role in perinatal mental health
- Role of Psychologist
- Role of Social Work

Submissions on the professional roles required for this Model of Care are listed in Appendix IV and can be downloaded from the HSE website:

http://www.hse.ie/eng/services/list/4/Mental_Health_Services/

This Model of Care addresses specialist perinatal mental health services, but it also outlines:

1. The overall perinatal mental health clinical pathway
2. The primary care and maternity unit/hospital component
3. The links between the non-specialist and specialist components.

These are described in Section 8 in the Proposed Clinical Pathway.

2. Background

This chapter describes the frequency with which mental health problems occur both antenatally and postnatally i.e. throughout the perinatal period, the range of disorders and their potential impact. It also references relevant national policy documents.

Epidemiology

10-15% of women suffer from mild to moderate postnatal depression. Most can be managed in primary care with access to specialist advice. 3% of women, again postnatally, suffer from moderate to severe mental health illness and require referral to secondary mental healthcare services. Of this cohort, one third would benefit from direct care and treatment from a specialist perinatal mental health service.

2/1000 women delivered are likely to suffer from a postnatal psychosis, most of whom will require inpatient treatment. Another 2/1000 delivered may suffer from serious/complex disorders, some of whom may also require inpatient treatment (Kendal 1987, Cox 1993, O' Hara 1996).

While the connection between mental illness and the postnatal period is well known, its occurrence antenatally is increasingly recognised as is the ensuing distress for the pregnant woman and her family (Wisner 2013, O'Connor 2002).

There is an increased risk of suicide with suicide being a significant cause of maternal death (Maternal Death Enquiry 2012). Babies may also be at risk where they are the subject of their mother's psychotic symptoms (Oates and Cantwell, 2011).

Post-traumatic Stress Disorder is estimated to occur in up to 3% of maternities and 6% of women following emergency caesarean section.

Finally, whilst childbirth is expected to be a time of great joy, it is not unusual for it to cause emotional upheaval with difficulties in adjusting to changes in lifestyle and relationships. This of itself can lead to adjustment disorders with significant distress for the new mother (Oates and Cantwell, 2011).

The rates of perinatal psychiatric disorder per 1,000 maternities is shown in the table below:

Table 1: Rates of Perinatal Psychiatric Disorder per thousand maternities

Postpartum psychosis	2/1000
Chronic serious mental illness	2/1000
Severe depressive illness	30/1000
Mild-moderate depressive illness and anxiety states	100-150/1000
Post-traumatic stress disorder	30/1000
Adjustment disorders and distress	150-300/1000
	<i>(JCP-MH 2012)</i>

A recent population survey of the prevalence rates of antenatal depression in the Irish Maternity Services using the Edinburgh Postnatal Depression Scale showed 16% of women scored positively on this screening tool with rates increasing with advancing pregnancy (O'Keane 2016).

Perinatal Mental Health Disorders

Psychotic Disorders - This group of disorders includes women who experience a first episode of psychosis in the early postnatal period (less than seven days post-delivery) to women who have a previous history of, in particular, bipolar disorder but also schizoaffective disorder or schizophrenia. These women have an increased risk of relapse in the early postnatal period. The clinical picture is characterised by an acute onset, severe psychotic symptoms of delusions and hallucinations, florid affective (mood) symptoms, perplexity, confusion and associated behavioural change. In some the psychotic symptoms may include the infant so prompt and thorough risk assessment is essential with rapid initiation of treatment to ensure the safety of the mother and her infant. Treatment includes antipsychotic medication together with skilled nursing care, both provided in a therapeutically safe environment guided by the risk assessment. At initial presentation perplexity and confusion may be the dominant symptoms. When this is so, it is essential to rule out any potential underlying medical/physical cause rather than assuming the change in behaviour is due to mental illness. A number of maternal deaths have been linked to this misattribution (Centre for Maternal and Child Enquiries, Cantwell 2011).

Depression - Depression is very common in both the antenatal and postnatal periods. Whilst more generally recognised as a feature of the latter, there is evidence that in up to 1/3 of episodes, it may start during pregnancy (Wisner 2013). Whilst the symptoms of perinatal depression do not differ from its occurrence at other times, its particular importance is that it occurs at such a critical time for women, their babies and their families. Failure to recognise and treat it may result in adversely compromising the mother-baby relationship, leading to a prolonged deleterious effect on this crucial relationship and the child's psychological, social and educational development (Murray 1997). There may also be an adverse effect on the relationship between the mother and her partner (Ballard 1994).

Mental illness is a significant factor in maternal mortality. The UK Confidential Enquiry into Maternal Deaths reports that while suicide is rare at this time, it remains one of the main causes of maternal deaths in the UK with serious mood disorder present in most of the women who died by suicide (CEMD : Cantwell 2011).

Data from the period 1997 - 2012 in the UK Confidential Enquiry into Suicides and Homicides by people with mental illness found that 4% of women aged 20-35 years died in the perinatal period. They were most likely to have a diagnosis of depression and not to be receiving treatment during this period (Khalifeh 2016).

Irish information is available in the tri-annual CEMD reports which now incorporate Irish data. During the six year period 2009-2014 there were eighteen maternal deaths classified as direct maternal deaths, five of which were caused by suicide. This was the joint most common cause along with thrombo-embolism (MDE Ireland 2016).

Anxiety Disorders - Many women experience periods of worry during the perinatal period but symptoms of anxiety may become intense, frightening, disruptive to their lives and to engagement with their babies (Henderson & Redshaw 2013).

The literature suggests anxiety disorders may be more prevalent than depression at this time (SIGN 2012). A recent systematic review and meta-analysis of 102 studies on perinatal anxiety found the overall prevalence for a clinical diagnosis of an anxiety disorder was 15.2% (Dennis 2017). There is emerging evidence that maternal antenatal anxiety is linked to poorer developmental outcomes in infants. In a prospective, longitudinal study of over 7,000 pregnant women and their offspring, findings indicated that maternal anxiety during pregnancy doubled the risk for hyperactivity in 4 year old boys, independent of obstetric and sociodemographic risks as well as mothers' postnatal anxiety levels (O Connor 2002).

Depression and anxiety often co-exist and symptoms can be similar e.g. poor concentration, excessive worry and agitation. Comparable to depression, the clinical features of anxiety during the perinatal period are similar to those in the non-pregnant population, with a few exceptions. These are predominantly fear or an intense focus on the outcome of pregnancy, labour and delivery, the baby's / infant's wellbeing and women worry about their ability to mother (Dunkel 2012).

Women may have pre-existing anxiety conditions such as generalised anxiety disorder (GAD), panic disorder, obsessive compulsive disorder (OCD), post traumatic stress disorder (PTSD) or specific phobias such as agoraphobia or tocophobia which pregnancy and the post natal period can exacerbate. Conversely women can develop anxiety disorders as a result of pregnancy, birth and early motherhood. It is important to recognise and respond to women's anxiety symptoms, as anxiety disorders have the potential to cause immense emotional distress for women and lead to adverse effects on their baby. The most common anxiety disorders, other than generalised anxiety disorders, relevant to the perinatal period are briefly outlined below:

Panic Disorder - During pregnancy women can become concerned with the physical changes in their bodies and worry excessively leading to panic attacks. During the post natal period, sleep deprivation, hormonal fluctuations and the emotional and psychological process of adapting to the responsibility of being a mother can also lead to panic attacks (Rubinchik 2006). It is important to consider and rule out the possibility of co-morbid/underlying medical conditions or an emerging serious mental illness.

Obsessive Compulsive Disorder (OCD) - During the perinatal period unwanted worries about potential harm occurring to the unborn baby and the women's own health can lead woman to seek reassurance from health care work providers. After the baby is born these symptoms may diminish or develop into obsessional thinking which may or may not be accompanied by intrusive imagery and compulsive behaviours such as harming or injuring their babies.

One meta-analysis reported a higher incidence of OCD in pregnant and postnatal women than the general population (Russell 2013). Thoughts about harm to baby / infant are common occurring in 86% of non-depressed parents and it is possible that pre-existing beliefs about the responsibility of becoming a mother can lower the threshold for developing symptoms of OCD (Abramowitz 2003). In relation to parenting, mothers who have a diagnosis of OCD may be less warm and more controlling than non-anxious control groups (Challacombe & Salkovskis 2009).

Tocophobia - is the intense fear and avoidance of pregnancy and the extreme and phobic fear of childbirth with severe anxiety symptoms (Hofberg & Brockington 1990). Tocophobia may affect up to 6% of women (Gosselin 2016) and in extreme cases women may avoid childbirth or situations associated with childbirth. If women do decide to become pregnant they may endure the pregnancy with dread and seek caesarean section if the thought of childbirth fills them with terror. Tocophobia can be classified into two categories:

- Primary: occurs prior to conception and predates pregnancy
- Secondary: occurs in response to a traumatic or distressing delivery

Post Traumatic Stress Disorder (PTSD) - The prevalence of PTSD after childbirth is up to 3% increasing to 6% of those who have had an emergency caesarian section, but this may be a conservative estimate. In some there may be a pre-existing PTSD. There is also a high co-morbidity with depression (Seng 2010).

Psychological trauma during birth can impact on postnatal mental health and consequently mother infant bonding and family relationships. It is associated with admission of women to high dependency and intensive care units, and where infants are admitted to neonatal intensive care units (NICE 2014). Those suffering obstetric loss are also at increased risk (O'Hara, 1996). A previous personal history of abuse may reactivate during pregnancy increasing the risk of developing PTSD (Ayers 2004). In addition to the association with physical factors such as medical interventions and type of birth, it is now recognised that care provider actions and interactions may also be relevant. A core feature is that the trauma is based on the woman's perception (Beck, 2004). Particularly important are a perceived lack of control and involvement in decision making (Elmir, 2010). This leads to feelings of being disconnected, helpless and isolated with the strongest predictor of developing birth related PTSD being interpersonal difficulties with care providers and experiencing a lack of support (Harris 2012).

A recent Cochrane review (Bastos 2015) concluded that women need improved emotional support during this time with maternity service provision underpinned by a framework which prioritises both the emotional and physical needs of women (Reed 2017). This requires good communication, trust and partnership and careful use of language as cited in the National Maternity Strategy (2015). The estimated number of women likely to be affected by perinatal mental health illnesses in Ireland each year is shown in Figure 1.

Figure 1: Estimated number of women affected by perinatal mental illnesses in Ireland each year



134



Postpartum Psychosis

Postpartum psychosis is a severe mental illness that typically affects women in the weeks after giving birth, and causes symptoms such as confusion, delusions, paranoia and hallucinations.

Rate: 2/1000 maternities

134



Chronic serious mental illness

Chronic serious mental illnesses are longstanding mental illnesses, such as bipolar disorder or schizophrenia, which may be more likely to develop, recur or deteriorate in the perinatal period.

Rate: 2/1000 maternities

2,013

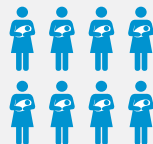


Severe depressive illness

Severe depressive illness is the most serious form of depression, where symptoms are severe and persistent, and significantly impair a woman's ability to function normally.

Rate: 30/1000 maternities

2,013



Post traumatic stress disorder (PTSD)

PTSD is an anxiety disorder caused by very stressful, frightening or distressing events, which may be relived through intrusive, recurrent recollections, flashbacks and nightmares.

Rate: 30/1000 maternities

10,066



Mild to moderate depressive illness and anxiety states

Mild-moderate depressive illness includes symptoms such as persistent sadness, fatigue and a loss of interest and enjoyment in activities. It often co-occurs with anxiety, which may be experienced as distress, uncontrollable worries, panic or obsessive thoughts.

Rate: 100-150/1000 maternities

20,133



Adjustment disorders and distress

Adjustment disorders and distress occur when a woman is unable to adjust or cope with an event such as pregnancy, birth or becoming a parent. A woman with these conditions will exhibit a distress reaction that lasts longer, or is more excessive than would normally be expected, but does not significantly impair normal function.

Rate: 150-300/1000 maternities

National Policy

There are two current national policy documents relevant for this Model of Care.

A Vision for Change (AVFC) is the government policy on the provision of mental health services in Ireland. It states “one additional adult psychiatrist and senior nurse with perinatal mental health experience should be appointed to act as a resource nationally in the provision of care to women with severe perinatal mental health problems” (A Vision For Change 2006). Of note there was no expertise in perinatal mental health involved in the drawing up of this report.

A recent Minister for Health, Dr. Leo Varadkar, convened a Steering Group in April 2015 to advise on the development of a ***National Maternity Strategy*** (Department of Health 2016). The Terms of Reference did not include a specific requirement to address the mental health aspects but subsequently the MHD was asked to submit on this matter. The MHD in recognition of the importance of the issue included in its 2016 Service Plan the development of a model of care for the specialist component of perinatal mental health services. The Maternity Strategy includes seven actions on mental health to be implemented by the HSE’s National Women & Infants Health Programme which is charged with implementing the Strategy. These recommendations are listed in Appendix 1. Also relevant in this regard is that where a specialist perinatal mental health team is involved, the members must be educated in and have an understanding of obstetric issues. These include mode of delivery, haemorrhage, HELLP syndrome, neonatal intensive care etc.

Whilst not national policy, the Psychological Society of Ireland made a useful submission to the Steering Group for the National Maternity Strategy. This emphasised screening for mental health issues in pregnant and postnatal women; clear local pathways of care; the need for specialist perinatal mental health services; cross disciplinary approaches and a clear governance system all based on an ethos of empowering families (PSI 2016).

The Department of Health intends to review and refresh AVFC. In preparation for this, it commissioned a literature review. This strongly advocates for the development of perinatal mental health services including the specialist component. In particular, it commented on the need to broaden the focus from depression stating commensurate attention was required for anxiety and psychosis. It also emphasised the need to ensure integration of services (mental health, maternity, GPs and public health nurses) and the development of specialist perinatal mental health services (DOH 2017).

3. Rationale and Scope

The Evidence Base

There are a number of useful documents on perinatal mental health which clearly outline the importance of mental health promotion, early recognition of problems and addressing these problems at the appropriate level. This can vary from informal support to primary, secondary and tertiary care assessment and treatment (Bauer 2014, RCPsych CR197 2014, NICE 192 2015). Central to this is the recognition of the potential adverse effects on infants if maternal mental health problems are not recognised and appropriately responded to (Murray 1996, OCECYMH 2014). The costs of perinatal depression, anxiety and psychosis was found in one study to carry a total longterm cost to society of £8.1 billion for each one year cohort of births in the UK. This is equivalent to the cost of just under £10,000 for every single birth in the country and of particular relevance nearly three quarters (72%) of this cost related to adverse impacts on the child rather than the mother (Bauer 2014). These adverse impacts persist into late adolescence and include cognitive (Stein 2014) as well as emotional and behavioural problems (Geradin 2011, Velden 2011, Leis 2013) with disorganised attachment of the mother to her infant being particularly relevant (Stein 2014).

Response and Scope

Given the range of disorders of all levels of severity together with the emphasis on infant development, it is not surprising that many services are relevant and when responding to need must do so in an integrated manner. The relevant services involved in an overall perinatal mental health response including the specialist component (in bold font) are listed below:

- Voluntary and self-help organisations
- General Practitioners, *public health nurses* and the extended primary care team
- Health and social care organisations, childrens centres
- Psychological therapies at primary care and other equivalents
- Clinical psychology services linked to maternity services
- Maternity services
- Parent-infant maternal health services
- Child and adolescent mental health services
- Intellectual disability services

- Alcohol and drug misuse services
- Adult mental health services
- ***Maternity liaison psychiatry services***
- ***Specialist perinatal mental health teams***
- ***Specialist inpatient mother and baby units***

(CR197 2015)

The components of a comprehensive pathway (see above) are listed in the Royal College of Psychiatrists Report on Perinatal Mental Health Services which includes its recommendations for the provision of services for child bearing women (CR197 2015). There are two points to emphasise for an Irish audience with regard to its listed service components.

1. *Health Visitors:* Health visitors rather than public health nurses are included with General Practitioners and the Primary Care Team in the Royal College Report. No such discipline as health visitor exists in Ireland but their documented effectiveness in the prevention and treatment of mild to moderate depression is well established. Both clinically and economically it has been shown that health visitors with additional training in listening visits and counselling significantly improve the outcome of women with postnatal depression compared to those without such skills, (Morcell 2009). In Ireland there is a very well trained public nursing service which provides this community follow up. There is Irish research underway to look at Public Health Nurses (PHNs) and what additional training needs they may have (Higgins, 2017). PHNs should be included in the Irish Perinatal Clinical Pathway (see chapter 8). Likewise the expansion of community midwifery recommended in the National Maternity Strategy would play an important role in this regard.
2. *Parent-infant mental health services:* The Royal College of Psychiatrists report describes parent-infant mental health services as having an important role in assessing and providing care for mothers with complex mental health problems who have or are at risk of *parenting* difficulties. These are not specialist mental health services but services where the focus of support that is provided to both mothers and fathers during the perinatal period is the parent-infant relationship. It is of great importance that the staff who are offering this support are provided with appropriate knowledge and skills through the provision of infant mental health training as well as on-going supervisory support. It is recommended that the services are described as parent-infant, and not perinatal mental health services to ensure their function is

clearly understood. Mothers and infants should be seen in their own homes as well as in clinic settings (Joint Commissioning Panel 2012, RCPsych CR 197 2015). Whilst this primary care component of a comprehensive perinatal mental health pathway is not universally available in Ireland, its documented benefits should be considered when the comprehensive pathway is being developed.

Specialist Perinatal Mental Health Services have responsibility for women with mental health issues with a specific focus on moderate to serious mental illness. These specialist services come within the responsibility of the Mental Health Division which has overall responsibility for specialist mental health services in Ireland.

As this Model of Care is charged with focusing on designing a national plan for the development and operation of *specialist* perinatal mental health services, its scope includes:

1. Liaison psychiatry service to maternity units / hospitals
2. Specialist perinatal mental health service (OPD)
3. Mother and baby units
4. The interface within maternity units/hospitals and with secondary care mental health services (general adult psychiatry community mental health teams) and the provision of support for primary care.

Whilst the focus of this Model of Care is on the specialist component of a perinatal mental health strategy, it is hoped and expected that this will act as the catalyst for all the relevant Operational Divisions in the Health Service Executive to come together to implement a comprehensive mental health strategy. To assist in this process the Model of Care includes a section on the clinical pathway for a complete perinatal mental health service. From the latter, each Community Healthcare Organisation and Acute Hospital Group should be tasked with implementing the perinatal mental health integrated clinical pathway locally. The recent setting up by the HSE's Acute Hospital Division of the Women & Infants Health Programme to implement the National Maternity Strategy (DOH 2016) provides a unique opportunity to do this.

A *national helpline* providing perinatal emotional and mental health advice and support modelled on the Australian helpline PANDA (Perinatal Anxiety and Depression Australia) should also be considered. This helpline provides support to everyone during pregnancy and early parenthood, including partners and family members. Online resources such as

www.tommys.org/pregnancy-information/im-pregnant/mental-wellbeing and the app [BabyBuddy](#) are already easily accessible and their availability should be made widely known.

There is a proposal to develop *clinical hubs* in Ireland where any member of the public can phone for advice and will be linked into an appropriate professional for that advice. The phone line will be answered by a person (not a recorded voice listing advice) at both levels.

This Model of Care recommends perinatal mental health advice is also available through these clinical hubs which it is intended will operate on a 24/7 basis.

4. Aims and Objectives

Aims of a Specialist Perinatal Mental Health Service

These are listed below:

1 Provision of timely access to high quality mental health care and treatment to women in pregnancy and early postpartum. This is to ensure that the special needs of such women are met and the potential risk to both mother and child are minimised.

2 Prevention of avoidable relapses and reoccurrences in vulnerable women.

3 Provision of advice on the use of psychotropic medications given the change in pharmacokinetics in pregnant women and the special precautions required in treating pregnant or breastfeeding women because of potential effects on the foetus or baby.

4 Provision of the necessary input to any mother and baby facility.

5 Where admitted, facilitation of early discharge by providing an outreach service for a minimum of 3 months post discharge.

6 Pre-conception advice to women at-risk of significant mental health issues postnatally.

7 Advice on the Protection of Life During Pregnancy Act (2013).

5. Core Values and Principles

This chapter has been informed principally by the:

- Service user perspective
- Obstetrician perspective

together with information in chapters 1-4 of this document. The presentations given by the service user and obstetrician representatives on the Working Group have been essentially reproduced here to avoid diluting their content. There was considerable overlap in the two perspectives and the key messages from each are as follows:

Service User Perspective

The key issues from a service user perspective are as follows:

- As well as the known high incidence of mental health problems / illness in this period, increased recognition of birth related post-traumatic stress disorder and the effects of birth on fathers and the wider family.
- Wider recognition in maternity services of the triggers for mental health problems which include:
 - Birth trauma, not necessarily related to physical clinical events
 - Losses e.g. death of a baby, babies born with a significant health problem whether diagnosed antenatally or not, admission to neonatal intensive care units, serious personal medical illness in the postpartum period
 - Unplanned pregnancy particularly after a previous traumatic birth
 - Previous obstetric loss due to miscarriage or still birth
 - Previous mental illness including those of family members
 - Factors such as substance misuse, homelessness and domestic violence.
- Identifying vulnerable mothers:
 - Those having IVF, twins and first time older mothers
 - Those reflecting recent changes in the Irish demography and in particular ethnic minorities. This includes refugees who might suffer from mental health problems from their loss of traditional family supports together with post traumatic stress following war violence and their subsequent journey to Ireland
 - Adolescents.
- Identifying who mothers can talk to in the maternity services:

- Women may be afraid to talk
- And if they do, is the help available?
- Health care professionals (HCPs) fears may be based on:
 - Lack of knowledge of perinatal mental health issues in pregnancy and the postpartum
 - Where to refer women
 - So may be reluctant to ask about mental health problems.
- Maternity care should be comprehensive and should include physical and emotional aspects of pregnancy and birth. For instance both physical and emotional trauma should be taken into account. Whilst in Ireland perinatal and maternal outcomes are good when reviewed from the narrow lens of mortality, physical and emotional morbidity is not routinely recorded.
- Communication between different services and health care professionals to ensure relevant mental health information is passed on.
- Health Care Professionals appear unsure sometimes about advising women on psychotropic medication during pregnancy and breast feeding.

The list below, provided by the Association for Improvements in Maternity Services in Ireland (AIMSI), summarises what women would like:

- Continuity of carer
- Plan of care
- Not to repeat their story over and over
- Safe place to tell their story
- Multidisciplinary approach so that everyone is involved including the midwife
- More midwives involved to help normalise mental health issues
- Ideally women with perinatal mental health problems should not be referred to community mental health psychiatric services, they should be supported in the service where they are receiving maternity care
- Mother and baby units not the be all and end all although important

- Mother and baby dyad maintained whenever possible
- More specialists are required but also more support in the community
- Listening services, talk therapy and peer support services
- Breaking the isolation by removal of stigma related to mental health issues.

The AIMSI recommendations specifically relevant for this model of care for Specialist Perinatal Mental Health Services include:

- Increased awareness of mental health issues based on normalising the experience
- Training for all maternity staff in perinatal mental health is necessary to ensure this
- Ensuring those working in maternity services understand that mental health is on a par with physical health
- Universal sensitive and supportive screening at the booking appointment and repeated screening for mental health thereafter, including postnatally
- A clearly established pathway of care
- Specialist services to avoid separating mothers and their babies
- Advocacy for women experiencing perinatal mental health problems
- A recognition of and support for women who have complex caring responsibilities as a risk factor e.g. child or adult with a disability.

Obstetrician Perspective

- 15.5 % of mothers in one maternity hospital in 2015 had a history of psychological/ psychiatric disorder
- 4.5% had a history of postnatal depression
- Identification of risk is part of the assessment at the first antenatal booking visit and includes:
 - psychosocial issues
 - previous birth trauma
 - bereavement at birth
 - baby or parent being adopted

- child sexual abuse
- female genital mutilation
- substance misuse
- Challenge of dealing with acute mental health crisis, especially suicidality
 - out of hours psychiatric assessment in the three Dublin Maternity Hospitals
 - lack of mental health expertise “on the floor” in maternity units
- Private patients - social class 1 & 2, often older mothers
 - high expectations : increased risk of postnatal depression
- women with eating disorders
 - reluctance to agree to referral to psychiatry
- Operation of Protection of Life During Pregnancy Act (PoLDP Act 2013).

What Obstetricians Need

- Out of hours telephone advice for acute mental health crises
- Speedy access for acute cases - maternity hospital based rather than mental health catchment area based
- Closer link with community (primary) care for post discharge (6 weeks) follow up
- Education for doctors, midwives and patients about perinatal mental health
- Framework providing guidance and signposting for the management of acute and urgent mental health problems.

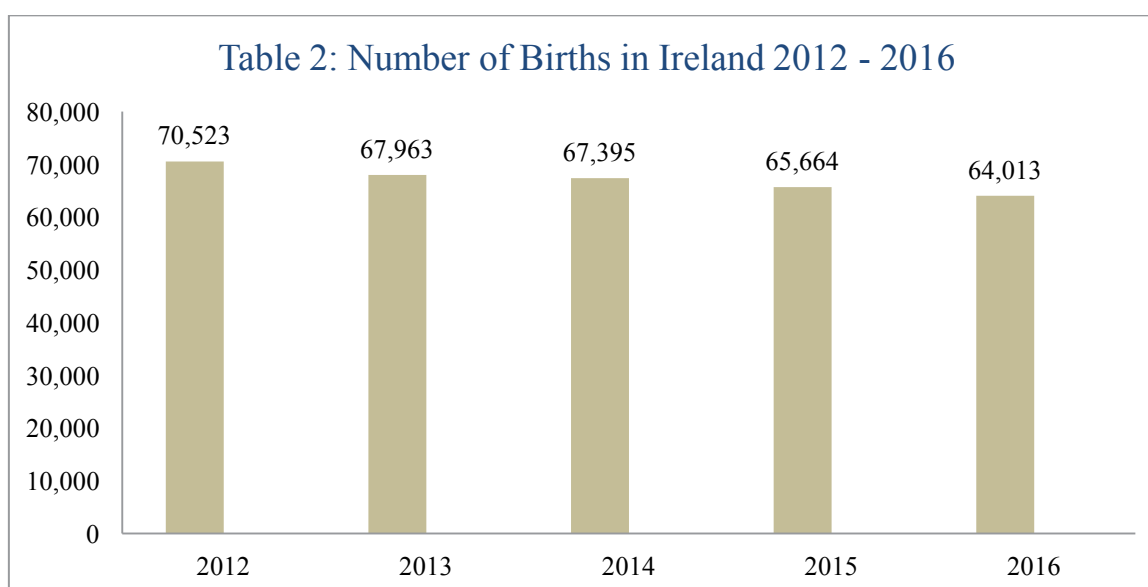
6. Proposed National Model of Care: Specialist Perinatal Mental Health Services

Current Provision in Ireland

There are 19 maternity units in Ireland. Four have approximately 8,000 deliveries per year – the three maternity hospitals in Dublin and Cork University Maternity Hospital (CUMH). Three have between 3,000 – 5,000 per year: Limerick 4,500, Drogheda 3,400 and Galway 3,000. The remaining 12 have 2,000 or less deliveries per year (HSE Business Information Unit 2017).

Of these, only the 3 Dublin maternity hospitals have access to specialist perinatal mental health services. These consist of part-time consultants (varying between 3 to 5 sessions per week). Each also has between 1-1.5 WTE senior nursing staff, of whom 2 are mental health nurses and 1.5 are midwives trained in perinatal mental health.

The list of maternity units and number of births by location for 2012-2016 (HSE Business Information Unit 2017) is shown in Table 3. The maternity units are shown per Hospital Group with the hospital with the largest number of deliveries in each Hospital Group listed first. The geographic dispersal is shown in Figure 2. Data for the five year period 2012 – 2016 shows a decrease in the total number of births in Ireland of 9.2% during this period (see Table 2). However, this is offset by a number of factors, as outlined in the National Maternity Strategy (2016), which mean maternity care in Ireland has become more complex. These include maternal factors such as higher maternal age, life style changes with higher expectations of pregnancy and motherhood and increased medical co-morbidity.



Source: HSE Business Information Unit, 2017

Table 3: HSE Reported Births by Location 2012 - 2016

Hospital Births	2012	2013	2014	2015	2016
Ireland East Hospital Group	15,934	15,260	15,581	15,231	14,551
National Maternity Hospital, Holles Street	9,142	8,994	9,309	9,389	9,017
Midland Regional Hospital, Mullingar	2,712	2,461	2,415	2,207	2,107
St Luke's Hospital, Kilkenny	1,907	1,815	1,812	1,748	1,631
Wexford General Hospital	2,173	1,990	1,982	1,887	1,796
Dublin Midlands Hospital Group	10,680	10,156	10,656	10,011	9,785
Coombe Women & Infants University Hospital	8,621	8,170	8,829	8,405	8,303
Midland Regional Hospital, Portlaoise	2,059	1,986	1,827	1,606	1,482
RCSI Hospital Group	14,615	14,405	14,136	13,547	13,593
Rotunda Hospital	9,046	8,842	8,980	8,539	8,589
Our Lady of Lourdes Hospital, Drogheda	3,653	3,648	3,385	3,286	3,183
Cavan General Hospital	1,916	1,915	1,771	1,722	1,821
South / South West Hospital Group	13,667	13,256	12,737	12,572	12,031
Cork University Maternity Hospital	8,563	8,339	8,062	8,051	7,638
Kerry University Hospital	1,676	1,500	1,450	1,405	1,413
South Tipperary General Hospital	1,170	1,202	1,100	1,064	1,034
University Hospital Waterford	2,258	2,215	2,125	2,052	1,946
University of Limerick Hospital Group	4,926	4,652	4,540	4,712	4,490
University Maternity Hospital Limerick	4,926	4,652	4,540	4,712	4,490
Saolta University Hospital Group	10,701	10,234	9,808	9,591	9,563
Galway University Maternity Hospital	3,377	3,141	2,992	2,974	3,001
Letterkenny General Hospital	1,872	1,797	1,684	1,763	1,736
Mayo General Hospital	1,788	1,697	1,744	1,614	1,650
Portiuncula Hospital, Ballinasloe	2,056	2,055	1,984	1,880	1,816
Sligo University Hospital	1,608	1,544	1,404	1,360	1,360
National Total	70,523	67,963	67,395	65,664	64,013

Source: HSE Business Information Unit, 2017

Figure 2: Location of 19 Maternity Units – No. of births by Hospital Group 2016



Estimated Need for Specialist Perinatal Mental Health Services in Ireland

Based on approximately 64,000 births in 2016, and the known incidence of perinatal mental health disorders (JCP-MH 2012), the number of mothers requiring specialist mental health services per annum are likely to be as outlined below:

For 64,000 deliveries:

1. 6,400 - 9,600 women likely to suffer mild to moderate depression. This should be managed at primary care level but access to support and advice from specialist perinatal mental health service is required e.g. on the use of psychotropic medication during pregnancy and whilst breastfeeding.
2. Up to 2,240 may suffer more serious mental illness and would be likely to benefit from referral to or advice from specialist perinatal mental health services.
3. 2/1000 women post-delivery (approx. 130) are likely to suffer from a postpartum psychosis, many of whom may require inpatient care.
4. A further 2/1,000 (approx. 130) are likely to suffer from other serious/complex disorders and some of these women may also require inpatient care.
5. Given the risk of PTSD following emergency caesarean section and the increasing caesarean section rate in general (32% in 2016: Irish Maternity Indicator System 2017) these figures are likely to be an underestimate. Other adverse events such as a traumatic ectopic pregnancy, uterine rupture or severe haemorrhage may also cause PTSD with some women requiring input from the specialist perinatal mental health service.

Designing a Specialist Perinatal Mental Health Service

Taking into account the Irish maternity figures, the geographic dispersal of maternity units and the current specialist perinatal liaison and generic liaison psychiatry provision, the following points were considered in the design of the specialist perinatal mental health service:

1. The large number of geographically dispersed maternity units, two thirds of which have 2,000 or less births per year.
2. Current specialist perinatal psychiatry provision.

3. The Mental Health Division's prioritising of Level 3 acute hospital liaison psychiatry developments between 2013-2015 via Programme for Government Funding. One whole time consultant liaison psychiatrist together with two clinical nurse specialists (CNS) have been allocated to many Level 3 hospitals highlighted for this development. This is in excess of the recommendation for the number of beds in the hospital. However, it was agreed by the Mental Health Division on the basis that this would provide leeway for more specialist liaison psychiatry provision such as perinatal.
4. Whether Hospital Groups should provide the basis for a hub and spoke model / clinical network for the specialist perinatal community mental health team? Consideration of current co-located maternity and mental health units on acute hospital sites is relevant in this regard as are planned re-locations.
5. Whether there should be a mother and baby unit? And if so, should there be one national unit or several smaller regional units. Is there a documented need in Ireland e.g. HRB or HIPE data on admissions for perinatal disorders in acute mental health units and maternity units respectively.
6. Where might a mother and baby unit(s) be sited bearing in mind it would need to be on the same site as an acute psychiatric unit for
 - cover purposes during the on-call period
 - backup for serious incidents involving, in particular, very difficult to manage behaviour.

Proposed Organisation of the Service

To avoid the potential risks of adhering solely to mental health service catchment areas which, together with primary and social care catchment areas, are not co-terminus with hospital groups, it is proposed that specialist perinatal mental health services should be provided in line with the maternity networks and developed within hospital groups based on:

1. A hub and spoke clinical network model with the three maternity hospitals in Dublin being hubs for their respective hospital groups (HGs). Each of the three maternity hospitals are due to move to an acute hospital campus in the next few years:
 - The National Maternity Hospital to St Vincent's Hospital, Elm Park, Dublin (Ireland East HG)
 - The Coombe to St James Hospital (Dublin Midlands HG)

- The Rotunda to Connolly Hospital (RCSI HG)

The three maternity units with the highest number of deliveries will be the hubs for the other three hospital groups:

- South / Southwest HG - Cork University Maternity Hospital
- University of Limerick HG – University Maternity Hospital Limerick (move to University Hospital Limerick is planned)
- Saolta HG - Galway University Hospital

The spokes are the smaller units which the National Maternity Strategy recommends are linked to the largest maternity hospital/unit within the hospital group. It is recommended the same model be adopted for specialist perinatal mental health services.

2. The allocation of specialist mental health consultant time be based on the recommended norm of 0.1 WTE per 1000 maternities (CR197, 2015).

3. In the maternity units with less than 4,000 births per annum, the specialist perinatal mental health service is provided as part of the overall liaison psychiatry service for the hospital. One WTE Consultant Liaison Psychiatrist is recommended per 500 acute beds. In Table 4, it is clear that in all Level 3 hospitals recently allocated a liaison psychiatrist by the Mental Health Division, the acute bed number (which includes the maternity beds) is less. These consultants, some in post and some being recruited, include the maternity unit as part of their liaison psychiatry role.

4. Twelve of the nineteen maternity units have approximately 2,000 (or fewer) maternities per year, with a preponderance along the north western seaboard and in the southeast. Currently there are in the order of ten Level 3 acute hospitals that might be changed to Level 2 hospitals. This would mean the hospital would no longer provide a 24 hour emergency service. Any such hospital with a maternity unit attached may see the unit moved to an adjacent Level 3 or Level 4 hospital or alternatively become a midwife led birth centre. This would result in increased maternities on an adjacent site and so may have implications for specialist perinatal mental health service provision.

Figure 3 depicts the hub and spoke model in one hospital group, also shown geographically in Figure 4. Table 4 shows the proposed organisation of the service together with associated consultant manpower and specialist perinatal mental health nursing professionals currently in place as well. Details of the manpower requirements for these and other professionals recommended for the specialist perinatal mental health teams are outlined in Section 7.

Figure 3: Hub and Spoke Clinical Network Model

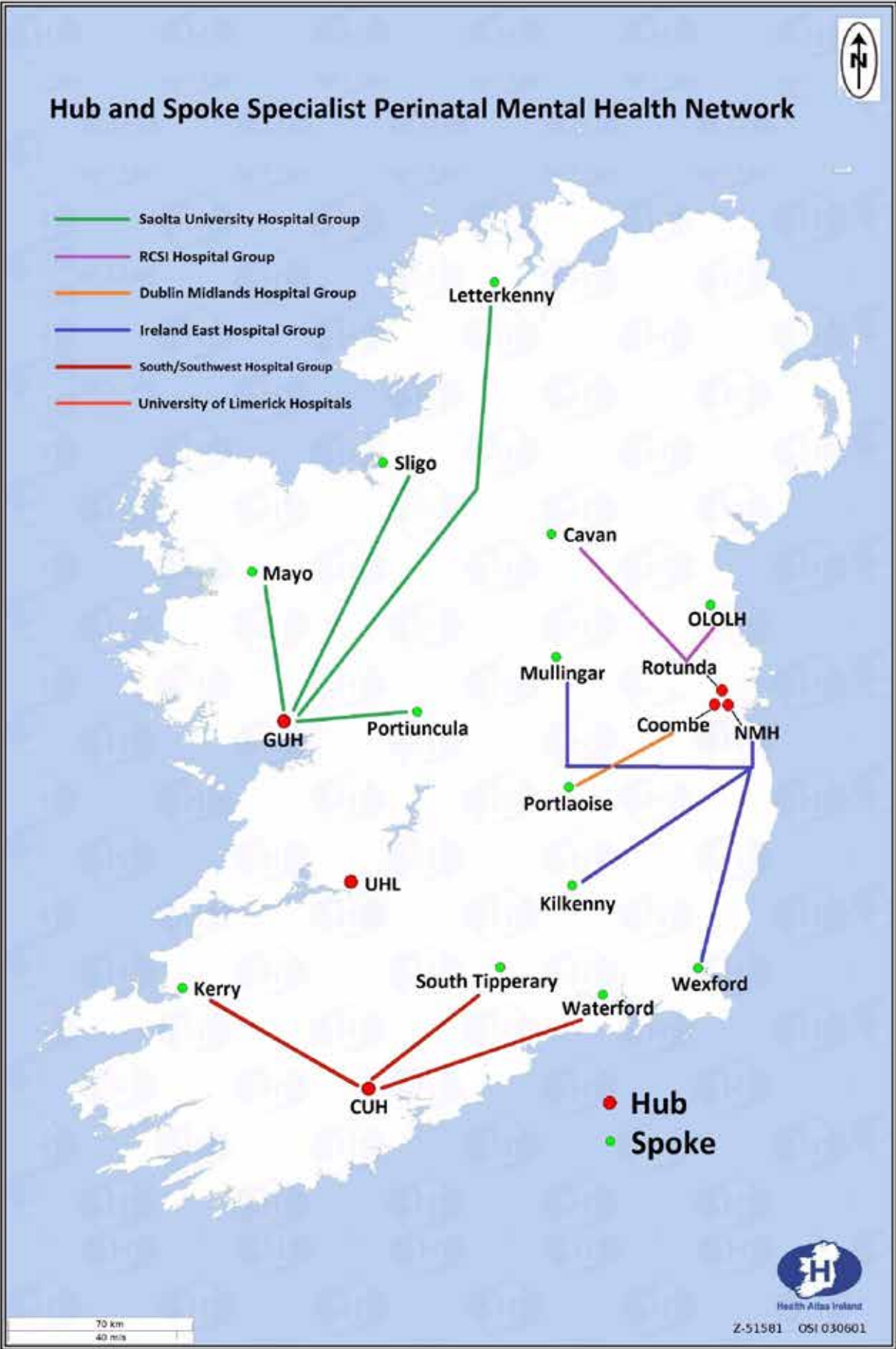


Table 4: Maternity Networks: current service (medical and nursing) & recommended specialist perinatal mental health provision

Hospital Groups/ Maternity Networks		Specialist Perinatal Consultants in post	Liaison Psychiatry Consultants in Spokes ¹	Consultant Psychiatrist provision Recommended ²	Perinatal Mental Health Nurses in Post	Perinatal Mental Health Nurses Recommended
Hub Hospital	Spoke Hospital	WTE	WTE	WTE	WTE	WTE
Ireland East	National Maternity Hospital	0.3		1.0	1.0	2.0
	Mullingar			0.2		
	Kilkenny			0.2		
	Wexford			0.2		
Dublin Midlands	Coombe³	0.3		1.0	1.0	2.0
	Portlaoise		n/a	0.15		
RCSI	Rotunda	0.4		1.0		2.0
	OLOL H		1.0			
	Cavan		1.0			
South / Southwest	CUMH	0.0		1.0		2.0
	Kerry		(1.0)	0.15		
	South Tipperary			0.1		
	Waterford		1.0	0.2		
University of Limerick	UMHL	0.0		0.5		1.0
Saolta	GUH	0.0		0.4		1.0
	Letterkenny		(1.0)	0.2		
	Mayo		(1.0)	0.2		
	Portiuncula			0.2		
	Sligo		(1.0)	0.15		
WTE Total		1.0	7.0	6.85	2.0	10.0

¹Number in brackets indicates liaison psychiatrists currently being recruited²One consultant psychiatrist session per 1,000 births, **5.1** WTE to be perinatal psychiatrists, of which 1.0 WTE is in place and 1.75 WTE an integrated component of liaison psychiatry posts³One new post awaiting recruitment: will serve Coombe (0.7 WTE) and Portlaoise (0.3 WTE).

Figure 4: Hub and Spoke Specialist Perinatal Mental Health Network Model



7. Requirements to deliver the service

The **functions** of a specialist perinatal mental health service are to provide:

- i) Specialist liaison psychiatry services to the wards and emergency departments of maternity hospital/units.
- ii) Outpatient clinics for relevant women attending maternity units/hospitals antenatally and postnatally.

Those referred may include women with a history of/or current anxiety, depression, OCD, post-traumatic stress (after a previous birth), background eating disorder or phobia (tocophobia in particular). It also includes women with complex mental health issues associated with a diagnosis of a major congenital malformation in the foetus/baby. Other diverse reasons for referral by the maternity service include attachment/bonding issues; capacity (decision making ability); possible co-morbid mental illness with substance misuse; concern about child safety issues. Termination of pregnancy issues either in the context of PoLDP Act (2013) or depression post termination are also relevant.

- iii) to receive referrals from general adult community mental health teams (GAP CMHT) of high risk women. This particularly applies to those with bipolar disorder who are pregnant. Preconception advice for high risk women is also an important function.

- iv) provide follow up for women with severe mental illness or advice to the women's CMHT in providing this care.

- v) education of maternity unit/hospital staff and also general adult psychiatry community mental health teams, general practitioners, practice nurses and public health nurses.

The team's **referral sources** are:

- i) all referrals from the maternity unit /hospital the service is based in
- ii) geographical for GP and secondary care mental health services to provide a clear pathway for referral for such services
- iii) primary care (public health nurses, psychologists and social workers) in collaboration with the woman's GP.

Staffing of a Specialist Perinatal Mental Health Team

The Specialist Perinatal Mental Health Team is the unit of service delivery for the three components of the specialist service:

- Liaison psychiatry service to maternity units / hospitals
- Specialist perinatal mental health teams
- Mother and baby unit

The team staffing should be related to the number of births in the maternity unit rather than the size of the local population. However, a more accurate measure of need is the number of women attending. This would then include women who lose babies through miscarriage or perinatal death who may also require access to the service but precise figures to include this cohort are difficult to obtain nationally.

Key disciplines for a specialist perinatal mental health team are:

- Consultant Psychiatrist with a special interest in perinatal psychiatry.
 - 1 session (1/2 day) per 1000 deliveries

Where a full time consultant is required the team should comprise:

- NCHD (preferably Senior Registrar) – 1 WTE
- Mental Health Nurses (Clinical Nurse Specialist grade) – 2 WTE
If the role is to extend to community visits, additional nursing staff would be required
- Psychology (senior) - 1 WTE
- Occupational Therapy (senior) - 1 WTE
- Social Work (senior) - 1 WTE
- Administrator - 1 WTE per team

(CR197, 2015)



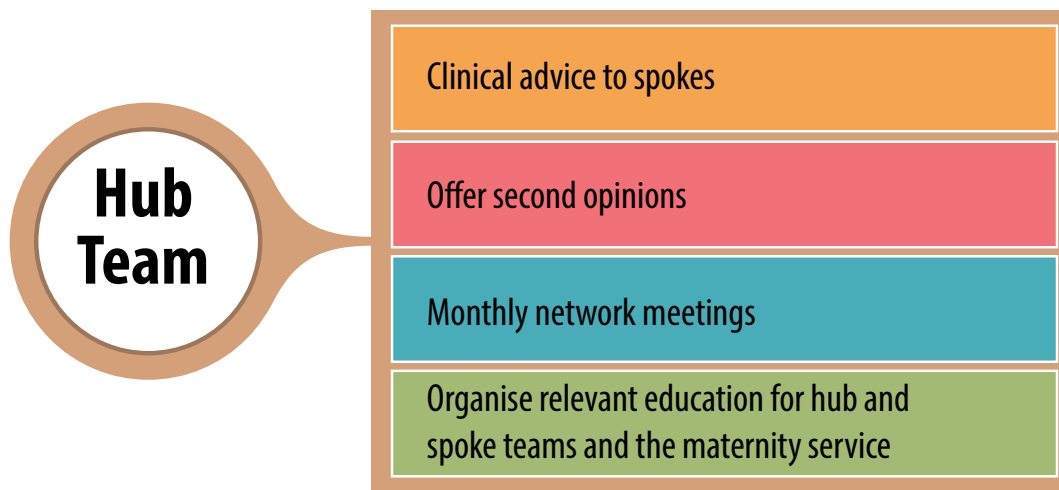
This team must be based in the maternity hospital/acute hospital since this site is the main focus of clinical work, integrated care and collaboration with other professionals involved. Each team is the specialist perinatal mental health service hub in its hospital group/maternity network. The total staffing requirement nationally is summarised in Table 5.

Spokes should be developed in each of the non-hub acute hospital maternity units. It is recommended that each spoke has a mental health nurse at CNS level with dedicated time for the role. The time should be calculated as 0.2 WTE per 1,000 births and is factored into the liaison psychiatry nurse allocation to level 3 acute hospitals. The liaison psychiatry consultant currently in place in these hospitals provides a service to the maternity units and clinics and this will continue but with the advantage of now being part of the Hospital Group's Specialist Perinatal Mental Health Network.

It will be the responsibility of the hub team to:

- Provide clinical advice to the spokes
- Offer second opinions if indicated
- Organise monthly network meetings, rotating the venues to include the hub and spoke sites
- Organise relevant education for the staff in the hub and spoke teams and for the maternity service as a whole (see section 10).

It will be the responsibility of the maternity hospitals and acute hospitals with maternity units to provide adequate space and the facilities for these teams to work in.



Mental health midwives: the primary role of this midwife is to promote parity between physical and mental health care in maternity services (The Royal College of Midwives, 2015). They are members of the maternity unit/hospital midwifery workforce and play a key role in working with midwives and obstetricians at all levels of care from booking and review clinics to postnatal wards. The Mental Health Midwife is a local champion who leads work within

the Maternity Services to ensure that women with perinatal mental health problems and their families receive the mental health care and support they need during pregnancy and in the postnatal period. They also raise awareness of postnatal depression and organise early management and treatment. They provide advice to colleagues and to women and their families, and act as a resource on issues relating to the identification, assessment and management of mental health problems during pregnancy or after birth. This in turn:

- Raises awareness to ensure pregnant women and their partners are informed of the emerging signs of mental health problems and illness and what to do if these problems occur
- Assists with building a trusting relationship which helps women to feel confident in speaking out if they are unwell
- Supports women to access additional care if required
- Promotes positive mental health of mothers which is central to the physical and psychological wellbeing of families/preservation of the family unit and helps to reduce the stigma and discrimination associated with poor mental health
- Promotes a positive relationship between mothers, babies and their families
- Provides education and training for staff in maternity hospitals particularly midwives and student midwives.

Their clinical links are to specialist perinatal mental health services in hub hospitals and to the liaison psychiatry services in spoke hospitals.

Given the key role they play within maternity services in raising awareness of mental health issues together with assessing and treating women with mild to moderate mental health problems, it is very welcome that the National Woman & Infants Health Programme Office has committed to funding two mental health support midwives for the four large hubs, one each for Galway and Limerick and one for each spoke hospital.

Table 5: Staffing for each Specialist Perinatal Mental Health Team: In Place/Required

Hospital Group		Ireland East HG	Dublin Midlands HG	RCSI Dublin North West	South/Southwest HG	University of Limerick Hospitals	Saolta HG	National Total WTE
Maternity Hospital		National Maternity Hospital	Coombe Hospital	Rotunda Hospital	Cork University Maternity Hospital	University Maternity Hospital, Limerick	University Hospital Galway	
Consultant	In place	0.3	0.3	0.4	0	0	0	1.0
	Required ¹	0.7	0.7	0.6	1.0	0.5	0.6 ²	4.1
CNS/ANP	In place	1.0	1.0	0	0	0	0	2.0
	Required ¹	1.0	1.0	2.0	2.0	1.0	1.0	8.0
NCHD	In place	0	0	0	0	0	0	0
	Required ¹	1.0	1.0	1.0	1.0	0.5	0	4.5
Psychology (S)³	In place	0	0	0	0	0	0	0
	Required ¹	1.0	1.0	1.0	1.0	0.5	0.5	5.0
Occupational Therapy (S)³	In place	0	0	0	0	0	0	0
	Required ¹	1.0	1.0	1.0	1.0	0.5	0.5	5.0
Social Work (S)³	In place	0.5	0	1.0	0	0	0	1.5
	Required ¹	0.5	1.0	0	1.0	0.5	0.5	3.5
Administrative Support	In place	1.0	0	0	0	0	0	1.0
	Required ¹	0	1.0	1.0	1.0	0.5	0.5	4.0
Midwives (Mental Health)	In place	0	0	1.5	0	0	0	1.5
	Required ¹	2.0	2.0	0.5	2.0	1.0	1.0	8.5

¹WTEs stated here as Required are in addition to WTEs currently in place.

²1 WTE to provide 0.4 WTE liaison Portiuncula, 0.6 Specialist Perinatal Mental Health for GUH & Portiuncula.

³(s) indicates senior grade required.

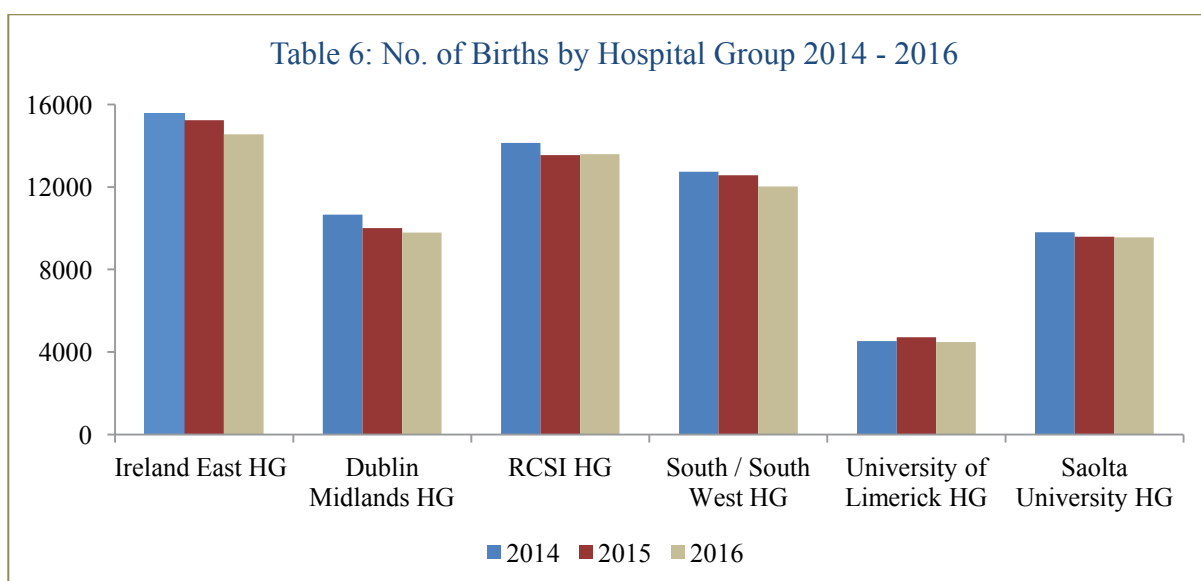
A total of 32.1 WTE is required to fully staff the specialist teams and an additional 21.5 WTE for mental health midwives of which 8.5 will be based in hubs and 13 in spoke hospitals.

Staffing of Mother and Baby Units is not included in this figure. One such unit would require an additional 15 WTE plus ring-fenced time for a link midwife to visit daily.

Mother and Baby Units

Given the documented adverse affects on separating mothers from their babies, the provision of mother and baby units is recommended notwithstanding the challenges of geography and dispersed maternity units. This should take into account maternal choice for:

- Admission to a mother and baby unit
- Admission to a local general mental health unit
- Admission to a mother and baby unit in course of admission without the baby, if the mother would prefer this.



Source: HSE Business Information Unit, 2017

Health Research Board data on inpatient admissions to psychiatric units reported a total of 18 mental health admissions for ICD code F53 (postnatal psychosis) in 2016 of which five were to one private hospital. It is known a few women with this diagnosis are treated in maternity units / hospitals as shown by the HIPE data.

HIPE data on the number of inpatient discharges with Admission Type Maternity with a listed mental illness diagnosis in 2016 was provided by the HIPE Pricing Office HSE. Admission Type Maternity is defined as patient admitted related to their obstetrical experience (from conception to 6 weeks post delivery). There were 558 such discharges in 2016 all confined to 16 maternity units/hospitals of which four were maternity hospitals. The information is shown in Appendix II.

The majority (342/558) were for anxiety disorders. One third of the overall total were recorded in Cork University Maternity Hospital. In total 34 (6%) were for bipolar affective disorder, 157 (28%) were for depressive episode and 19 (3%) for recurrent depressive disorder. Only 6 (1%) of discharges (all within one hospital) were discharges specifically associated with the puerperium i.e. postnatal psychosis. The pattern in terms of numbers and diagnoses suggests there may not be consistent recording of mental disorder across all of the hospitals. Based on this information it is likely that the six women with postnatal psychosis (F53) would require admission, and possibly half of those with bipolar disorder and a fifth of those with depression (comorbid depressive episode and recurrent depression). This would give a total of approximately 40 women. It is possible that some of these women were transferred to a psychiatric unit but no information is available on this.

Hence in 2016 there may have been between 40 and just under 60 women who might have benefited from admission to a mother and baby unit. Whilst this data probably has shortcomings in terms of hospital recording of mental illness in particular, it is helpful in supporting the case for a Mother and Baby Unit. A six bedded mother and baby unit could accommodate at least 60 admissions per year with a mean length of stay of five weeks per woman.

Recommendation

One six bedded unit is recommended per 15,000 deliveries by CR197 (2015).

Currently only one Hospital Group (Ireland East) had this number of deliveries in 2016.

Hospital Group	Deliveries 2016
Ireland East	14,551
Dublin Midlands	9,785
RCSI	13,593
South / South West	12,031
University of Limerick	4,490
Saolta	9,563

It is recommended that one mother and baby unit be developed in Dublin in the Ireland East Hospital Group. This would serve as a national tertiary referral unit. This recommendation is based on the current population of the greater Dublin area (Dublin, Meath, Kildare and Wicklow) of 1.8 million projected to increase to 2.2 million by 2031 (Dublin, Chamber of Commerce 2017). This site is also easily accessible via the M50 and N11. The unit should have the capability of expanding to 10 beds if the need emerges in due course. It is proposed this be sited in the psychiatric unit based in St. Vincent's University Hospital, Dublin. It would provide 6 beds for use nationally and be part of the Specialist Perinatal

Mental Health Service based in the National Maternity Hospital. It must include a family side unit to facilitate contact with partners and other children. Family accommodation should also be considered.

Operation of the Unit

The unit should adhere to the standards set out in the Quality Network for Perinatal Mental Health Services (RCPsych CCQ 1161 2014). Background information and the link to these standards are attached as Appendix III for ease of reference.

In considering the operation of this national mother and baby unit for Ireland, the principles underlying the Working Group's recommendation are:

1. That the unit operates as a national tertiary centre of excellence
2. With defined access from specialist perinatal mental health services
3. Following admission of a mother with her baby, special attention is paid to the needs of the rest of the family. This should include timely support and counselling for other children in the family.
4. From the service user perspective, extension of this national unit to other regions of the country if there is a need demonstrated should be considered in the future.

Staffing for the unit

Staffing for a 6-10 bedded mother and baby unit is listed in the Royal College of Psychiatrists Report on Perinatal Mental Health Services (CR197, 2015).

It consists of:

2 Mental Health Nurses per shift	9.0 WTE
1 Nursery Nurse for extended day time hours	2.5 WTE
Consultant	0.5 WTE
NCHD	1.0 WTE
Psychology	0.5 WTE
Occupational Therapy	0.5 WTE
Social Work	0.5 WTE
Ward Clerk/Administrator	1.0 WTE

Link midwife to visit daily.

This staffing is recommended by this Model of Care.

Other Options

Two other options may be considered particularly because of the distance from home to the proposed national unit. One as an immediate option and the second if the need emerges after several years experience with the single national unit.

(i) As Needed Mother and Baby Provision

This option is based on the wish of the mother not to be separated from her family. Each local mental health unit's ability to facilitate a mother and baby admission should be considered. This may be easier in some hospitals. For instance, Cork University Hospital has a new mental health unit which has the facilities to admit a mother and baby if required. The unit in Limerick University Hospital has been recently upgraded so should also be able to do so. The mental health unit in Galway University Hospital is being replaced and includes the facilities to admit a mother and baby.

When a mother and baby are being admitted, the arrangements required are:

- The admission is to a single room with the baby being roomed with the mother
- There should also be a sitting room nearby providing a private space for meetings with partner, relatives and professionals
- Mother to have one to one mental health nursing
- Nursery nurse to be provided by maternity unit for extended day hours
- Midwife to visit daily
- Psychology, social work and occupational therapy to be provided from the acute unit's complement

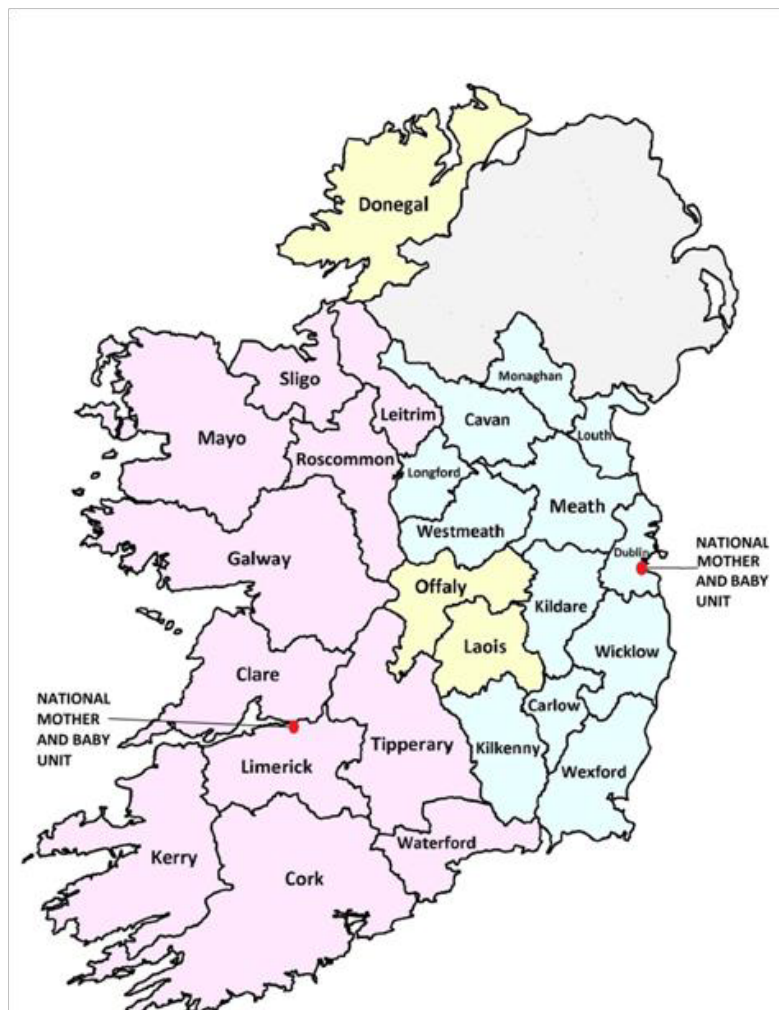
Daily follow up by the specialist perinatal mental health team where the mother and her baby are admitted to a hospital with a specialist perinatal mental health hub. In non-hub sites the local relevant general adult psychiatry team, with readily available advice from the specialist perinatal mental health team, would be responsible for inpatient care and treatment.

These arrangements are derived from the Quality Network for Perinatal Mental Health Services standards referenced earlier.

(ii) Alternatively a mother and baby unit could be developed in Limerick

A second national mother and baby unit in Limerick could provide improved accessibility for women living in the catchment areas of the three non Dublin aligned Hospital Groups. The total number of births in 2016 in these Hospital Groups was 26,084. Hence one six bedded unit with the capacity to increase to 10 beds could be considered if the need emerges. The map shows suggested catchment areas if two mother and baby units were developed. Counties in pink would admit to a Limerick unit and those in blue to the Dublin unit.

Figure 5: Proposed Access to a second Mother and Baby Unit



In this Model, flexibility to enable mother and babies in Laois/Offaly who might find Limerick more accessible should be accommodated. Likewise, mothers in Donegal who would find Dublin more accessible than Limerick should be facilitated. These counties are shown in yellow. If a mother and baby unit was developed in Northern Ireland, women and their families in Donegal might find this more convenient. A cross border arrangement would be required to expedite this.

Review

The operation of the unit should be monitored for two reasons:

- (i) As part of the Royal College of Psychiatrists Quality Network for perinatal mental health services to ensure it is meeting the standards required of a mother and baby unit.
- (ii) To assess whether one national unit meets the need for specialist perinatal inpatient mental health care.

8. Proposed Clinical Pathway for Perinatal Mental Health Services (including the specialist component)

Whilst this Report addresses the Model of Care for Specialist Perinatal Mental Health Services, it provides the opportunity to propose a design for an overall Perinatal Mental Health Clinical Pathway for Ireland. This also shows the context in which the specialist service will operate.

The guiding principle for such a clinical pathway is that women and their families receive good care from skilled professionals during pregnancy and the first year of baby's life. This care should be comprehensive, equitable, integrated and needs led. Since perinatal mental health care involves different levels of care, different professionals and different services, it is complex to organise. However, the provision of effective integrated care based on partnership with women and their families gives the best chance of healthy development of babies and children and is far less costly than trying to repair the damage of not providing such services in the first place (Healthy London Partnership, 2017).

The **principles** identified as key by the Working Group are as follows:

1. Equal weight to be given to the emotional as well as physical care aspects of pregnancy and the postnatal year.
2. Equal weight to be also given to the prevention and early detection of mental health issues rather than just focusing on women with a higher risk of more severe mental illness.
3. Describing the required components of the perinatal mental health clinical pathway encompassing general practitioners, primary care teams, maternity hospitals / units, adult mental health services and specialist perinatal mental health services.
4. Describing the linkages between these components to ensure that integrated care is provided to mothers, infants and their families.
5. This clinical pathway to be recommended as the National Clinical Pathway for the provision of Perinatal Mental Health Services.
6. In line with the National Maternity Strategy, each Hospital Group and Community Health Organisation should have a jointly agreed Perinatal Mental Health Integrated Care Pathway. This should show all components and their linkages and also outline how education and training on perinatal mental health should be provided and by whom.

The **components** together with their responsibilities within a perinatal mental health clinical pathway are briefly outlined below.

1. General Practitioners

The majority of women attend their GP first. Following confirmation of pregnancy, an assessment of physical and emotional health is made by the GP and the women are booked into the appropriate antenatal clinic. The GP should inform the antenatal clinic of any past or current mental health issues/illnesses. If a woman has a history of bipolar disorder, the GP should refer to the relevant Specialist Perinatal Mental Health Services, letting any general adult psychiatry service involved know of this referral.

2. Booking Visit

The midwife should enquire about emotional as well as physical issues. If there are any identified risks e.g. the woman had a previous traumatic birth, following discussion with and agreement by the woman, referral to the mental health midwife should be considered. Woman with a history of bipolar disorder not already linked into the Specialist Perinatal Mental Health Service should be discussed with the obstetrician and referred to that service.

3. General Practitioners, Practice Nurses and Public Health Nurses

The General Practitioner, Practice Nurse and Public Health Nurse should at each contact with the mother and baby inquire about emotional health. Any concerns should be explored and further help sought as clinically indicated e.g. Mental Health Midwife, Primary Care Psychology, local Mental Health Service or Specialist Perinatal Mental Health Service.

4. Primary Care Psychology

Some women during pregnancy and the postnatal year may have mental health problems which could benefit from access to Primary Care Psychology. This should be available in each area. Those providing the services should have additional training in Perinatal Mental Health so that they are aware of the issues that may arise. These may include anxiety, depression and fears about the ability to cope with the baby. Any pregnant woman requiring such intervention should be prioritised by Primary Care Psychology.

5. Mental Health Midwives

Midwives with training in the identification of mental health issues and the provision of interventions for mild to moderate mental health problems should be available in each

Maternity Hospital / Unit. Such midwives can offer brief interventions for pregnancy related symptoms and their role is key to assisting women in these circumstances. They may also provide interventions individually or in group format for women with traumatic birth experiences whether physically or emotionally based.

6. Addiction Services

An important component of Primary Care provision is the availability of substance misuse services to also include alcohol misuse. As well as being available in the community, there should also be in-reach to maternity units and clinics. In the Dublin Maternity Hospitals there is a specialist addiction midwife in each. This model should be considered for the other Hubs.

7. General Adult Community Mental Health Team

Most women with moderate to severe mental illness will be or have been under the care of General Adult Mental Health Teams. These teams play a pivotal role in informing women of childbearing age with bipolar disorder in particular of the risks of pregnancy, including those associated with particular psychotropic medication. They should have readily available advice from Specialist Perinatal Mental Health services where necessary and be able to refer any women they are particularly concerned about. To ensure the interface between the specialist and general adult team operates smoothly, it is recommended that one community mental health nurse in each double sector team develops a special interest in perinatal psychiatry. To support this, the nurse will be provided with appropriate training (see Section 10). This nurse should develop close links with the specialist team and relevant mental health midwives. Their role would include monitoring vulnerable women and follow up of those discharged from the specialist team following a period of treatment.

8. Specialist Perinatal Mental Health Service

During pregnancy and the postnatal period, Primary Care (particularly GPs and PHNs), midwives and adult mental health services should be able to easily obtain advice by phone from the specialist team. Where necessary, women should be referred to the Specialist Perinatal Mental Health Service as described in Section 7.

9. Parent – Infant Services

Parent – Infant Services are not widely available in Ireland but increasingly recognised as an important gap to address.

These services, provided at primary care level, focus on the infant's current and future mental health by providing care for mothers together with their infants where it is thought that the mother may have difficulties in relating to her baby. Vulnerable mothers include those that have been in care, referred by TUSLA or those who have significant mental health problems.

10. Social Work Services

Social work services for children and families are provided by TUSLA, the HSE and some voluntary agencies involved in providing intellectual disability services. They are crucial in identifying vulnerable women and babies and ensuring appropriate supports such as parent-infant services are provided.

Service Delivery

The range of services involved in the provision of an overall perinatal mental health clinical pathway means that it is essential that each Hospital Group and Community Health Office within its associated Maternity Network should have an agreed local document describing the Network's clinical pathway in detail.

This should include:

- (i) An integrated care pathway covering all levels of service provision and all severities of mental health problems / illnesses
- (ii) The sharing of relevant mental health history between primary care including intellectual disability services, maternity and mental health services
- (iii) Partnership working with women, their families and external agencies such as TUSLA
- (iv) Seamless transition across health care settings: primary and secondary/ physical and mental health care
- (v) Clarity on the referral route and indications for referral at each level.

All of the above must be supported by a maternity network education strategy together with a relevant set of metrics to ensure that the pathway is functioning efficiently and effectively.

Table 7 summarises the Integrated Perinatal Mental Health Clinical Pathway. This is then followed by a separate section on the maternity booking visit given its importance in the clinical pathway.

Table 7: Integrated Perinatal Mental Health Pathway

What's needed	When	Where/Who
Preconception advice	<ul style="list-style-type: none"> • Bipolar disorder • Previous postnatal psychosis • Previous severe depression 	<ul style="list-style-type: none"> • Specialist Perinatal MHS/GAMHS¹
When Pregnancy confirmed	<ul style="list-style-type: none"> • GP asks about mental health • If concerned notifies/refers as clinically indicated. 	<ul style="list-style-type: none"> • Booking clinic • Mental Health Midwife • Adult Mental Health Service if attending • Specialist Perinatal MHS <ul style="list-style-type: none"> - Bipolar disorder - Postnatal psychosis history • Primary Care Psychology
Booking Clinic	<ul style="list-style-type: none"> • Midwife asks about mental health at each visit. If concerned discusses/refers to: 	<ul style="list-style-type: none"> • Obstetrician • Mental Health Midwife • Specialist Perinatal MH Service
Maternity care plan	<ul style="list-style-type: none"> • Jointly prepared by mother and all services involved and must include mental health component. 	<p>Flag vulnerable women:</p> <ul style="list-style-type: none"> - Bipolar disorder - Postnatal Psychosis history - PTSD - Mental health problems during pregnancy - Psychosocial issues including parenting problems in past - Domestic abuse - Personal history of child abuse
Postnatal Immediate	<ul style="list-style-type: none"> • Bipolar disorder • History of postnatal psychosis 	<ul style="list-style-type: none"> • Daily review by Specialist Perinatal Mental Health Service in Maternity Unit² • Subsequent follow up care for 6 months if indicated
Postnatal Medium term	<ul style="list-style-type: none"> • GP/PN/PHN review: enquire about mental health • If concerned refer as clinically indicated. 	<ul style="list-style-type: none"> • Primary Care Psychology • Parent – Infant Services • Adult Mental Health Service • Sp. Perinatal MHS (up to 6mths post delivery) • Social Work (TUSLA)

¹GAMHS: General Adult Mental Health Service²Daily review by Liaison Psychiatry Service in Maternity Units based in "spoke" acute hospitals.

Mental Health Screening at the Booking Visit

The Booking Clinic is the key location for screening by midwives for mental health problems. Open questions to encourage discussion about mental health problems are helpful in identifying at risk women. It is recommended that the Whooley questions (Table 8) are used as they are non-threatening and promote further discussion about mental health (Whooley 1997).

Table 8 – Whooley Questions

1. During the past month, have you often been bothered by feeling down, depressed or hopeless?
 2. During the past month, have you often been bothered by having little interest or pleasure in doing things?
- A third question should be considered if a woman answers "yes" to the initial questions.
3. Is this something you need or want help with?

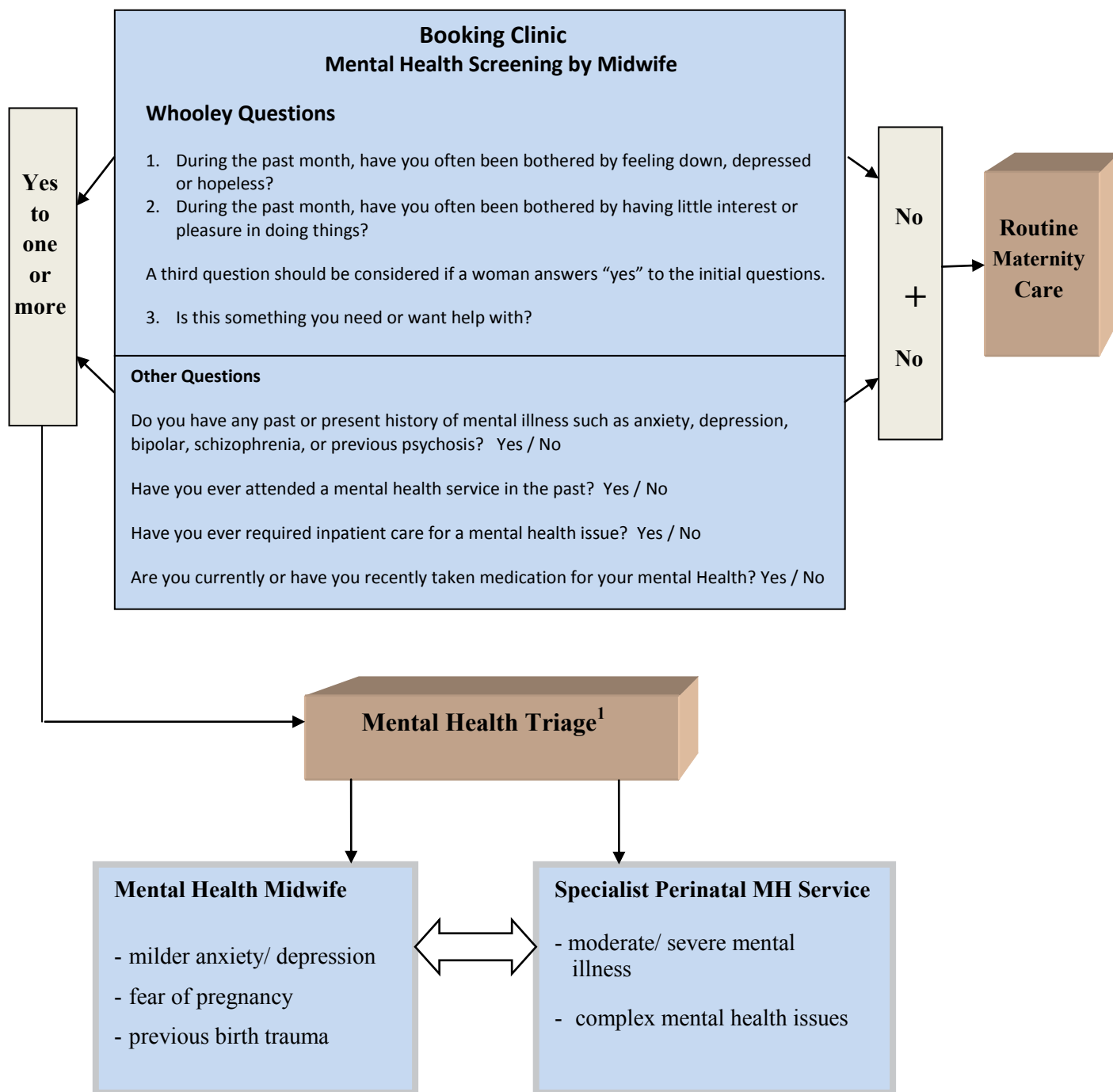
The Maternity and Newborn Clinical Management System (MN-CMS) Mental Health Project Team recommends that to aid standardisation of mental health screening in booking clinics and in line with best practice and NICE guidelines, each patient at booking clinics are also asked the questions below:

- Do you have any past or present history of mental illness such as anxiety, depression, bipolar, schizophrenia, or previous psychosis? Yes / No
- Have you ever attended a mental health service in the past? Yes / No
- Have you ever required inpatient care for a mental health issue? Yes / No
- Are you currently or have you recently taken medication for your mental Health? Yes / No

Women should be referred to the perinatal mental health services if they are suspected of having a mental illness or have any history of mental illness.

Women with milder problems would be seen by a Mental Health Midwife and those with severer problems by the Specialist Perinatal Mental Health Team. A combined mental health referral triage system is recommended to expedite this. This is illustrated in Figure 6.

Figure 6: Perinatal Mental Health Referral Pathway – within Maternity Services



¹The implementation of a Mental Health Referral Triage System in each maternity service to review all mental health referrals is recommended by this Model of Care. This system should involve the mental health midwives and the specialist service together determining the most appropriate route of response for each referral i.e. mental health midwife or specialist team. The specialist service in the hubs will be specialist perinatal mental health services and in the spokes the liaison psychiatry services.

Adapted from Madden D. (2017)
Whooley questions, Whooley (1997) (CG192)

Midwives, Nurses and Perinatal Mental Health Services

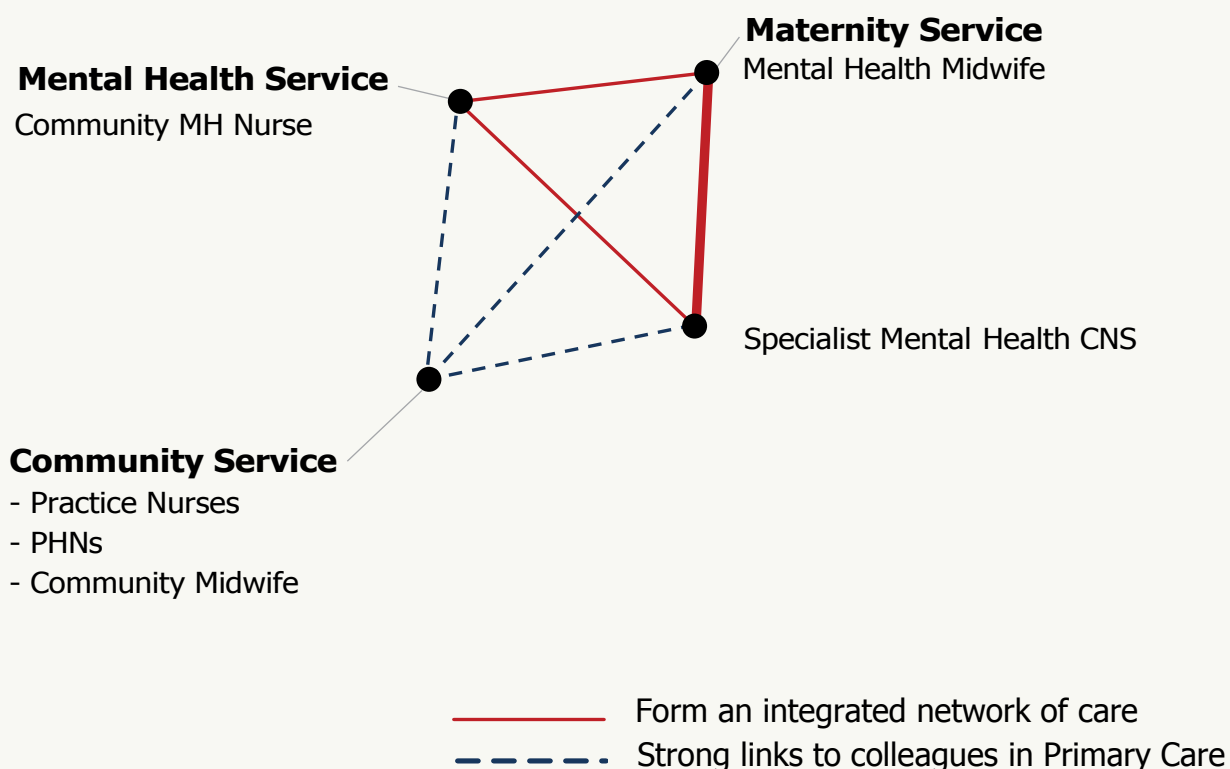
This Model of Care provides an excellent opportunity to demonstrate integrated working across services at mental health midwife and mental health nursing level and its extension into primary care.

The mental health referral triage system (Figure 6) is the key to understanding delivery of a comprehensive mental health response within the maternity services.

Figure 7 illustrates the close links that should be developed by mental health midwives and the specialist service with the identified community mental health nurses (CMHNs) with a special interest in perinatal mental health in the adult mental health community services. This will ensure seamless care for women. Likewise links with nurses and midwives based in primary care is crucial. Within the primary care services the links may involve practice nurses, public health nurses and community midwives depending on how services are provided locally.

While all other disciplines are equally involved, the nursing/midwifery professions will be key in providing continuity of care across services and between levels of care, i.e. primary, secondary and tertiary.

Figure 7: Mental Health Midwives, Mental Health Nurses and Community based Nurses – Working Together.



Standards of Care

The National Institute for Health and Care Excellence (NICE) is a well regarded body within the UK Department of Health. It has issued guidance on standards of perinatal mental health care which are relevant for this proposed overall clinical pathway (CG 192, 2014/2015). Whilst non-binding in Ireland, there are no equivalent standards here, so these are reproduced below and Statement 7 refers to the specialist component: the focus of this document.

Statement 1: Women of childbearing potential are not prescribed valproate to treat a mental health problem.

Statement 2: Women of childbearing potential with a severe mental health problem are given information at their annual review about how their mental health problem and its treatment might affect them or their baby if they become pregnant.

Statement 3: Pregnant women with a previous severe mental health problem or any current mental health problem are given information at their maternity service booking appointment about how their mental health problem and its treatment might affect them or *their baby*.

Statement 4: Women are asked about their emotional wellbeing at each routine antenatal and postnatal contact.

Statement 5: Women with a suspected mental health problem in pregnancy or the postnatal period receive a comprehensive mental health assessment.

Statement 6: Women referred for psychological interventions in pregnancy or the postnatal period start treatment within 6 weeks of referral.

Statement 7: (developmental) Specialist multidisciplinary perinatal community services and inpatient psychiatric mother and baby units are available to support women with a mental health problem in pregnancy or the postnatal period.

NICE also lists key performance indicators to measure implementation of its standards of care (see over). These could form the basis of evaluating the clinical pathway proposed in this section.

Valproate: Proportion of women of childbearing potential prescribed valproate to treat a mental health problem.

Pre-conception information: Proportion of women of childbearing potential with a severe mental health problem who are given information at their annual review about how their mental health problem and its treatment might affect them and their baby if they become pregnant.

Information for pregnant women: Proportion of pregnant women with a previous severe mental health problem or any current mental health problem who are given information at their booking appointment about how their mental health problem and its treatment might affect them or their baby.

Asking about mental health and wellbeing: The proportion of routine antenatal and postnatal contacts at which women are asked about their emotional wellbeing by a healthcare professional.

Comprehensive mental health assessment: Proportion of women with a suspected mental health problem in pregnancy or within 12 months of giving birth who receive a comprehensive mental health assessment.

9. Governance of Specialist Perinatal Mental Health Services

The National Maternity Strategy requires that Maternity Networks within Hospital Groups are established. These should be based on strong corporate and clinical governance.

There is an established structure in the three Dublin Maternity Hospitals based on one consultant (known as the Master from legislation enacted in the 1700s) who is the CEO and budget holder of each maternity hospital and reports to its Hospital Board. HSE hospitals with maternity units have a Clinical Director. With the development of Hospital Groups, there is now a Clinical Director for Women and Infants Services in each Hospital Group reporting to the Chief Clinical Director of the Hospital Group. Mental health services have an equivalent structure in which the Clinical Director is titled an Executive Clinical Director to differentiate from the role of Clinical Directors required for each mental health unit (Mental Health Act 2001).

A crucial function of the National Women & Infants Health Programme (NWIHP) in implementing the Maternity strategy is integrating the essential components of Maternity Services across primary, secondary and tertiary care. This will include crosslinking all maternity, gynecological, obstetric, anaesthetic, neonatal and mental health services whether at individual hospital, maternity network or CHO level. The strategy states that to achieve this, developmental funding for maternity services will be ringfenced and allocated through the NWIHP. This is akin to the Cancer Strategy model.

In this model, it is essential that Perinatal Mental Health Services, including the specialist components, are included. This will ensure funding is ringfenced for their development, that an integrated approach as outlined earlier in this Model of Care is developed and that the specialist component is prioritised. The latter is crucial both to advise on and to develop the necessary training and educational programmes.

The Maternity Networks are crucial to this Strategy as they will ensure:

- Sharing of expertise
- Improved operational resilience
- Delivery of safer and better services

The clinical governance structure of the specialist perinatal mental health service should encompass maternity hospitals, acute hospitals with maternity units and the adjacent mental

health service through the relevant Chief/Mother and Infants Clinical Director and Executive Clinical Director Mental Health Service. This is to ensure clear and seamless pathways of care for women based on sound clinical governance. In the three Dublin Hospital Groups and Limerick this includes the associated maternity hospitals.

Within each maternity network, there should be a perinatal mental health network operating as part of the maternity network. Leadership is vital in the development of the specialist component of the perinatal mental health network and this will be the responsibility of the hub/specialist perinatal mental health service in each hospital group. It should function as part of an overall perinatal mental health response involving both Primary Care and Maternity Services as proposed in Section 8 of this Report.

10. Education, training and continuing professional development

This chapter addresses the education, training and continuing professional development of the members of specialist perinatal mental health teams and also for other professionals providing perinatal mental health services. Training and supervision should be available for all professionals involved in the care of pregnant women and new mothers, as well as those involved in the care of pregnant and postnatal women with mental illness, so they can deliver high quality care in keeping with NICE guidance.

Specialist Perinatal Mental Health Team: Training for Individual Members.

Consultant Psychiatrist with a special interest in Perinatal Psychiatry

The training requirements are:

- (i) Completion of professional training in psychiatry including higher training in General Adult Psychiatry as evidenced by inclusion in the Medical Council's Register of Medical Specialities in the Psychiatry Division.
- (ii) One year of supervised training in perinatal psychiatry.

Mental Health Nurses

Nurses should be at Clinical Nurse Specialist (CNS) grade, i.e., 5 years post registration and on the Nursing and Midwifery Board of Ireland (NMBI) Division of Psychiatric Nursing and have an additional relevant qualification.

Such nurses may apply to proceed to *Advanced Nurse Practitioners* (ANP) when they have two years experience in Perinatal Mental Health Nursing. A further three years experience in perinatal mental health nursing together with regular supervision by a Consultant Psychiatrist trained and working in Perinatal Psychiatry are essential prerequisites for such as application. This role greatly enhances the operation of the team with an ANP being able to assess, manage and deliver interventions for women with more complex mental health needs. Appendix IV provides details on the specific role and NMBI generic criteria for progression to ANP level is available online at: <https://www.nmbi.ie/Registration/Advanced-Practice/Advanced-Practice-Post>.

Mental Health Midwives

The midwife must be on the NMBI Midwifery Division of the Register, have 3 years post registration experience and also have a special interest in mental health.

To advance to specialist level the midwife must have in addition:

- (i) Specialist knowledge and experience (2 years minimum) in maternal and infant mental health developed through training and practice
- (ii) An additional qualification in mental health or a counselling qualification
- (iii) Evidence of high quality group teaching and training experience together with an ability to influence, motivate and lead others.

The NMBI criteria (see appendix IV for link) for further progression to ANP level also applies for mental health midwives.

Psychologists, Occupational Therapists and ***Social Workers*** are core members of a specialist perinatal mental health team.

There are no specific training requirements for these three professional groups to work in these specialist teams. However, all must be fully trained clinicians registered with their relevant professional bodies. Each should be at senior level and on joining the team, if they have no previous experience in the specialist area, should have a thorough induction period which includes:

- (i) A detailed understanding of working in a maternity setting
- (ii) Good knowledge of the special aspects of women's mental health during pregnancy and the postnatal period and also of infant mental health
- (iii) The development of good communication skills sensitive to the area of practice.

The induction period must be uniform across the country and include both onsite training and supervision together with attendance at a specific course. This course will be developed as a component of implementing this model of care.

Training and Continuing Professional Development

Training and continuous professional development of staff working in Specialist Perinatal Mental Health Teams and Mother and Baby Units is crucial. It must cover the range from screening and detection of mental health problems to the assessment and treatment of

those with the most severe mental illnesses. What is different in this area of specialism is the three threads it must include:

1. The mother
2. The baby
3. Their relationship

In the context of the family.

This is reflected in the topics which should be addressed in training.

The following topics should be addressed in training:

- Antenatal and postnatal care and the role of the midwife
- Perinatal care planning
- The perinatal period and the perinatal frame of mind
- Infant mental health
- Understanding defensive processes and attachment behaviour
- Mood and anxiety disorders: nature, treatment, risk
- Experience of the baby when mother has OCD and GAD
- Creating the 'safety net': working as part of a multi-disciplinary team and across agencies.
- Depression and anxiety disorders – nature, treatment, risk
- Experience of baby when a mother is emotionally ill
- Personality disorder: the psychiatric perspective
- Psychotic illnesses – nature, treatment, risk
- Experience of the infant when the mother has psychosis
- An evolutionary perspective on how personalities form and become disordered
- The complexity of managing risk and the need to work with other agencies
- Prescribing psychotropic medication in pregnancy and breastfeeding
- Complex safeguarding including understanding substance misuse through the lens of attachment theory
- Cultural competence in perinatal mental health: a complex issue
- The sick baby and the role of the neonatal intensive care unit

Royal College of Psychiatrists, UK (RC Psych 2017)

Training to be a Consultant in Perinatal Psychiatry requires in addition to the above, in depth knowledge of perinatal mental illness, use of psychotropic medication during the perinatal period as well as other special issues. These are listed in Appendix V for ease of reference. Of note the curriculum for training as an obstetrician includes mental health aspects which are also listed in Appendix V. Joint study days for higher trainees in obstetrics and perinatal psychiatry are a valuable training component for both specialities.

The Interface

The two important interfaces for the specialist teams are:

1. Mental Health Midwives
2. Lead Perinatal CNS in the general adult psychiatry community mental health team (GAPCMHT).

It is recommended that they too partake in the training provided to the members of the specialist teams. This would have the added advantage of facilitating the formation of local peer groups thereby enhancing integrated working and by extension integrated care for women and their babies.

The training must be delivered by professionals with the relevant competencies. Training should include ongoing supervision and reflective practice. This would facilitate continuous professional development and its embedding in local staff training and development strategies.

Equality and diversity considerations

When tailoring psychological interventions to women's individual needs, health professionals need to ensure that assessments and interventions are culturally competent and that women are able to understand and communicate effectively. An independent interpreter should be provided if needed (Antenatal and postnatal mental health, NICE 2016; HSE 2009).

Services should explicitly target inequalities in health and aim to meet the needs of vulnerable and socially disadvantaged groups. Community agencies and peer support will be key in engaging with these groups.

11. Programme metrics and evaluation - including patient / family experience of the service

In a modern health service, it is expected that services will be able to demonstrate that they are providing safe and effective services for people to ensure they have a positive experience of care (Healthy London Partnership 2017).

To evaluate this national model of specialist perinatal mental health care, each specialist team will be expected to record data for monthly reporting purposes. A sub group of the working group identified the type of data that will be required from this new service. This sub group are now working with the Maternity & Newborn Clinical Management System (MN-CMS) project team to ensure that specialist perinatal mental health data requirements will be included in the design of the MN-CMS system.

The MN-CMS Project is the design and implementation of an electronic health record (EHR) for all women and babies in maternity services in Ireland. This record will allow information to be shared with relevant providers of care as and when required and the key benefits include:

- Improved patient care as a result of better communication, supported decision making and effective planning of care.
- More effective and efficient recording of information reflecting best standards in documentation.
- Enhanced clinical audit and research locally as a result of better quality data.
- Informed business intelligence that will drive local and national management decisions.

The core deployment of the project started in 2016 with the initial sites being Cork University Maternity Hospital, Kerry University Hospital (maternity services), the National Maternity Hospital and the Rotunda Hospital. The system will be deployed to the remaining 15 hospitals on a phased basis from 2017.

Reporting from this system will include:

- Demographic information on women attending the service
- Access times to the service
- Referral agencies
- Relevant past and current history including mental health history

- Diagnosis
- Substance misuse if present
- Services provided by the specialist team
- Other supports arranged
- Involvement of next of kin including provision of information (written and oral).

Service User Engagement

In addition measures of patient experience and satisfaction will be included.

It is increasingly recognised that many measures are of satisfaction rather than a true measure of experience of the service.

The Patient Outcomes and Experience Tool measure (POEM) is a patient rated tool very recently developed by the Perinatal Quality Network of the Royal College of Psychiatrists to capture satisfaction with the service and detect fluctuations within it over time.

Its themes include communication, the care environment, information provision and baby care. Women and their partners/family members will be invited to complete it when discharged from inpatient or outpatient care. The tool is to be used in the United Kingdom to evaluate perinatal mental health services. This tool should be examined further, in consultation with service users, to see if it could be used in an Irish context and reflect experience rather than just satisfaction.

Appendices



Appendix I - Mental Health Actions to be implemented by the National Women & Infants Health Programme¹

19 Will ensure access to mental health supports are improved to ensure appropriate care can be provided in a timely fashion.

20 All Health Care Professionals in ante and postnatal care are trained to identify women at risk of developing or experiencing emotional or mental health difficulties, including an exacerbation of previous mental health issues, in the perinatal period.

21 A multidisciplinary approach to assessment and support is adopted for women at risk of developing or experiencing emotional or mental health difficulties in the perinatal period.

22 Women with a history of a mental health condition are identified early and midwives will work collaboratively with mental health and other services to ensure that the appropriate supports are provided.

23 Mother - baby bonding is facilitated and supported at all times, and every effort will be made to keep the mother and baby together, if clinically possible.

24 Access to perinatal psychiatry and psychology is standardised and, as a minimum, provided on a maternity network basis.

25 Additional support is available for women who have experienced traumatic birth or the loss of a baby.

¹National Maternity Strategy (Ireland) 2016-2026. (DOH 2016)

Appendix II: Health Research Board and HIPE data 2016

(i) Health Research Board 2016 - Provisional data

Admission Data to Psychiatric Units with diagnosis of F53 - F53.9 in 2016

Community Healthcare Organisation (CHO)	Primary Admission Diagnosis	Secondary Admission Diagnosis
CHO 1	1	
CHO 3	3	
CHO 4	2	
CHO 6	3	
CHO 7	2	1
CHO 8	2	1
Private Hospitals	5	
Total	18	2

Source: National Psychiatric In-patient Reporting System (NPIRS) 2017

(ii) HIPE 2016 No. of in-patient discharges with Admission Type Maternity¹ and ICD 10 coded mental illness.

Hospital/Unit	ICD-10-AM Diagnosis Codes ³					Total Hospital
	F31	F32	F33	F41	F53	
1	7	21	~	34	6	68
2	~	6	0	12	0	18
3	10	~	~	16	~	26
4	0	~	~	~	~	0
5	0	0	0	0	~	0
6	0	6	0	7	0	13
7	~	~	0	8	~	8
8	11	61	0	102	~	174
9	0	0	0	10	~	10
10	6	11	0	32	0	49
11	0	~	0	~	0	0
12	~	12	~	75	~	87
13	0	6	0	~	~	6
14	~	17	0	15	0	32
15	0	7	0	9	~	16
16	0	~	0	0	0	0
17	0	~	19	8	~	27
18	~	10	0	7	~	17
19	0	~	~	7	~	7
Total Diagnosis	34	157	19	342	6	558

Notes:

¹ The patient is admitted related to their obstetrical experience (from conception to 6 weeks post delivery).

² HIPE collects a principal diagnosis and up to 29 secondary diagnoses per discharge.

Each HIPE discharge record represents one episode of care.

³ ICD-10-AM 8th edition code descriptions:

F31 Bipolar affective disorder
 F32 Depressive episode
 F33 Recurrent depressive disorder
 F41 Other anxiety disorders
 F53 Puerperal disorders

“~” denotes 5 or less patients

Please note: HIPE does not collect activity on outpatients, emergency department, psychiatric units or long term stay units.

Appendix III: Service Standards for Mother and Baby Units (4th Ed.)

<http://www.rcpsych.ac.uk/pdf/Perinatal%20Inpatient%20Standards%20Cycle%208.pdf>

"Background

Following the inquiry into the deaths of Daksha and Freya Emson in October 2003 and the publication of the Confidential Enquiries into Maternal Deaths in 2001 and 2004, the Royal College of Psychiatrists made a commitment to promote perinatal mental health.

Initial funding was provided for the College Centre for Quality Improvement (CCQI) to complete a national survey of Specialist Perinatal Mental Health Services and to set up a network.

The Quality Network for Perinatal Mental Health Services was launched in June 2007, as part of this commitment, to develop and maintain standards for mother and baby units. The network engages with frontline staff and applies a clinical audit method within a peer-support network. Since 2013 100% of mother and baby units in the UK have participated in the process. In 2012 the network developed standards for community perinatal mental health services.

The Review Process

The standards represent just one part of the cycle: the real benefit for services is in taking part in the process of reviews. These reviews aim to gradually improve services using the principles of the clinical audit cycle."

Source: Service Standards for Mother and Baby Units (4th Ed.)

Appendix IV: Submissions

1. Role of Occupational Therapy in Perinatal Mental Health
2. Role of Specialist Perinatal Psychologist
3. Role of Specialist Perinatal Mental Health Social Worker
4. Role of Advanced Nurse Practitioner in Specialist Perinatal Mental Health
5. Role of Mental Health Midwife
6. Advanced Nurse Practitioners: NMBI criteria

Available in full through the following links:

http://www.hse.ie/eng/services/list/4/Mental_Health_Services/

<https://www.nmbi.ie/Registration/Advanced-Practice/Advanced-Practice-Post>

Appendix V: Consultant Training for Perinatal Psychiatry

(i) Perinatal Psychiatry Training for Consultant and Senior Registrars in Psychiatry should include training in the following topics:

- Birth Trauma and PTSD.
- Maternal Anxiety and OCD.
- Postnatal Psychosis and BPAD.
- Depression in Pregnancy and Postnatally.
- Personality Disorders.
- Eating Disorders.
- Schizophrenia and Schizoaffective Disorder.
- Substance Misuse and Alcohol Dependency.
- Infant Mental Health.
- Safeguarding Children.
- The woman's and her partner's perspectives and experience.
- Co-morbidity and domestic violence.
- Evaluation of Major Risk – Lessons from Maternal Deaths Enquiries.
- General principles of Prescribing during Pregnancy and Breastfeeding. Prescribing off-licence. Prescribing Anti-Psychotic, Anti-Depressant, Mood Stabilising and Sedative Medications. Use of ECT in the Perinatal Period.
- Role of the MBU.
- Pre-Pregnancy Counselling.
- Pre-Birth Planning.
- Perinatal Mental Health Clinical Networks.
- Service Development.
- Working with Primary Care.
- The role of the midwife.
- Physical changes and common medical problems in pregnancy.
- Preparation of Reports for the Family Court.

Royal College of Psychiatrists, UK, RC Psych (2017).

(ii) Specialist Registrar training in Obstetricians and Gynaecology includes training in the following topics:

- Review of patient's previous psychiatric history.
- Issues around post natal depression.
- How to recognise puerperal depression.
- How to recognise puerperal psychosis.
- Liaison with psychiatrists in the care of women at risk of or affected by psychiatric illness in the puerperium.

Institute of Obstetricians and Gynaecologists, RCPI (2016).

Glossary of Acronyms

<i>A</i>	AIMSI	Association for Improvements in Maternity Services in Ireland
	AH	Acute Hospital
	ANP	Advanced Nurse Practitioner
	AVFC	A Vision for Change
<i>C</i>	CCQI	College Centre for Quality Improvement
	CEMD	Confidential Enquiry in Maternity Deaths
	CEO	Chief Executive Officer
	CHO	Community Healthcare Organisation
	CAMHS	Child and Adolescent Mental Health Services
	CFL	Connecting for Life
	CL	Clinical Lead
	CMHN	Community Mental Health Nurse
	CMHTS	Community Mental Health Teams
	CO	Chief Officer
	CP	Clinical Programme
	CNM	Clinical Nurse Manager
	CNS	Clinical Nurse Specialist
<i>D</i>	DOH	Department of Health
<i>E</i>	ED	An emergency department (ED), also known as accident & emergency (A&E), emergency room (ER), or casualty department
	EHR	Electronic Health Record
<i>G</i>	GAD	General Anxiety Disorder
	GAP	General Adult Psychiatry
	GAMHT	General Adult Mental Health Team
	GAMHS	General Adult Mental Health Services
	GAPCMHT	General Adult Psychiatry Community Mental Health Team
	GP	General Practitioner
<i>H</i>	HCPs	Health Care Professionals
	HELLP	Syndrome of Haemolysis, Elevated Liver enzymes, and Low Platelet count: life threatening complication of pre-eclampsia
	HG	Hospital Groups
	HIPE	Hospital In-Patient Enquiry
	HIQA	Health Information and Quality Authority
	HWB	Health and Wellbeing (HSE)
	HSE	Health Service Executive
	HR	Human Resources
<i>I</i>	ICD	International Classification of Diseases
	ICT	Information and Communications Technology
	ICP	Individual Care Plan
	ID	Intellectual Disability
	IMIS	Irish Maternity Indicator System

<i>K</i>	KPI	Key Performance Indicator
<i>M</i>	MDR MHD MH MHC MHT MN-CMS MOC	Management Data Report Mental Health Division Mental Health Mental Health Commission Mental Health Team Maternity & Newborn Clinical Management System Model of Care
<i>N</i>	NCAGL NICE NCHD NMBI NSP NWIHP	National Clinical Advisor Group Lead National Institute for Health and Care Excellence Non Consultant Hospital Doctor Nursing and Midwifery Board of Ireland National Service Plan National Women & Infants Health Programme
<i>O</i>	OCD OPD OT	Obsessive Compulsive Disorder Out Patients Department Occupational Therapist
<i>P</i>	PANDA PC PHN PM PN POEM PoLDP PSI PTSD	Perinatal Anxiety and Depression Australia Primary Care Public Health Nurse Programme Manager Practice Nurse Patient Outcomes and Experience Tool measure Protection of Life During Pregnancy Psychological Society of Ireland Post Traumatic Stress Disorder
<i>Q</i>	QPS	Quality and Patient Safety
<i>R</i>	RCSI RCPI RPN	Royal College of Surgeons in Ireland Royal College of Physicians of Ireland Registered Psychiatric Nurse
<i>S</i>	SR SW	Senior Registrar Social Worker
<i>T</i>	TUSLA	Child and Family Agency
<i>U</i>	UK	United Kingdom
<i>V</i>	VFC	A Vision for Change
<i>W</i>	WTE	Whole Time Equivalent

References

- Abramovitz JS, Swartz SA, Moore KM, Luenzmann KR (2003). Obsessive compulsive symptoms in pregnancy and the puerperium: a review of the literature. *Journal of Anxiety Disorders*, 17: 461-478. doi: [https://doi.org/10.1016/S0887-6185\(02\)00206-2](https://doi.org/10.1016/S0887-6185(02)00206-2).
- Ayers S (2004). Delivery as a traumatic event: prevalence, risk factors and treatment for post-traumatic stress disorder. *Clinical Obstetrics and Gynaecology*, 47: 552-675. doi: 10.1097/01.grf.0000129919.00756.9c.
- Ballard C, Davis R, Cullen P, Mohan R, Dean C. (1994). Prevalence of postnatal psychiatric morbidity in mothers and fathers. *British Journal of Psychiatry*, 164(6): 782-8.
- Bastos MH, Fuvuta M, Small R, Mc Kenzie-McHarg K, Bick D (2015). Debriefing interventions for the prevention of psychological trauma in women following childbirth. *Cochrane Database of Systematic Reviews*, 4:CD007194. doi: 10.1002/14651858.CD007194.pub2.
- Bauer A, Parsonage M, Knapp M, Lemmi V, Adelaja B (2014). *The costs of perinatal mental health problems*. Centre for Mental Health and London School of Economics. Available from <https://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=07afd94b-92cb-4e47-8439-94cbf43548d8>.
- Beck CT (2004). Birth trauma: in the eye of the beholder. *Nursing Research*, 53(1);28-35.
- BeyondBlue (2008). *National action plan for perinatal mental health 2008-2010: full report*. BeyondBlue: The National Depression Initiative & Perinatal Mental Health Consortium, Australia. Available at [https://www.beyondblue.org.au/docs/default-source/8.-perinatal-documents/bw0125-report-beyondblues-perinatal-mental-health-\(nap\)-full-report.pdf?sfvrsn=2](https://www.beyondblue.org.au/docs/default-source/8.-perinatal-documents/bw0125-report-beyondblues-perinatal-mental-health-(nap)-full-report.pdf?sfvrsn=2).
- Cantwell R, Clutton-Brock T, Cooper G, Dawson A, Drife J, Garrod D et al. (2011). Saving mothers' lives: reviewing maternal deaths to make motherhood safer: 2002-2008. The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom. *British Journal of Obstetrics and Gynaecology*, 118 (Suppl 1): 1-203. doi: <https://doi.org/10.1111/j.1471-0528.2010.02847.x>.
- Cantwell R, Sisodia N, Oates M (2002). *A comparison of mother & baby admission to a specialised inpatient service with postnatal admissions to generic services*. Proceedings of the Marcé Society Biennial Conference, Sydney.
- Challacombe F, Salkovskis P (2009). A preliminary investigation of the impact of maternal obsessive-compulsive disorder on parenting children. *Journal of Anxiety Disorders*, 23: 848-57.
- Childhood Development Initiative, Preparing for Life, youngballymun (2012). *Prevention and early intervention programme: joint submission to public consultation on improving the lives of children and young people*. Dublin: CDI, Preparing for Life, youngballymun. Available at http://www.youngballymun.org/fileadmin/user_upload/pdf/PEIP_submission_to_DCYA_Final.pdf.
- Cox J, Murray D, Chapman G. (1993). A controlled study of the onset, prevalence and duration of postnatal depression. *British Journal of Psychiatry*, 163:27-41.
- Cullen K, McDaid D (2017). *Evidence review to inform the parameters for a refresh of A Vision for Change (AVFC)*. Work Research Centre, London School of Economics. Available at <http://health.gov.ie/wp-content/uploads/2017/07/Evidence-Review-A-Vision-for-Change.pdf>.
- Dennis CL, Falah-Hassani K, Rahman S (2017). Prevalence of antenatal and postnatal anxiety: systematic review and meta-analysis. *British Journal of Psychiatry*, 210(5): 315-323. doi: 10.1192/bjp.bp.116.187179.
- Department of Health [Ireland] (2006). *'A Vision for Change': report of the Expert Group on Mental Health Policy*. Dublin, Stationery Office.
- Department of Health [United Kingdom] (2009) *Improving access to psychological therapies (IAPT): perinatal positive practice guide*. Available from <https://www.nwscnsenate.nhs.uk/files/1714/7325/4614/perinatal-positive-practice-guide.pdf>.

- Department of Health [Ireland] (2016). Creating a better future together: National Maternity Strategy 2016 - 2026 [Online]. Available from: <http://health.gov.ie/wp-content/uploads/2016/01/Final-version-27.01.16.pdf> [Accessed: 21st September 2016].
- Dublin Chamber of Commerce: Economic profile of Dublin 2017. Available at <http://www.dubchamber.ie/policy/economic-profile-of-dublin>.
- Dunkel Schetter C. & Tanner L. (2012). Anxiety, depression and stress in pregnancy: Implications for mothers, children, research and practice. *Current Opinion in Psychiatry*, 25:141-148. doi: 10.1097/YCO.0b013e3283503680.
- Elmir R, Schmeid V, Wilkes L, Jackson D (2016). Women's perceptions and experiences of a traumatic birth: a meta-ethnography. *Journal of Advanced Nursing*, 66 (10):142-53. doi: 10.1111/j.1365-2648.2010.05391.x.
- Geradin P, Wendland J, Bodeau N et al. (2011). Depression during pregnancy: Is the developmental impact earlier in boys? A perspective case control study. *Journal of Clinical Psychiatry*, 72 (3): 378 -87. doi: 10.4088/JCP.09m05724blu..
- Gosselin P, Chabot K, Beland M, Goulet-Gervais L & Morin AJ (2016). Fear of childbirth among nulliparous women: relations with pain during delivery, post-traumatic stress symptoms and postpartum depressive symptoms. *Encephale*; 42(2): 191-196. [Original article in French]. doi: 10.1016/j.encep.2016.01.007.
- Government of Ireland (2013). *Protection of Life During Pregnancy Act*. Available at <http://www.irishstatutebook.ie/eli/2013/act/35/enacted/en/html?q=Protection+of+Life+During+Pregnancy+Act>.
- Harris R, Ayers S (2012). What makes labour and birth traumatic? A survey of intrapartum hotspots. *Psychological Health*, 27 (10): 1166-77. doi: 10.1080/08870446.2011.649755.
- Healthy London Partnership (2017). *Perinatal mental health services for London: guide for commissioners*. Available at <https://www.healthylondon.org/wp-content/uploads/2017/10/Perinatal-mental-health-service-for-London.pdf>.
- Henderson J & Redshaw M (2013). Anxiety in the perinatal period: antenatal and postnatal influences and women's experience of care. *Journal of Reproductive & Infant Psychology*, 31(5): 465-478. doi: <http://dx.doi.org/10.1080/02646838.2013.835037>.
- Higgins, A., Carroll, M., Downes, C., Monahan, M., Gill, A., Madden, D., McGoldrick, E. & Nagel, U. (2017). *Perinatal mental health: an exploration of practices, policies, processes and education needs of midwives and nurses within maternity and primary care services in Ireland*. Dublin: Health Service Executive. Available at <http://hdl.handle.net/10147/622641>.
- Hofberg K, Brockington IF (2000). Tokophobia: an unreasoning dread of childbirth. *British Journal of Psychiatry*, 176:83-85.
- Hogg S. (2013). *Prevention in mind. all babies count: spotlight on perinatal mental health*. London, NSPCC. Available at <https://www.nspcc.org.uk/globalassets/documents/research-reports/all-babies-count-spotlight-perinatal-mental-health.pdf>.
- Health Service Executive (2009). *On speaking terms: good practice guidelines for HSE staff in the provision of interpreting services*. Dublin, HSE. Available at <http://www.hse.ie/eng/services/publications/SocialInclusion/emaspeaking.pdf>.
- Infant Mental Health Network Groups (IMH-NG)(2015). *Evaluation of an interdisciplinary model for integrating infant mental health principles into everyday clinical practice and service in the community*. Infant Mental Health Learning Network, North Cork Ireland. Available at <http://hdl.handle.net/10147/605447>.
- Institute of Obstetricians and Gynaecologists. Higher Specialist Training in Obstetrics and Gynaecology. RCPI (2016).
- HSE National Clinical Programme in Obstetrics and Gynaecology (2017). *Irish Maternity Indicator System (IMIS)*. Available at <http://hdl.handle.net/10147/621034>.

- Joint Commissioning Panel for Mental Health (2012). *Guidance for commissioners of perinatal mental health services*. London, JCP-M H. Available at <https://www.jcpmh.info/wp-content/uploads/jcpmh-perinatal-guide.pdf>.
- Kendel RE, Chalmers KC, Platz C (1987). Epidemiology of puerperal psychoses. *British Journal of Psychiatry*, 150:662-73.
- Kalifeh H, Hunt I, Appleby L, Howard L (2016) Suicide in perinatal and non-perinatal women in contact with psychiatric services: 15 year findings from a UK national inquiry. *Lancet Psychiatry*, 3(3):233-242. doi: 10.1016/S2215-0366(16)00003-1.
- Leahy-Warren P (2007). Social support for first-time mothers: an Irish study. *MCN American Journal of Maternal Child Nursing*, 32(6):368-74.
- Leis J, Hevon J, Stuart E, Mendelson T (2013). Association between maternal mental health and child emotional and behavioural problems: does prenatal mental health matter? *Journal of Abnormal Child Psychology*, 42: 161-171. doi: <http://dx.doi.org/10.1007/s10802-013-9766-4>.
- Lyman D, Holt R, Dougherty RH (2010) *State case studies of infant and early childhood mental health systems: strategies for change*. DMA Health Strategies. Available at http://www.commonwealthfund.org/~media/files/publications/fund-report/2010/jul/1427_lyman_state_case_studies_child_mental_hlt.pdf.
- Madden D, Sliney AM, O’Friel A, McMackin B, O’Callaghan B, Casey K, Courtney L, Fleming V, Brady V. (2017) Using action research to develop midwives skills to support women with perinatal mental health needs. *Journal of Clinical Nursing*, [in press]. doi: 10.1111/jocn.13908.
- Martin M, Carr A, Burke L, Carroll L & Byrne S. (2006). *The Clonmel Project. Mental health service needs of children and adolescents in the South East of Ireland: final report*. Clonmel: Health Service Executive. Available at <http://hdl.handle.net/10147/596599>.
- Morcell CJ, Slade P, Warner R, Paley G, Dixon S, Walters SJ, Brugha T, Barkham M, Parry G, Nicholl J. (2009). Clinical effectiveness of health visitor training in psychologically informed approaches for depression in postnatal women: pragmatic cluster randomised trial in primary care. *British Medical Journal*, 338:a3045. doi: 10.1136/bmj.a3045.
- Murray L, Hipwell A, Hooper R et al. (1996). The cognitive development of 5-year old children of postnatally depressed mothers. *Journal of Child Psychology and Psychiatry*, 37:927-35.
- National Institute for Health and Care Excellence (NICE), (2014). *Antenatal and postnatal mental health: clinical management and service guidance*. London, NICE. Available at <https://www.nice.org.uk/guidance/cg192/resources/antenatal-and-postnatal-mental-health-clinical-management-and-service-guidance-pdf-35109869806789>.
- New Zealand Mental Health Commission (2011). *A literature Review: prevention and possibilities. a focus on children and youth*. Auckland, MHC. Available at <http://www.hdc.org.nz/publications/other-publications-from-hdc/mental-health-resources/a-literature-review-prevention-and-possibilities,-a-focus-on-children-and-youth>.
- NHS England Commissioning Board (2012). *Specialised commissioning specifications: perinatal mental health services*. Available at <https://www.england.nhs.uk/wp-content/uploads/2016/12/c06-spec-peri-mh.pdf>.
- Oates M, Cantwell R (2011). Chapter 11: Deaths from psychiatric causes in Saving Mothers' Lives. Reviewing maternal deaths to make motherhood safer: 2006-2008. The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom (CMACE). *British Journal of Obstetrics and Gynaecology*, 118, Sup 1. pp 132-142. doi: 10.1111/j.1471-0528.2010.02847.x.
- O’Connor TG, Heron J, Golding J, Beveridge M & Glover V (2002). Maternal antenatal anxiety and children’s behaviour/emotional problems at 4 years. Report from the Avon Longitudinal Study of Parents and Children. *British Journal of Psychiatry*; 180(6):502-8. doi: 10.1192/bjp.180.6.502.

- O'Hara MW, Swain AM (1996). Rates and risk of postpartum depression - a meta-analysis. *International Review of Psychiatry*, 8:37-54. doi: <http://dx.doi.org/10.3109/09540269609037816>.
- O'Keane V. (2016) Well before birth: *A Population survey of prevalence rates of antenatal depression in the Irish obstetrics services using the Edinburgh Postnatal Depression Scale* (draft report) REDEEM Research Group, TCD and National Obstetrics Services.
- Clinton J, Kays-Burden A, Carter C, Bhasin K, Cairney J, Carrey N, Janus M, Kulkarni C, Williams R (2014). *Supporting Ontario's youngest minds : Investing in the mental health of children under 6*. Ontario: Ontario Centre of Excellence for Child and Youth Mental Health. doi: http://www.excellenceforchildandyouth.ca/sites/default/files/resource/policy_early_years.pdf.
- Royal Australian & New Zealand College of Psychiatrists (2010). *The prevention and early intervention of mental illness in infants, children and adolescents*. doi: https://www.ranzcp.org/Files/ranzcp-attachments/Resources/College_Statements/Position_Statements/ps63-pdf.aspx.
- Reed R, Sharman R, Inglis C. (2017). Women's descriptions of childbirth trauma relating to care provider actions and interactions. *BMC Pregnancy and Childbirth* (2017) 17:21. doi: <https://doi.org/10.1186/s12884-016-1197-0>.
- Ross LE & McClean LM (2006). Anxiety disorders during pregnancy and the postpartum period: a systematic review. | *Journal of Clinical Psychiatry*, 67(8):1285-1298.
- Royal College of Psychiatrists (2015). *Perinatal mental health services: recommendations for the provision of services for childbearing women*. London, Royal College of Psychiatrists. Available at <http://www.rcpsych.ac.uk/files/pdfversion/CR197.pdf>.
- Rubinchik SM, Kabinger AS & Gardner SJ (2005). Medications for panic disorder and generalised anxiety disorder during pregnancy. *Primary Care Companion to the Journal of Clinical Psychiatry*; 7(3),100-105. PMID: PMC1163270
- Russell EJ, Fawcett JM, Mazmanian D (2013). Risk of obsessive-compulsive disorder in pregnant and post-partum women : a meta-analysis. *Journal of Clinical Psychiatry*, 74(4):377-85. doi: 10.4088/JCP.12r07917.
- Seng JS et al. (2010). Exploring post traumatic stress disorder symptom profiles among pregnant women. *Journal of Psychosomatic Obstetrics and Gynaecology*, 31(3):176-187. doi: 10.3109/0167482X.2010.486453.
- Scottish Intercollegiate Guidelines Network (SIGN) (2012). *Management of perinatal mood disorders*. Edinburgh: SIGN. Available at <http://www.sign.ac.uk/assets/sign127.pdf>.
- Stein A et al. (2014). Effects of perinatal mood disorders on the foetus and child. *Lancet* 384:1800-1819. doi: [http://dx.doi.org/10.1016/S0140-6736\(14\)61277-0](http://dx.doi.org/10.1016/S0140-6736(14)61277-0).
- Royal College of Midwives (2015). *Caring for women with mental health problems: standards and competency framework for specialist maternal mental health midwives*. London: RCM. Available at https://www.rcm.org.uk/sites/default/files/Caring%20for%20Women%20with%20Mental%20Health%20Difficulties%2032pp%20A4_h.pdf.
- Thompson P, Mahon K. *Service Standards for mother and baby units: fourth edition* (2014). London: Royal College of Psychiatrists.. Available at <https://www.rcpsych.ac.uk/pdf/Perinatal%20Inpatient%20Standards%20Cycle%208.pdf>.
- Wisner KL, Sit DK, McShea MC et al. (2013). Onset, timing, thoughts of self harm and diagnoses in post-partum women with screen-positive depression findings. *JAMA Psychiatry*, 70(5):490-498. doi: <https://dx.doi.org/10.1001%2Fjamapsychiatry.2013.87>.
- Whooley MA, Avins AL, Miranda J, Browner WS (1997). Case finding instruments for depression: two questions are as good as many. *Journal of General Internal Medicine*, 12(7): 439-45. PMID1497134.



HSE Mental Health Services