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## Understanding care plans in a psychiatric mother-baby unit

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## Understanding care plans in a psychiatric mother-baby unit

*Introduction:* Care plans outline collaborative goals for recovery and treatments provided by the health service. While care planning is recommended across international mental health guidelines, scant attention has been received to understand the unique nature of care planning within psychiatric mother-baby units. This retrospective audit aims to explore the content of care planning goals, compare against the World Health Organisation's (WHO) International Classification of Functioning, Disability, and Health (ICF), and devise a care plan framework to support development of admission goals.

*Methodology:* A total of 63 care plans across admission, mid-admission and discharge were analysed from 21 consumers between June 2020 and February 2021. Using deductive content analysis, care plan goals were compared to the World Health Organisation's (WHO) International Classification of Functioning, Disability, and Health (ICF) codes. Care plans were also analysed using inductive content analysis to generate a framework for care plans.

*Results:* When compared to the WHO ICF codes, care plans were most commonly coded against d570 (looking after one's health) and d7600 (parent-child relationships). Six themes derived from inductive content analysis of care plans were: mental health recovery, physical health, connecting with baby, caring for baby, relationships, and community supports.

*Discussion:* This study is the first to examine the nature of recovery goals in care plans within a psychiatric mother-baby unit. The results inform a framework to support care planning and thereby facilitate holistic well-being and recovery for a mother with mental illness, and her baby and family.

Keywords: mental health, inpatient mother-baby unit, care planning, recovery goals, community support, perinatal

### Background

Approximately 20% of women experience clinical mental health problems in the perinatal period (Bauer et al., 2014; Moss et al., 2020). In the twelve months following birth, there is a high risk of relapsing or first onset of severe mental illnesses such as severe depression, bipolar disorder, eating disorders, personality disorders and psychotic disorders (Bauer et al., 2014; Moss et al., 2020).

Postpartum mental illnesses can contribute to a range of less adaptive outcomes for the mother (e.g., difficulties functioning, poorer quality of life), the baby (e.g., emotional dysregulation, developmental delays) and the mother-baby dyad (e.g., insecure attachment, poorer mother-baby interactions) (Centre of Perinatal Excellence, 2017; Rollè et al., 2020). When left untreated, severe perinatal mental health difficulties may also lead to intergenerational trauma and affect the well-being of the family system (DeAngelis, 2019; Isobel et al., 2020).

To support mothers with severe mental illness, mother-baby mental health inpatient units (MBUs) are considered best practice when treating a mother's mental health whilst fostering mother-baby attachment (Centre of Perinatal Excellence, 2017; National Institute for Health and Care Excellence, 2020). MBUs provide specialised perinatal and infant mental health assessment and treatment, avoid separation between the mother and the baby, and contribute to positive clinical outcomes for both the mother and the baby (Connellan, 2017; Glangeaud-Freudenthal, 2014). Multidisciplinary health professionals involved in care include psychiatry staff, allied health professionals, mental health nursing staff, child health nurses and paediatric medical staff (Bruns et al., 2015). This comprehensive treatment generally encourages family-centred care, and supports the wellbeing of the mother's partner or carers to reduce the risk of relapse and readmission, and increase adherence to treatment (Australian Commission on Safety and Quality in Health Care, 2012). MBUs provide person-centred care and supports the transition into the community with post-discharge services (Connerty et al., 2015).

To guide assessment and treatment, a therapeutic tool that is recommended to be completed is the care plan (National Institute for Health and Care Excellence, 2020). Care plans are documents developed collaboratively with the treating team and consumer, which outline goals for recovery and health care interventions to be provided. The National Institute for Health Care Excellence (NICE) guidelines recommend that perinatal mental health care plans should explain the specific treatment provided by multidisciplinary health professionals and timeframes for implementation. It is also recommended that care plans are created collaboratively with the treating team and the consumer; with the team being well-informed of the consumer's needs, goals and treatment, and the consumer being consulted with to reach an agreement (National Institute for Health and Care Excellence, 2020). The Australian National Mental Health Commission Guidelines (2021) similarly highlights

the benefits of the care planning process in that it ensures care is consumer-led, and empowers the consumer to lead their own recovery. Moreover, the American Psychiatric Association recommends that the Collaborative Care Model should be employed, wherein treatment is based on the consumer's personal goals and modified throughout admission based on the effectiveness of treatments to ensure optimal outcomes are achieved (American Psychiatric Association, 2021).

In general adult inpatient mental health units where care plans are used, effective implementation has been found to enhance the therapeutic alliance, promote consumer's independence following discharge, and reduce risk of readmission (Abello et al., 2012; Schultz & Videbeck, 2009). Furthermore, care plans ensure that the treating team are informed about the consumer's goals, and facilitates consumers to monitor their own recovery journey (Better Health Victoria, 2012). Despite the identified benefits of care plans, to the authors' knowledge, there have been no empirical studies evaluating the nature of the content of care plans completed in an MBU. Understanding the nature of care plans in a specialised MBU may contribute to increased collaboration and positive outcomes for the mother and baby.

It is also beneficial to understand the nature of care plan goals in the context of the World Health Organisation's (WHO) International Classification of Functioning, Disability, and Health (ICF), an internationally recognised framework for the classification of health and related areas. The WHO ICF categorises the individual's health condition, and how this condition interacts with body functions (b codes), body structures (s codes), activities and participation (d codes), environmental (e codes), and personal factors. This classification provides a common language across countries to describe functioning relating to a health condition (World Health Organisation, 2002), and assist practitioners to understand the content of care plans.

Existing international recovery models, such as the New Mum Star (Burns et al., 2018), Think Family Model (Social Care Institute for Excellence, 2011), Camberwell Assessment of Needs (Howard et al., 2008), and the CHIME framework (Scottish Recovery Network, 2016) provide a framework for recovery goal setting in other mental health settings. Whilst these models emphasise the need for holistic care, incorporating a wide range of areas within the mother's recovery, there is yet to be a model that specifically targets care planning within an inpatient MBU.

To address these needs, the aim of this study is to examine the nature of care plans completed within a mother-baby unit, and how the care planning goals are classified using the WHO ICF framework. Further, a mother-baby specific care planning framework will be devised based on the themes identified. It is hypothesised that care plans will be matched with a range of WHO ICF codes.

## **Method**

### ***Study design***

A retrospective chart audit of care plans completed in an MBU was conducted. Firstly, care plans were thematically analysed; secondly, recovery goals were coded based on the WHO ICF; and thirdly, a framework specific to MBUs was created.

### ***Study setting***

The Lavender MBU is a mental health inpatient service that provides specialist perinatal assessment and treatment for women with significant mental health difficulties that cannot be managed in the community, and their baby(s) under one year old. There are four adult beds and four to five baby beds. The service is publicly funded and admits mother-baby dyads state-wide within Australia. There is a large multidisciplinary team of medical (consultant psychiatrist, psychiatry registrar), nursing (mental health nurses, child health nurse) and allied health professionals (occupational therapy, social work, psychology, physiotherapy, dietitian, pharmacy, speech pathology, an allied health professional with further postgraduate training in infant mental health). Individual and group programs are offered to mothers, such as infant massage, sensory modulation, grounding techniques, and healthy lifestyle support.

### ***Participants***

Mothers admitted to the Lavender MBU who had three care plans completed during admission were eligible for inclusion in the retrospective chart audit. Care plans between June 2020 and February 2021 were extracted from mothers admitted to the Lavender Unit during that time. A total of 63 care plans were examined from 21 consumers, which is 70% of the total number of mothers admitted

over this period. Mothers were aged between 20 to 41 years, with an average age of 29 years ( $SD = 6.82$ ). Mothers were predominantly born in Australia (76.19%,  $n = 16$ ), with 14.29% born in Asia ( $n = 3$ ). Mothers resided across Queensland with 33.33% ( $n = 7$ ) from Brisbane (North Region), 19.05% ( $n = 4$ ) from Gold Coast Region, and 14.29% ( $n = 3$ ) from the Sunshine Coast Region. 14.29% ( $n = 3$ ) of mothers identified as Aboriginal or Torres Strait Islander. Mothers had a primary psychiatric diagnosis of depressive disorders (52.38%,  $n = 11$ ), eating disorders (9.52%,  $n = 2$ ), psychotic disorder (9.52%,  $n = 2$ ), and personality disorder (9.52%,  $n = 2$ ). Of the babies admitted alongside the included mothers, 61.90% ( $n = 13$ ) were male, and 38.10% ( $n = 8$ ) were female. The average baby age was 19 weeks ( $SD = 13.21$ ). Demographic variables of the mothers and babies included in this study are reported in Table 1.

### ***Procedure***

The care plan template used within the statewide public health system provides the opportunity for up to six recovery goals to be outlined. Associated with each goal, multidisciplinary intervention activities to attain the goal are written. Care plans are conducted within 72 hours of admission, weekly during admission, and at discharge. Care plans are developed collaboratively with consumers and the treating multidisciplinary team. The primary nurse and/or primary allied health clinician assigned to the mother discusses their care planning goals, intervention and activities in a therapeutic session, which are written in the care plans. At the multidisciplinary care review meeting, further input is provided by other clinicians, which has been discussed with the consumer. Care plans are uploaded to the electronic medical records database and a copy is provided to the consumer for reference.

The medical records of consumers admitted to the Lavender Unit were examined to identify consumer who had three care plans completed at: admission, mid-admission, and discharge. As the majority of admissions were on average 25.57 days ( $SD = 12.40$ ) (i.e., 3.5 weeks), most admissions only had three care plans (i.e., admission, mid-admission and discharge). For admissions that were longer than three weeks, the care plan closest to the mid-point of the admission was selected for the mid-admission care plan. Three care plans were extracted for analysis per consumer, to provide insight into the nature of care planning goals at different times during admission.

In the first phase, thematic content analysis of the care plans using inductive reasoning was conducted to identify the nature of care planning goals and intervention activities (Braun and Clarke, 2006). Codes were then grouped into broader themes to develop a framework for care planning. In the second phase, deductive content analysis of the care plans was employed whereby codes were classified against the WHO ICF.

Across the two phases, content analysis was conducted by two independent raters who were separate to clinical care. The first rater was an Honours' psychology student (CH) who was trained in content analysis by the second rater (GB). The second rater was an occupational therapist and service development and research coordinator who had previous experience in ICF classification (Chien et al., 2016). Goals and intervention activities were coded independently by each rater. When there were disagreements in the classification of goals and intervention activities, discussion between the two raters occurred until a consensus was reached.

**Table 1**

*Demographic Variables of Study Participants (N = 21).*

Demographic Variable	n	%	M	SD	Min	Max
Mother's age (years)			29.19	6.82	20.00	41.00
Baby's age (weeks)			19.41	13.21	1.43	38.19
Length of stay (days)			25.57	12.40	9.00	56.00
Baby's sex	21	100.00				
Male	13	61.90				
Female	8	38.10				
Mother's place of birth	21	100.00				
Australia	16	76.19				
Asia	3	14.29				
United Kingdom	1	4.76				
New Zealand	1	4.76				
First Nations Status	21	100.00				



Neither Aboriginal nor Torres Strait Islander	18	85.71
Aboriginal or Torres Strait Islander	3	14.29
Catchment Region Within Queensland	21	100.00
Brisbane (North Region)	7	33.33
Gold Coast Region	4	19.05
Sunshine Coast Region	3	14.29
Brisbane (South Region)	2	9.52
Toowoomba Region	2	9.52
Ipswich Region	2	9.52
Charleville Region	1	4.76
Mother's Primary Diagnosis	21	100.00
Depressive disorder	11	52.38
Eating disorder	2	9.52
Psychotic disorder	2	9.52
Personality disorder	2	9.52
Bipolar affective disorder	1	4.76
Drug related	1	4.76
Obsessive compulsive disorder	1	4.76
Not classified	1	4.76

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## Results

### *Thematic inductive content analysis*

Thematic inductive content analysis of the 63 care plans identified six themes within the care planning goals and intervention activities: mental health recovery (98.41%), physical health (92.06%), bonding with baby (84.13%), caring for baby (53.97%), relationships (50.79%), and access to community supports (74.60%). Overall, goals pertaining to mental health and physical health recovery appeared most frequently in care plans. Descriptions of these six themes have been outlined in Table 2 and extracts of the care plans across the domains and timepoints are detailed in Table 3.

**Table 2***Themes Derived and Frequency of Themes Based on Inductive Thematic Analysis of the 63 Care Plans.*

Themes of		Description	Frequency	
Care Planning Goals	Domain		<i>n</i>	%
Mental Health Recovery	This domain covers goals and intervention activities related to strategies to improve mental health such as medication management, sensory modulation, mindfulness, healthy coping strategies, emotional regulation strategies, mindfulness, relapse prevention, and leisure participation.	62	98.41	
Physical Health	This domain covers goals and intervention activities related to improving physical health, including post-caesarean care, contraception, smoking cessation, healthy eating, exercise, pelvic floor issues, incontinence, and healthy sleep hygiene.	58	92.06	
Connecting with Baby	This domain covers goals and intervention activities relating to fostering a positive relationship with baby, including adapting to motherhood, mother-infant bonding, understanding baby cues, playing with baby with age-appropriate activities, and developing a secure attachment to baby.	53	84.13	
Caring for Baby	This domain covers goals and intervention activities relating to caring for baby's needs, including bathing, feeding, settling, obtaining medical care for baby, and ensuring baby is meeting developmental milestones.	34	53.97	

Relationships	This domain covers goals and intervention activities relating to developing positive relationships with others, including communication with family and friends, working through domestic and family violence issues, and supporting family well-being.	32	50.79
Community Supports	This domain covers goals and intervention activities relating to accessing community support services following discharge, including linkages with playgroups, community health, social welfare, child health, psychiatry, child caring support, and cultural support services.	47	74.60

**Table 3**

*Excerpts of Care Plans Based on the Domains of the Lavender Recovery Flower Framework and Timepoint During Admission.*

Domain	Admission	Mid-Admission	Discharge
Mental Health Recovery	“The Medical Team will continue to meet with you to discuss medications, your mental health, leave and progression towards to discharge... the Psychologist and the provisional Psychologist will meet with you to discuss your mental health and provide input around managing your mental health. A Peer Support Worker is available to	“The Occupational Therapist will meet you to discuss sensory modulation and sensory tools that may assist your regulation. We will also do your sensory profile to have a look at how you process sensory information - sometimes this can make situations or tasks quite challenging ... You are encouraged to continue to practice the strategies to reduce risk of self-harm.” - Sarah	““The Occupational Therapist has worked with you on your sensory profile and preferences...and has recommended the use of the 5kg weighted blanket. The Occupational Therapy student provided you with a printout of quotes for your prompt

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	meet with you and can chat to you from a lived experience perspective.” - <i>Jenny</i>		cards which we encourage you to make.” - <i>Harriett</i>
Physical Health	<p>“Upon admission you will receive a comprehensive physical health assessment which will include routine investigations like taking your bloods, having an ECG which looks at your hearts rhythm and activity. Routine monitoring of your blood pressure, pulse, temperature, respiration will occur. We will offer you advice about your health and well-being this includes contraception, nutrition, healthy lifestyle choices and smoking cessation/nicotine replacement.” - <i>Tina</i></p>	<p>“The Physiotherapist will continue to review your low back pain and your pelvic pain...Continue your pelvic floor exercises and use them to brace as you move. Continue your stretches for your low back pain as provided by the physiotherapist. Aim to walk for 30 minutes every day of the week for both your physical and mental health. The dietitian will meet with you this week” - <i>Jessica</i></p>	<p>“Continue your gym exercises at home at least 3 x week as provided by the Physiotherapist. To consider reconnecting with apps/online options to enhance motivation. Continue daily walks, aiming for 30mins most days. Continue your Pelvic Floor exercises as practiced with the Physiotherapist. Continue to aim for regular meals to support your own health. Continue to include lactose as per your own level of tolerance.” - <i>Isabel</i></p>

Connecting with Baby	<p>“During your admission the treating team will work with you to help strengthen your bond with baby. The Nurses are here to support you as you learn about being a mum.” - <i>Celia</i></p>	<p>“The Infant Mental Health Worker will be available to meet with you on Friday to support your bond attachment with baby. The physiotherapist will spend time with you and baby, and give you ideas to develop play ideas and practice tummy time.” - <i>Isabel</i></p>	<p>“You have been referred to a parent-infant therapist to help you to develop your bond with baby and his secure attachment with you...Continue your sensory play group with baby. As much as you can make efforts to touch, caress, smile and play with baby. He delights in you and your efforts to build your love with him.” - <i>Jessica</i></p>
Caring for Baby	<p>“The Nursing staff and allied health staff will help you in learning about baby’s cues and developmental stages. You will be able to see a Child Health Nurse during your admission for specific child health and developmental advice.” - <i>Isabel</i></p>	<p>“The Nurses are here to support you as you learn about being a mum. Nursing staff will support you to feel more confident in bathing baby. Learn how to prepare baby formula, clean and sterilize bottles, getting the right flow and giving the right amount. Learning how to make, and store formula. Nursing staff will support you to</p>	<p>“The child health nurse can met with you on Thursday to support the needs of baby include weighing and growth progression, feeding, and overall health.” - <i>Lucy</i></p>

feel calm when baby is crying and distressed.

Nursing staff will support you to learn effective strategies to settle your baby. The child health nurse or lactation consultant can provide support, advice and will discuss some of the challenges you may experience, nursing staff will also support you.” - *Celia*

Relationships “We will talk with your family about your plans going home. Eventually, it would be great to have a practice night at home, to help prepare you for going home full-time. We understand you would like your family to visit and this is very welcome.” - *Hannah*

“The Social Worker and Psychologist are available to help you in navigating and strengthening your relationships with your partner and discuss your support needs as a family after discharge.” - *Jessica*

“Progress discussions with your partner regarding arrangements for separation and co-parenting of baby” – *Tina*

Community  
Supports “We will liaise with your family and relevant professionals to co-ordinate your discharge. We will discuss with you the various support services available to you in your local area and

“The Social Worker will provide Child Support and Family Law information to assist with making arrangements for ongoing care of baby. Social Worker will provide information

“Attend the Women's Well-Being workshop on the 27th of August at Encircle neighbourhood centre. Look into enrolling baby into day care one

with your consent refer you to those agencies and people that can best support you after discharge.” - *Sarah*

regarding potential community services for parenting and social connection for your consideration and assist with referrals or linkage with these. You will be provided with support around your Disability Support Pension application by the Social Worker” - *Tina*

day a week and let social work student know if you would like a letter to be sent for support to receive some free day care. You have been referred to White Cloud mum meals. They will contact you to organise a drop off day.” - *Jessica*

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Note: Names of the clinicians have been removed and pseudonyms for the names of the mothers have been substituted to retain confidentiality

### ***ICF classification of care planning sub-goals***

Within these six themes, 20 common care planning sub-goals were identified. Of these 20 goals, 17 (85.00%) were classified in accordance to the ICF classification codes (refer to Table 4) related to body functions (b codes), body structures (s codes), activities and participation (d codes), and environmental (e codes). Four (23.53%) were classified into the broader category of *body functions* (b), and specifically into b1 (*mental functions*). Eleven goals (64.71%) were classified into *activities and participation* (d). More specifically, one goal (5.88%) as d2 (*general tasks and demands*), three goals (17.65%) as d5 (*self-care*), two goals (11.77%) as d6 (*domestic life*), two goals (11.77%) as d7 (*interpersonal interactions and relationships*), and two goals (11.77%) as d9 (*community, social, and civic life*). Three goals (17.65%) were classified as *environmental factors* (e), and specifically as e5 (*services, systems, and policies*). Three of the identified goal themes (15.00%) could not be classified under the ICF framework (involving family in recovery, postpartum women's health issues, contraception).

Within *Mental Health Recovery*, the most frequent goal was related to maintenance of mental health (92.06%), which related to management of symptoms, medication, and following medical advice. In *Physical Health*, goals pertaining to the maintenance of diet and fitness were most frequent (80.95%). This goal related to consuming nutritious food, and completing adequate exercise. In *Connecting with Baby*, one goal theme was identified related to positive mother and baby relationships (84.13%), which encompassed adapting to motherhood, positive mother-baby interactions, and developing healthy attachment. Within *Caring for Baby*, goals relating to the support of baby's health and development were most frequent (52.38%), which pertained to performing baby care tasks, such as bathing, feeding, and settling. In *Relationships*, the most frequent goal was involving family in recovery (36.51%), which focused on family-centred care. Finally, within *Community Supports*, goals most frequently pertained to accessing social support services (66.67%), which includes referral to social activities and groups that are available to the consumer post-discharge.



**Table 4***WHO ICF Codes and Frequencies Based on Deductive Analysis of the 63 Care Plans.*

Care Planning Goals and Sub-Goals	ICF Domains	ICF Codes	Frequency	
			<i>n</i>	%
<b>Mental Health Recovery</b>				
Improving mental health	Activities and participation - self-care	d570	58	92.06
Using emotional regulation techniques	Body functions -mental functions	b1521	47	74.60
Using healthy coping strategies	Activities and participation - general tasks and demands	d240	19	30.16
Supporting engagement in leisure activities	Activities and participation - community, social, and civic life	d920	3	4.76
<b>Physical Health</b>				
Maintaining healthy diet and fitness routines	Activities and participation - self-care	d5701	51	80.95
Improving and managing physical health	Activities and participation - self-care	d5702	35	55.56
Engaging in healthy sleep hygiene	Body functions - mental functions	b134	8	12.70
Postpartum women's health issues		Not classified	12	19.05
Contraception		Not classified		
<b>Connecting with Baby</b>				
Fostering positive mother and baby relationships	Activities and participation - domestic life	d6600	53	84.13

## Caring for Baby

Supporting baby's health and development	Activities and participation - domestic life	d6600	33	52.38
Meeting baby growth and milestones	Activities and participation - domestic life	d6605	13	20.63

## Relationships

Maintaining positive relationships with friends and family	Activities and participation - interpersonal interactions and relationships	d750, d760	12	19.05
Involving family in recovery		Not classified	23	36.51

## Community Supports

Accessing and engaging with social support services	Environmental factors - services, systems, and policies	e575	42	66.67
Accessing and engaging with community health services	Environmental factors - services, systems, and policies	e5800	26	41.27
Time management and activity scheduling skills	Body functions -mental functions	b1642	6	9.52
Accessing social welfare support services (e.g. Centrelink)^	Environmental factors - services, systems, and policies	e5700	4	6.35
Accessing and engaging with cultural support services	Activities and participation - community, social, and civic life	d930	6	9.52

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Note: ^Centrelink is Australia's social welfare support system that provides social benefit payments to assist those in need (e.g., people with disabilities, single mothers)

## Discussion

This study is the first to examine the nature of recovery goals in care plans within an MBU using both inductive and deductive content analysis. Firstly, inductive content analysis revealed six themes of the recovery goals and intervention activities, which is also displayed as the Lavender Recovery Flower Framework (Figure 1). These findings suggest that a diverse range of care planning goals are assessed and treated with an MBU setting. Secondly, using deductive analysis, care plans were classified in accordance to the WHO ICF Framework, an internationally recognised framework, based on body functions, activities and participation, and environmental factors categories. This research highlights the goals related to mother, baby, mother-baby dyad, family, and discharge planning that are targeted with an MBU admission. As care plans are collaboratively devised, the results of the present study highlight the consumer-centred goals that are addressed during admission and recovery care planning. The findings also promote collaboration between the treating team and the consumer as the comprehensive Lavender Recovery Flower may be used to enable holistic understanding of the mother-baby dyad's recovery journey (Gask & Coventry, 2012). The Lavender Recovery Flower framework that can also be used for effective care planning relevant to the goals and needs of mothers and babies admitted to an MBU.

## Figure 1

*Lavender Recovery Flower Framework Based on the Themes Inductively Analysed Which are Relevant for Care Plan Goal-Setting Within an Acute Inpatient Mother-Baby Unit Admission*



The domains of the Lavender Recovery Flower Framework, derived from the themes of the care plan, contain similarities and unique aspects compared with other international recovery models such as the New Mum Star, Think Family Model, Camberwell Assessment of Needs, and the CHIME framework. The Outcome Star's New Mum Star is an outcome measure and model recently designed to assist first-time mothers in adapting to motherhood (Burns et al., 2018). This model is used as part of a community-based, Family Nurse Partnership Accelerated Design And Programme Testing (ADAPT) program, which provides a public health home-visiting program to first-time young mothers (Family Nurse Partnership, 2020). The New Mum Star consists of nine key areas: life skills, health and wellbeing, looking after baby, baby's development, safety and stability, connecting with baby, relationships, family and support network, and goals and aspirations (Burns et al., 2018). While the New Mum Star targets young, first-time mothers in the community with child health concerns, the Lavender Recovery Flower Framework is tailored for use with mothers with severe

mental illnesses admitted to an inpatient MBU setting (Burns et al., 2018). Additionally, the New Mum Star focuses on the process of change and is designed to be reviewed over a period of four to six months (Burns et al., 2018). In contrast, the Lavender Recovery Flower Framework is designed for weekly use and focuses on recovery goals pertinent to the acute psychiatric setting.

The Think Family model is an additional framework that emphasises the need to focus on the family unit as a whole, rather than only the mental wellbeing of the parents or children (Social Care Institute for Excellence, 2011). This model displays the bidirectional relationship that parent and child mental health has on one another, and how this can impact upon the parent-child relationship (Social Care Institute for Excellence, 2011). The Think Family model considers both risk and protective factors that play a role in overcoming adversity (Social Care Institute for Excellence, 2011). Both the Think Family model and the Lavender Recovery Flower Framework focus on the parent's mental health, child's health and development, and parent-child relationship. Unique aspects of the Lavender Recovery Flower Framework are the emphasis on mother's physical health, discharge planning, connecting with wider community supports, and linkages with informal family supports. While the Think Family model may be applied to parents and their children of any age within a community setting and focuses on the aetiology of mental health conditions and the parent-child relationship, the Lavender Recovery Flower Framework focuses on the treatment and recovery goals for mothers in an MBU with the first year postpartum.

Additionally, the Camberwell Assessment of Needs for Mothers (CAN-M) is used to assess biopsychosocial needs and level of support required to support mothers with mental illnesses in the peripartum (Howard et al., 2008). The instrument contains a series of comprehensive standardised questionnaires that both the consumer and the health professional complete, in order to gather multiple perspectives on the perceived needs. The CAN-M comprehensively covers 26 domains of needs, including accommodation, psychotic symptoms, basic education, psychological distress, physical health, safety to self and children, food, practical and emotional demands of childcare, and violence and abuse. Many of the domains within the CAN-M align well with the Lavender Recovery Flower Framework. For example, the following CAN-M domains may be encapsulated under the Lavender Recovery Flower domain of "Mental Health Recovery": self-care, daytime activities, psychological distress, psychotic symptoms, and safety to self. Both the CAN-M

and the Lavender Recovery Flower Framework emphasise the importance of identifying the needs from the consumer's perspective and promote collaboration with the treating team. Another similarity is that both the models are specific for mothers with severe mental health illnesses, although the Lavender Recovery Flower Framework has a narrower scope of focusing on the postpartum period. While the CAN-M only identifies the needs that exist, it does not set goals for meeting these needs. In contrast, the Lavender Recovery Flower Framework promotes goal setting based on identified needs that are relevant to be addressed in an acute inpatient mental health facility of an MBU.

The Lavender Recovery Flower Framework and care planning process also aligns well with the CHIME framework. The CHIME framework was developed based on feedback from consumers and carers and is useful in outlining the key elements in the recovery process. The CHIME framework suggests that whilst recovery is a unique process between consumers, each recovery journey has five key principles in common; connectedness, hope and optimism, identity, meaning, and empowerment. The CHIME framework has been applied to general adult mental health facilities to assist consumers to understand the care planning process and setting goals meaningful to them. It has been found that this application promotes connectedness between the consumer and their recovery journey, and assists goals to be tailored to the consumers' specific needs (Scottish Recovery Network, 2016). The Lavender Recovery Flower Framework is congruent with the model as it promotes connectedness with the "Connecting with Baby", "Caring for Baby", "Relationships", "Community Supports". The Lavender Recovery Flower Framework promotes hope, optimism and identity in that consumers have goals that are collaboratively worked towards. Further, this framework encourages the goals to be meaningful and relevant to the specific life-stage the women are in, and aims to empower the women to take charge of their recovery journey. The Lavender Recovery Flower Framework builds on this work by tailoring the goals specific to mothers and babies admitted to an MBU.

The results of this study, and the development of the Lavender Recovery Flower Framework, are also congruent with the National Safety and Quality Health Service (NSQHS) Standards. These standards outline several principles that should be applied across mental health services in Australia. Notably, these standards promote the acknowledgement of differences between

consumers, the promotion and prevention of mental health problems, the supporting recovery using a person-centred approach (Australian Commission on Safety and Quality in Health Care, 2012). Setting clinical goals using the Lavender Recovery Flower Framework assists with meeting these standards; consumers are encouraged to collaborate with the medical team to identify domains important to themselves and their recovery, and set goals based on these. The Lavender Recovery Flower framework recognises the importance of person-centred recovery, and promotes the holistic approach to mental health recovery.

Another strength of the paper was that the care plans were matched to WHO ICF codes. Three of the themes identified in the care plans were unable to be classified using the WHO ICF codes (involving family in recovery, postpartum women's health issues, and contraception). However, these were included in the Lavender Recovery Flower Framework as they were deemed pertinent to the nature of the MBU. Future revisions of the WHO ICF framework might consider the addition of these themes. The range of WHO ICF codes that were identified also indicate that a range of goals across multiple domains (e.g., activities and participation, body functions, environment) are targeted during inpatient admission in an MBU. This suggests that the care in the MBU is holistic and caters for the biopsychosocial needs of the mother-baby dyad.

While the results have led to the development of a new framework, a key limitation is that the care plans in only one MBU was evaluated. A larger sample gathered from multiple MBUs, both nationally and internationally, would provide greater insight the nature of care planning goals from a cross-cultural and geographical perspective, and increase generalisability. Future research that also examines the effectiveness in using this Framework may also be conducted.

Despite this, the Lavender Recovery Flower framework is in alignment with the United Kingdom's National Institute of Health and Care Excellence (NICE) Guidelines related to the nature of inpatient MBUs. For example, the guidelines state that MBUs should be integrated with community-based services (i.e., Community Support Domain of the Lavender Recovery Flower framework), and that there should have access to specialist advice on psychotropic medication during the peripartum period (i.e., Mental Health Recovery of the Lavender Recovery Flower framework). The Lavender Recovery Flower framework is also congruent with the Australia's Centre of Perinatal Excellence Mental Health Care in the Perinatal Period Clinical Practice

Guideline which states that co-admission assists with the development of mothercraft skills (i.e., Caring for Baby of the Lavender Recovery Flower framework) and a positive relationship with the baby (i.e., Connecting with Baby of the Lavender Recovery Flower framework).

### **Clinical Implication**

A strength of the Lavender Recovery Flower Framework is that it is specific to postpartum mothers with severe mental illnesses with a baby who are admitted to for an acute psychiatric unit. The Lavender Recovery Flower Framework is recommended to be used to structure care planning goals and discussions between the clinicians and the consumer, and ensures goals are comprehensive and holistic across all domains of recovery. For instance, for the Mental Health Recovery domain, triggers, coping strategies, pharmacotherapies and understanding their warning signs of relapse are discussed with the consumer. The clinician can systematically discuss each domain's elements as summarised in Table 2.

The collaborative process in care planning involves setting recovery goals based on the preferences and desires of the consumer, whilst incorporating clinical advice, guidance, and education from the treating team. The care planning goals are discussed and written as a therapeutic process and reflects therapy strategies taught to consumers.

Content within care plans are personalised to each mother, using key ideas, words, or phrases discussed in therapeutic sessions. Care planning goals reiterate previous information discussed with the consumer in therapeutic sessions, except in cases where information is referred to for future consideration (e.g. contraception and family planning).

The goals are progressively changed based on the recovery journey. Consideration of the SMART Goal principles are beneficial: specific, measurable, achievable, realistic and timely (Bailey, 2017). For instance, rather than writing 'practice mindfulness', a goal that is *specific* states the type of activity, the context, the frequency, and the duration (e.g., when my baby is crying and I'm feeling overwhelmed, put the kettle on and take slow deep breaths while the kettle is boiling).

Care plans are clinical documents that are consumer-oriented in that consumers use these as an action plan for working towards recovery goals and are to be referred to post-discharge to support the transition home. Therefore, consideration of health literacy principles is warranted (e.g., avoiding



jargon, using key words). The use of a quantitative rating scale (e.g., visual analogue scale) may be helpful to record the progress of goals throughout admission. Care plans enable mothers to understand and take charge of their mental health condition, treatment, and recovery process.

## **Conclusion**

This study was the first to evaluate the contents of a care plan within an MBU setting. By matching care planning goals to the WHO ICF framework, a common language, this enables international understanding and interpretation of the results. This study has allowed for identification of the care planning goals within MBUs, and their relevant WHO ICF codes. The results indicated six key goals that are commonly used when setting care planning goals within an MBU, with goals pertaining to mental health, physical health, and connecting with baby being most prevalent. The Lavender Recovery Flower Framework informs care planning within an MBU setting, and provides a template for setting holistic recovery goals that target the mother, the baby, the mother-baby dyad, the family unit, and the community. The creation of the Lavender Recovery Flower framework provides a valuable tool for setting goals relevant to the needs of mother-baby dyads admitted to an MBU.

## References

- Abello, A., Jr, Brieger, B., Dear, K., King, B., Ziebell, C., Ahmed, A., & Milling, T. J., Jr (2012). Care plan program reduces the number of visits for challenging psychiatric patients in the ED. *The American Journal of Emergency Medicine*, 30(7), 1061-1067. <https://doi.org/10.1016/j.ajem.2011.07.002>
- American Psychiatric Association. (2021). *Learn about the collaborative care model*. Retrieved from <https://www.psychiatry.org/psychiatrists/practice/professional-interests/integrated-care/learn>
- Australian Commission on Safety and Quality in Health Care. (2012). *Safety and Quality Improvement Guide Standard 2: Partnering with Consumers*. Sydney: Commonwealth of Australia
- Australian National Mental Health Commission. (2021). *Consumer and carer engagement*. Retrieved from <https://www.mentalhealthcommission.gov.au/mental-health-reform/consumer-and-carer-engagement>
- Bailey, R. (2017). Goal setting and action planning for health behavior change. *American Journal of Lifestyle Medicine*, 13(6), 615–618. <https://doi.org/10.1177/1559827617729634>
- Bauer, A., Parsonage, M., Knapp, M., Iemmi, V., & Adelaja, B. (2014). The costs of perinatal mental health problems. <http://doi.org/10.13140/2.1.4731.6169>.
- Better Health Victoria. (2012). *Mental health care plans*. Retrieved from <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/mental-health-care-plans>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77- 101, <http://doi.org/10.1191/1478088706qp063oa>
- Bruns, E. J., Pullmann, M. D., Sather, A., Denby Brinson, R., & Ramey, M. (2015). Effectiveness of wraparound versus case management for children and adolescents: results of a randomized study. *Administration and policy in mental health*, 42(3), 309-322. <https://doi.org/10.1007/s10488-014-0571-3>
- Burns, S., MacKeith, J., Greaves, S. (2018). *New mum star*. Retrieved from <https://www.outcomesstar.org.uk/using-the-star/see-the-stars/new-mum-star/>
- Chien, C., Branjerdporn, G., Rodger, S., & Copley, J. (2017). Exploring environmental restrictions on everyday life participation of children with developmental disability. *Journal of Intellectual & Developmental Disability*, 42(1), 61-73, <http://doi.org/10.3109/13668250.2016.1194969>
- Centre of Perinatal Excellence. (2017). *Postnatal depression: A guide for women and their families*.
- Connellan, K., Bartholomaeus, C., Due, C., & Riggs, D. W. (2017). A systematic review of research on psychiatric mother-baby units. *Archives of Women's Mental Health*, 20(3), 373–388. <https://doi.org/10.1007/s00737-017-0718-9>

- Connerty, T. J., Roberts, R., & Williams, A. S. (2016). Managing life, motherhood and mental health after discharge from a mother–baby unit: an interpretive phenomenological analysis. *Community mental health journal*, *52*(8), 954-963.
- DeAngelis, T. (2019). The legacy of trauma. *Monitor on Psychology*, *50*(2). <http://www.apa.org/monitor/2019/02/legacy-trauma>
- Family Nurse Partnership. (2020). *FNP ADAPT*. Retrieved from <https://fnp.nhs.uk/fnp-development/adapt/>
- Gask, L., & Coventry, P. (2012). Person-centred mental health care: The challenge of implementation. *Epidemiology and psychiatric sciences*, *21*(2). 139-44. 10.1017/S2045796012000078.
- Glangeaud-Freudenthal, N. M., Howard, L. M., & Sutter-Dallay, A. L. (2014). Treatment - mother-infant inpatient units. Best practice & research. *Clinical obstetrics & gynaecology*, *28*(1), 147–157. <https://doi.org/10.1016/j.bpobgyn.2013.08.015>
- Howard, L., Hunt, K., Leese, M., O’Keane, V., Seneviratne, T., Slade, M., Thornicroft, G., & Wiseman, M. (2008). *Camberwell Assessment of Needs for Mothers*.
- Isobel, S., Goodyear, M., Furness, T., & Foster, K. (2019). Preventing intergenerational trauma transmission: A critical interpretive synthesis. *Journal of clinical nursing*, *28*(7-8), 1100–1113. <https://doi.org/10.1111/jocn.14735>
- Moss, K.M., Reilly, N., Dobson, A.J., Loxton, D., Tooth, L. and Mishra, G.D. (2020). How rates of perinatal mental health screening in Australia have changed over time and which women are missing out. *Australian and New Zealand Journal of Public Health*, *44*. <http://doi.org/10.1111/1753-6405.12999>
- National Institute for Health and Care Excellence. (2020). *Antenatal and postnatal mental health: clinical management and service guidance*.
- Rollè, L., Giordano, M., Santoniccolo, F., & Trombetta, T. (2020). Prenatal Attachment and Perinatal Depression: A Systematic Review. *International journal of environmental research and public health*, *17*(8), 2644. <https://doi.org/10.3390/ijerph17082644>
- Schultz, J. M., & Videbeck, S. L. (2009). *Lippincott's manual of psychiatric nursing care plans*. Lippincott Williams & Wilkins.
- Scottish Recovery Network. (2016). *Using CHIME as a mechanism for support planning*.
- Social Care Institute for Excellence. (2011). *Think child, think parent, think family: A guide to parental mental health and child welfare*. Retrieved from <https://www.scie.org.uk/publications/guides/guide30/introduction/thinkchild.asp>
- World Health Organisation. (2002). *Towards a common language for functioning, disability and health: ICF*.