HTA Austria
Austrian Institute for
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GmbH

Perinatal and infant mental health care models and pathways

A scoping review

MEDIZINISCHE UNIVERSITÄT INNSBRUCK
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AGREE II .....Appraisal of Guidelines for Research & Evaluation II Instrument
ANRQ .....Antenatal Risk Questionnaire
AWMF .....Association of the Scientific Medical Societies (Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften)
CBR.....consensus-based recommendation
CBT.....cognitive behavioural therapy
COPE .....Centre of Perinatal Excellence
CTFPHC .....Canadian Task Force on Preventive Health Care
EBR.....evidence-based recommendation
EPDS.....Edinburgh Postnatal Depression Scale
FWF .....Austrian Science Fund (Fonds zur Förderung der wissenschaftlichen Forschung)
GAD .....Generalized Anxiety Disorder Scale
GP.....general practitioner
HCP.....healthcare professional
ICH .....infant and child healthcare
IPT .....interpersonal psychotherapy
MBU.....mother-baby unit
MMHA.....Maternal Mental Health Alliance
NHS.....National Health Service
NICE.....National Institute for Health and Care Excellence
n.r. .....not reported
PANDA.....Perinatal Anxiety & Depression Australia
PHQ .....Patient Health Questionnaire
PIMH .....perinatal and infant mental health
PMH.....perinatal mental health
PP .....practice point
RANZCOG .....Royal Australian and New Zealand College of Obstetricians and Gynaecologists
RANZCP .....Royal Australian and New Zealand College of Psychiatrists
RQ .....research question
SIGN .....Scottish Intercollegiate Guidelines Network
UK.....United Kingdom
USPSTF.....U.S. Preventive Services Task Force
WA .....Western Australia
WHO.....World Health Organization
WTE.....whole time equivalent

Executive Summary

Background and aim of the report

Mental health problems are among the most common morbidities of the perinatal period (i.e. pregnancy and postpartum), with potential serious adverse effects on the mother, the child and the family. Up to 20% of women and 10% of men are affected by perinatal mental health problems (such as depression, anxiety disorders or postpartum psychosis) during pregnancy and the first year of life of the child. Perinatal mental health care should include prevention, early detection and treatment of peripartum mental health problems. High-quality perinatal mental health care ideally results in earlier detection of mental health problems, improved parent-child interaction, optimal treatment of perinatal mental illness and fewer hospital admissions, and also has clear economic benefits.

prevalence of perinatal mental health problems (i.e. during pregnancy and in the first year after the birth)

up to 20 % of women and 10 % of men

This report aims to provide an overview of international care models for perinatal and infant mental health (PIMH) from selected countries and to analyse and describe their characteristics as well as requirements for delivery of services. It is conducted as part of the five-year research project 'Co-designing perinatal mental health support in Tyrol' which is funded by the Austrian Science Fund (FWF).

overview of international care models

part of a FWF project

Methods

We conducted a comprehensive manual search in several databases and on websites of different institutions (e.g. ministries of health), and asked experts for relevant documents. We included English or German evidence-based guidelines and documents describing regional or national PIMH care models that focus on several different aspects of care (such as primary prevention, screening, treatment). The focus was on European countries. In addition, documents from Canada and Australia were included. We extracted information on a range of categories from the documents and assessed the quality of the documents using the AGREE II instrument. Through the manual search and expert consultation, several other sources from different European countries were identified, which did not meet our inclusion criteria. These describe, for example, interesting pilot projects and initiatives as well as the current status of care in a country. The information from these sources was summarised in tabular form in the appendix.

manual search and expert consultation

evidence-based guidelines and national/regional care models

Europe, Canada, Australia

Results

We identified a total of 6 documents that met our inclusion criteria: two evidence-based guidelines (United Kingdom [UK], Australia) and 4 documents that described national (UK, Ireland) or regional (Canada/Ontario, Australia/Western Australia) care models. The target groups of the included care models are pregnant and postpartum individuals and those planning a pregnancy in general, or those with a past or current mental health problem or who may have an existing or new mental health problem. The included documents mention a broad range of professionals involved in service delivery which reflects the need of multiprofessional and interdisciplinary teams. The documents emphasise that clearly defined pathways and stepped-care approaches are important for PIMH care organisation and provision. Another important aspect is the education, training and continuing professional development of healthcare professionals involved in PIMH care.

6 documents from 4 countries (UK, Ireland, Australia, Canada)

important aspects: e.g., multiprofessional teams, clearly defined pathways, stepped care, education & training

'care components' of the care models summarised in a visualisation;

'ideal' model includes, e.g.,

primary prevention, counseling, effective screening

evidence-based, timely treatment

consideration of the mental health of the father/co-parent and the parent-infant relationship

inclusion of people with lived experiences

All six documents provide information on several aspects of PIMH care, including primary prevention, early identification, triage processes and treatment. A visualisation that synthesises the common characteristics of the included documents regarding these 'care components' can be found in chapter 4.6. This 'ideal' care model should

- be evidence-based, needs-based, person-centred, and equitable
- provide compassionate, supportive, empowering care, based on collaborative decision-making
- include integrated pathways and multiprofessional, coordinated networks
- integrate interventions of primary prevention, counselling and effective early identification and screening
- have clearly defined referral pathways and stepped-care approaches
- provide appropriate evidence-based treatment with timely access
- consider not only the mental health and wellbeing of the mother, but also of the child(ren) and the father/partner/co-parent, as well as the parent-infant relationship
- include people with lived experiences when designing and implementing PIMH care but also when supporting people with perinatal mental health problems e.g., by providing peer-support groups
- plan evaluation and/or monitoring of newly implemented interventions from the beginning

Discussion and conclusion

many research & policy activities currently ongoing

focus also on fathers/ co-parents

Perinatal mental health is currently a very dynamic field and there are a lot of research and policy activities ongoing in Europe and worldwide. We identified numerous sources that did not meet our inclusion criteria, but contained interesting information, e.g., on pilot projects or the current situation in other than the four included countries. The identified documents mainly focused on perinatal mental health of the mother; however, more recent research also concentrates on the father or co-parent.

open questions: e.g., consideration of the (mental) wellbeing of the infant

There remain some open questions that were not adequately addressed in the identified documents, from our point of view. These include the identification and care for fathers/co-parents/partners with perinatal mental health problems, the explicit inclusion and consideration of the (mental) wellbeing of the infant as well as other children in the family, and the specific role of people with lived experiences.

report as basis for the development and implementation of services in Austria

Although we are aware of some limitations, this scoping review provides a comprehensive overview of international good practice models for perinatal and infant mental health care models and pathways. The results from this report can be used for further discussion and serve as a basis for designing, further developing and implementing PIMH care in Austria.

Zusammenfassung

Hintergrund

peripartale psychische Erkrankungen (= in der Schwangerschaft und im ersten Lebensjahr des Kindes)

bis zu 20 % der Frauen und 10 % der Männer betroffen

potentiell schwerwiegende Auswirkungen auf Mutter/Vater und Kind

Psychische Erkrankungen der Eltern sind eine häufige und schwerwiegende Komplikation während der Schwangerschaft und im ersten Jahr nach der Geburt: Etwa 20 % der Frauen und 10 % der Männer leiden unter psychischen Problemen wie Depressionen oder Angststörungen in der peripartalen Zeit (d. h. während der gesamten Schwangerschaft und im ersten Jahr nach der Geburt des Kindes). Man spricht daher von peripartalen psychischen Erkrankungen. Diese sind in Art, Verlauf und Rückfallrisiko ähnlich zu jenen, die zu anderen Zeiten im Leben auftreten (mit Ausnahme der postpartalen Psychose, eine seltene schwere psychotische Erkrankung, die nur in den ersten acht Wochen nach der Geburt vorkommt). Der wesentliche Unterschied ist jedoch, dass aufgrund der unmittelbaren Auswirkungen auf Mutter/Vater und Kind ein dringenderer Bedarf an einer raschen und wirksamen Versorgung besteht. Unmittelbare Auswirkungen können beispielsweise Komplikationen in der Schwangerschaft oder bei der Geburt, Einschränkungen im Beziehungsaufbau zwischen Eltern und Baby, Verhaltens- oder emotionale Probleme des Kindes bis hin zu einem erhöhten Risiko für Suizid des Elternteils sein.

Fokus bisher auf Frauen, neuere Studien auch zu psych. Erkrankungen der Väter

Peripartale psychische Erkrankungen tragen somit in erheblichem Maße zur Müttersterblichkeit und zu negativen Auswirkungen auf Neugeborene, Säuglinge und Kinder bei, welche bis ins späte Jugendalter bestehen bleiben können. Die Forschung hat sich bisher hauptsächlich auf die Mütter fokussiert, aber es gibt immer mehr Studien, die zeigen, dass psychische Erkrankungen des Vaters ebenfalls mit einem erhöhten Risiko für Entwicklungsstörungen und psychische Probleme bei den Kindern verbunden sind.

Versorgung umfasst Prävention, frühzeitige Erkennung und Behandlung

zahlreiche Vorteile von qualitativ hochwertiger Versorgung, z. B. frühzeitige Erkennung und Behandlung, bessere Eltern-Kind-Beziehung, weniger Spitalsaufnahmen, volkswirtschaftlicher Nutzen

Es braucht daher hochwertige, flächendeckende peripartale psychische Gesundheitsversorgung, welche die Prävention, frühzeitige Erkennung und Behandlung peripartaler psychischer Probleme umfasst. Zu den Vorteilen einer solchen hochwertigen peripartalen psychischen Gesundheitsversorgung gehören z. B. die frühere Erkennung psychischer Probleme durch eine bessere Sensibilisierung (z. B. der in der Betreuung von Schwangeren und Kindern beteiligten Berufsgruppen), eine verbesserte Eltern-Kind-Beziehung, eine optimale Behandlung peripartaler psychischer Erkrankungen, sowie frühzeitige Interventionen bei psychischen Erkrankungen, die z. B. zu weniger Spitalsaufnahmen führen. Es gibt auch eindeutige volkswirtschaftliche Vorteile: Ein britischer Forschungsbericht aus dem Jahr 2014 hat gezeigt, dass ein unzureichender Umgang mit peripartalen psychischen Problemen zu weitaus höheren Kosten für die Gesellschaft führt als die Kosten für die Bereitstellung geeigneter Leistungen. Die jährlichen Kosten für peripartale psychische Erkrankungen wurden für das Vereinigte Königreich auf umgerechnet 9 Milliarden Euro berechnet, von denen mehr als 2/3 auf die langfristigen Auswirkungen für das Kind im Laufe des Lebens entfallen. Darin enthalten sind Kosten für das Gesundheits- und Sozialwesen, aber auch für den Bildungs- und Strafrechtssektor.

Österreich: keine nationale Strategie/ Versorgungsmodell; bisher kein Routine-Screening im Mutter-Kind-Pass

Für Österreich gibt es bisher weder eine nationale Strategie noch ein nationales Versorgungsmodell für peripartale psychische Gesundheit. Im Mutter-Kind-Pass, dem nationalen Screening-Programm für die Schwangerschaft und die ersten fünf Lebensjahre des Kindes, ist ein routinemäßiges Screening auf psychische Probleme bisher nicht vorgesehen. Darunter versteht man die frühzeitige Identifizierung von Personen mit erhöhtem Risiko auf eine psychische

Leistungsstrukturen häufig unkoordiniert, nicht flächendeckend verfügbar

Erkrankung z. B. mithilfe von standardisierten Fragebögen. Über den Mutter-Kind-Pass hinaus gibt es eine Reihe von Diensten, die Familien während der peripartalen Phase unterstützen, z. B. die so genannten Frühe Hilfen, die seit 2015 in Österreich in regionalen multiprofessionellen Netzwerken umgesetzt werden. Insgesamt sind die vorhandenen Leistungsstrukturen jedoch häufig unkoordiniert und bisher nicht flächendeckend verfügbar. Das kann dazu führen, dass der Bedarf an psychosozialer Unterstützung in den betroffenen Familien nicht erkannt wird oder eine unzureichende Versorgung stattfindet.

Bericht als Teil eines FWF-finanzierten Forschungsprojekts

Dieser Bericht wurde im Rahmen eines fünfjährigen Forschungsprojekts erstellt, das vom Österreichischen Fonds zur Förderung der wissenschaftlichen Forschung (FWF) finanziert wird. Das Projekt zielt darauf ab, einen Verbesserungsansatz im Bereich der peripartalen psychischen Gesundheit in Tirol gemeinsam mit Betroffenen und Stakeholdern zu entwickeln, umzusetzen und zu evaluieren. Das Forschungsprojekt wird von der Medizinischen Universität Innsbruck geleitet, mit Forschungspartner*innen an der Leopold-Franzens-Universität Innsbruck, dem Austrian Institute for Health Technology Assessment und dem Ludwig Boltzmann Institut für Rehabilitation Research.

Ziel des Berichts: Überblick über Versorgungsmodelle und -pfade

Das Ziel dieses Berichts ist es, einen Überblick über internationale Versorgungsmodelle und -pfade für peripartale psychische Gesundheit zu geben und ihre wesentlichen Merkmale sowie Anforderungen an die Leistungserbringung zu analysieren und Gemeinsamkeiten und Unterschiede zu beschreiben.

Methoden

umfassende Handsuche, Expert*innen-Konsultation

evidenzbasierte Leitlinien, nationale/regionale Versorgungsmodelle aus Europa, Kanada, Australien

Wir führten eine Handsuche in mehreren Datenbanken und auf Webseiten von verschiedenen Institutionen (z. B. Gesundheitsministerien) durch und fragten Expert*innen nach relevanten Dokumenten. Es wurden englisch- und deutschsprachige evidenzbasierte Leitlinien und Dokumente, die regionale oder nationale Versorgungsmodelle beschreiben, eingeschlossen. Wir berücksichtigten ausschließlich solche Versorgungsmodelle, die Informationen zu mehreren Aspekten der Versorgung beinhalteten (Prävention, Früherkennung, Behandlung, …). Der Fokus lag dabei auf europäischen Ländern. Zusätzlich wurden auch Dokumente aus Kanada und Australien eingeschlossen.

Datenextraktion zu mehreren Themenfeldern

Aus den eingeschlossenen Dokumenten wurden Daten zu den folgenden Themenfeldern extrahiert und tabellarisch dargestellt:

- allgemeine Informationen zu den Dokumenten (z. B. Art des Dokuments, Sprache, Auftraggeber, Finanzierung, Entwicklung des Dokuments, Ziele)
- Charakteristika der Versorgungsmodelle (z. B. berücksichtigte Zielgruppen, involvierte Berufsgruppen, Organisation der Leistungen, Aus- und Fortbildung, Bestandteile/Komponenten der Versorgungsmodelle wie Prävention, Früherkennung, Überweisung, Behandlung, spezifische Leistungen für Väter/Partner*in)
- Informationen zu Voraussetzungen für die Umsetzung des Versorgungsmodells (z. B. Rahmenbedingungen, Infrastruktur, Evaluation)

Bewertung der Qualität der Dokumente mittels AGREE II; weitere Informationen aus anderen Ländern in Tabelle im Anhang

Die Qualität der eingeschlossenen Dokumente wurde mithilfe des Qualitätsbewertungstools AGREE II bewertet. Die Datenextraktion und die Synthese der Informationen fokussierte auf die eingeschlossenen umfassenden Leitlinien und Versorgungsmodelle, die Empfehlungen für eine idealtypische Versorgung beinhalten. Durch die Recherche und Expert*innen-Konsultation wurden zahlreiche weitere Quellen aus verschiedenen europäischen Ländern

identifiziert, welche unsere Einschlusskriterien jedoch nicht erfüllten. Diese beschreiben z. B. interessante Pilotprojekte und Initiativen sowie den Ist-Stand der Versorgung in einem Land. Die wichtigsten Informationen aus diesen Quellen wurden in tabellarischer Form im Anhang zusammengefasst.

Ergebnisse

insgesamt 6 Dokumente aus 4 Ländern (UK, Irland, Kanada, Australien) eingeschlossen

2 evidenzbasierte Leitlinien, 4 nationale bzw. regionale Versorgungsmodelle

Es wurden insgesamt sechs Dokumente für die genauere Analyse eingeschlossen: zwei evidenzbasierte Leitlinien (Vereinigtes Königreich (UK), Australien) sowie vier Dokumente, die Versorgungsmodelle für einen nationalen (UK, Irland) oder regionalen (Kanada/Ontario, Australien/Western Australia) Kontext beschreiben. Die Dokumente wurden von multiprofessionellen Arbeitsgruppen entwickelt, an der Expert*innen unterschiedlicher Berufe und Fachrichtungen, aber auch Personen mit gelebter Erfahrung (d. h. Menschen, die selbst von peripartalen psychischen Erkrankungen betroffen waren) beteiligt waren. Zu den Adressat*innen dieser Dokumente gehören Fachkräfte des Gesundheitswesens, die Familien in der Schwangerschaft und nach der Geburt betreuen, Personen, die für die Leistungsplanung zuständig sind, sowie die Familien selbst.

Zielgruppe: Personen, die Schwangerschaft planen, schwanger sind, oder ein Kind <1 Jahr haben

Berufsgruppen: medizinische Fachrichtungen, Hebammen & Pflege, assoziierte Berufsgruppen

Ein Teil der identifizierten Versorgungsmodelle und -pfade definiert als Zielgruppe alle Personen, die eine Schwangerschaft planen, bereits schwanger sind oder kürzlich ein Kind bekommen haben. Andere Modelle fokussieren auf Personen in derselben Lebensphase, die aber früher oder aktuell psychische Probleme haben oder bei denen Verdacht auf eine psychische Erkrankung besteht. In den eingeschlossenen Dokumenten wird ein breites Spektrum von Fachkräften erwähnt, die an der Leistungserbringung beteiligt sind: medizinische Fachrichtungen (z. B. Ärzt*innen für Allgemeinmedizin, Gynäkologie, Kinderheilkunde, Psychiatrie), Hebammen- und Pflegespezialisierungen (z. B. auf (peripartale) psychische Gesundheit spezialisierte Hebammen und Pflegepersonen) und assoziierte Berufsgruppen (z. B. klinische Psycholog*innen, Ergotherapeut*innen, Sozialarbeiter*innen). Dies verdeutlicht die Notwendigkeit multiprofessioneller und interdisziplinärer Teams.

integrierte Versorgung, klar definierte Überweisungspfade, abgestufte Betreuungskonzepte

In den Dokumenten wird hervorgehoben, dass integrierte Versorgungsmodelle, klar definierte Pfade und abgestufte Betreuungskonzepte für die Organisation und Bereitstellung von Leistungen der peripartalen psychiatrischen Versorgung wichtig sind. Integrierte Versorgung bedeutet in diesem Zusammenhang, dass verschiedene Leistungserbringer und Berufsgruppen über den ganzen Behandlungs- und Betreuungsprozess kontinuierlich und strukturiert zusammenarbeiten. Dies basiert auf standardisierten Konzepten, wobei die Patient*innen aktiv miteingebunden werden. Außerdem braucht es klare Definitionen, wohin Betroffene weiterverwiesen werden (Überweisungspfade).

Aus-, Fort- und Weiterbildung

„Komponenten" der Versorgungsmodelle in Visualisierung zusammengefasst

Ein weiterer wichtiger Aspekt ist die Aus-, Fort- und Weiterbildung. Schulungen und Supervision sollten nicht nur für die direkt an der peripartalen psychischen Versorgung beteiligten Fachkräfte, sondern für alle Berufsgruppen, die mit schwangeren und postpartalen Frauen und Familien arbeiten, angeboten werden. Alle sechs Dokumente enthalten Informationen zu verschiedenen Aspekten der Versorgung, einschließlich Primärprävention, Früherkennung, Diagnostik/Überweisung und Behandlung. Eine Synthese der gemeinsamen Charakteristika der eingeschlossenen Dokumente in Bezug auf die „Komponenten" der Versorgung findet sich auch in Abbildung 1:

Primärprävention: Information für werdende Eltern z. B. über Symptome peripartaler psych. Erkrankungen

Beratung vor Eintritt der Schwangerschaft bei bereits bestehenden psych. Problemen

- Im Rahmen der Primärprävention sollten werdende Eltern über psychische Gesundheit im Allgemeinen und über psychische Probleme, die während der Schwangerschaft und nach der Geburt auftreten können (z. B. Symptome peripartaler psychischer Erkrankungen), sowie über andere relevante Themen (wie soziale Unterstützung, Erziehungsfragen oder die Entwicklung des Kindes) informiert werden. Speziell für Frauen mit neuen, bereits bestehenden oder früheren psychischen Problemen oder mit einem erhöhten Risiko für psychische Erkrankungen sollte eine Beratung vor Eintritt der Schwangerschaft angeboten werden. Dabei sollen Informationen (z. B. zu Medikation und Stillen) vermittelt und das bisherige Krankheitsmanagement optimiert werden (z. B. Verbesserung des Gesundheitsverhaltens wie Ernährung, körperliche Aktivität oder Schlaf; Überprüfung der psychologischen oder pharmakologischen Behandlung).

Früherkennung: Screening der (werdenden) Mütter zu mehreren Zeitpunkten

Screening-Methoden für Depressionen & Angststörungen

Anamnese zu früheren psych. Erkrankungen, Fragen nach (emotionalem) Wohlbefinden

- Die frühzeitige Identifizierung von Personen mit peripartalen psychischen Problemen ist ein wesentlicher Bestandteil der Modelle. Screening von Müttern auf peripartale psychische Erkrankungen wird in allen eingeschlossenen Dokumenten empfohlen, meist zu mehreren Zeitpunkten: zu Beginn der Schwangerschaft, später in der Schwangerschaft, 6-12 Wochen nach der Geburt und mindestens einmal im ersten Jahr nach der Geburt. Die Dokumente nennen mehrere Screening-Methoden für Depression (z. B. Whooley-Fragen, „Edinburgh Postnatal Depression Scale“ [EPDS], „Patient Health Questionnaire“ [PHQ-9] sowie „sensibles Fragen“ ohne Verwendung eines bestimmten Fragebogens) bzw. Angststörungen (z. B. Generalized Anxiety Disorder Scale [GAD-2]). Darüber hinaus sollte zu Beginn der Schwangerschaft auch nach früheren oder aktuellen psychischen Problemen gefragt werden. Bei Verdacht auf Alkoholmissbrauch kann ein entsprechender Screening-Fragebogen eingesetzt werden. Das (emotionale) Wohlbefinden sollte bei jedem Termin während der Schwangerschaft und nach der Geburt angesprochen werden.

Assessment und Überweisung: erste diagnostische Beurteilung, Überweisung je nach Art und Schweregrad der psych. Probleme

- Der nächste Schritt umfasst eine erste diagnostische Beurteilung (Assessment) und die Identifizierung von Personen, die eine weitere Diagnostik oder Überweisung benötigen. Je nach Art und Schweregrad der psychischen Probleme können unterschiedliche Behandlungspfade festgelegt werden. Im Falle einer peripartalen psychischen Krise (z. B. bei Psychose- oder Suizidgefahr) ist eine umgehende psychiatrische Beurteilung erforderlich. Die Überweisungspfade sind auch von den lokalen Begebenheiten abhängig, eine koordinierte Versorgung und klare Kommunikation sind jedoch in jedem Fall unerlässlich.

Behandlung: psychosoziale, psychologische, psychotherapeutische Interventionen und medikamentöse Behandlung

Mutter-Baby-Station wenn stationäre Aufnahme nötig

- Die Behandlung peripartaler psychischer Probleme umfasst hauptsächlich psychosoziale, psychologische und psychotherapeutische Interventionen (z. B. strukturierte Psychoedukation, angeleitete Selbsthilfe, Selbsthilfegruppen, kognitive Verhaltenstherapie, interpersonelle Psychotherapie) und medikamentöse Behandlung. Wenn eine stationäre Behandlung erforderlich ist, sollten Frauen zeitnah Zugang zu einer Mutter-Baby-Station im Krankenhaus haben, in der sie gemeinsam mit dem Kind aufgenommen werden können. Es wird ein abgestuftes Modell der Leistungserbringung empfohlen, das unterschiedliche Interventionen je nach Art und Schweregrad der psychischen Erkrankung bereitstellt. Generell sollten die Behandlungsmöglichkeiten mit der Frau, ihrem Partner und ihrer Familie besprochen werden, um einen individuellen Behandlungsplan zu erstellen.

- Frauen mit peripartalen psychischen Gesundheitsproblemen (insbesondere mit nur leichten oder subklinischen Symptomen) sollten über Selbsthilfegruppen informiert werden, die von Personen geleitet werden, die über eigene Erfahrungen mit peripartalen psychischen Erkrankungen verfügen (Personen mit gelebter Erfahrung, auch „Peers" genannt).

Peer-Selbsthilfegruppen

- Im Rahmen der postpartalen Betreuung sollte auch die Eltern-Kind-Beziehung berücksichtigt und Bedenken der Eltern besprochen werden. Denn die eingeschlossenen Dokumente beschreiben, dass sich die psychische Erkrankung eines Familienmitglieds auf das Wohlbefinden der gesamten Familie auswirkt.

Berücksichtigung der Eltern-Kind-Interaktion und -Beziehung

- In den eingeschlossenen Modellen fokussieren die Leistungen hauptsächlich auf die (werdenden) Mütter. Die psychische Gesundheit der Co-Elternteile/Partner*innen/Väter wird in einigen Dokumenten erwähnt, aber spezifische Angebote werden nicht genannt.

keine spezifischen Interventionen für Väter/Co-Elternteile

- Zusätzliche Komponenten der Versorgungsmodelle sind u.a. gezielte Leistungen für vulnerable Familien, die z. B. von sozialarbeiterischen Diensten identifiziert werden können.

tw. gezielte Leistungen für vulnerable Familien

- Im Hinblick auf die (sektorenübergreifende) Koordinierung der Leistungen wird empfohlen, einen integrierten Versorgungsplan zu entwickeln, der eine koordinierende Gesundheitsfachkraft (z. B. Krankenpflegeperson, Hebamme) vorsieht, die den Informationsaustausch mit allen beteiligten Diensten und Personen, die Kontinuität der Versorgung und das zeitnahe Angebot von Interventionen sicherstellt.

Erstellen eines integrierten Versorgungsplans mit koordinierender Gesundheitsfachkraft

Informationen zu den Anforderungen an die Leistungserbringung

Eine weitere Forschungsfrage zielte darauf ab, die Informationen aus den Dokumenten zu den Anforderungen an die Leistungserbringung zusammenzufassen. Beispiele sind z. B. die Entwicklung von Netzwerken innerhalb von Krankenhäusern mit definierten integrierten Versorgungspfaden oder die Einrichtung einer Website mit Schulungsprogrammen und Online-Materialien für Gesundheitspersonal. Einige der Dokumente enthalten ausführliche Informationen über die erforderlichen personellen Ressourcen für die peripartale psychiatrische Versorgung. Es werden auch mögliche förderliche und hinderliche Faktoren für die Umsetzung solcher Dienste genannt: z. B. eine nachhaltige Struktur- und Kompetenzentwicklung („Capacity building") für das Gesundheitspersonal, die Einbeziehung wichtiger Stakeholder sowie die Entwicklung von Standards und Leitlinien. Barrieren sind z. B. Zeitmangel oder die geringe Inanspruchnahme von Überweisungen. Die meisten Versorgungsmodelle und Leitlinien betonen auch die Wichtigkeit von Evaluierung und Monitoring durch die Verwendung von Leistungsindikatoren oder regelmäßiger Datenberichterstattung.

z. B. personelle Ressourcen, förderliche und hinderliche Faktoren, Evaluierung/Monitoring

Diskussion

Zusammenfassung gemeinsamer Merkmale der identifizierten Versorgungsmodelle aus 4 Ländern

Der Bericht fasst die gemeinsamen Merkmale von sechs Modellen zur Prävention und Versorgung peripartaler psychischer Erkrankungen aus vier Ländern zusammen. Diese Versorgungsmodelle wurden in die Analyse eingeschlossen, weil sie auf verschiedene Aspekte (z. B. Primärprävention, Screening, Behandlung) fokussieren und nicht nur Empfehlungen z. B. für ein Screening geben, und sowohl die Schwangerschaft als auch das erste Jahr nach der Geburt des Kindes abdecken. Die durch die manuelle Suche sowie die Konsultation der Expert*innen identifizierten Informationen aus anderen Ländern geben einen groben Überblick über die Situation in 12 weiteren europäischen Ländern. Ein sehr umfangreicher Bericht der nordischen Län-

grober Überblick über Situation in 12 weiteren europäischen Ländern

der (u. a. Norwegen, Schweden, Dänemark, Finnland) beschreibt die Ist-Situation in diesen Ländern. Diese scheinen im Allgemeinen der psychischen Gesundheit während der Peripartalperiode einen hohen Stellenwert einzuräumen, auch wenn z. B. das Screening auf psychische Erkrankungen nicht in allen Ländern einheitlich geregelt und umgesetzt ist. Weitere Quellen beschreiben z. B. ein Projekt aus Deutschland, bei dem die routinemäßigen Untersuchungen in der Schwangerschaft und nach der Geburt durch entsprechende Screenings auf psychische Erkrankungen erweitert werden, oder die Einrichtungen von multiprofessionellen Behandlungsteams in den Niederlanden, die aus verschiedenen Berufsgruppen der Psychiatrie, Geburtshilfe und Pädiatrie bestehen („POP Teams“).

Betrachtung von Eltern, Kind, Eltern-Kind-Beziehung sowie familiärer Situation als Ganzes wichtig

Bei der Prävention und Versorgung von peripartalen psychischen Problemen müssen die Eltern, das Kind, die Eltern-Kind-Beziehung sowie die familiäre Situation als Ganzes (einschließlich Partner*in, Co-Elternteile, andere Kinder, etc.) betrachtet werden. Die psychische Gesundheit des Säuglings wirkt sich auf das mütterliche und väterliche Wohlbefinden aus, und psychische Probleme der Eltern können das Wohlbefinden des Kindes beeinflussen. Obwohl einige der eingeschlossenen Dokumente die Bedeutung der Eltern-Kind-Beziehung betonen, fehlen spezifische Empfehlungen, z. B. zur Erkennung und Behandlung von Störungen der Eltern-Kind-Beziehung.

Fokus auf (werdende) Mütter

Bewusstsein für Bedeutung der psych. Gesundheit des Vaters/Co-Elternteils wächst, zumindest in Forschung

in Versorgungs-modellen bisher nicht ausreichend berücksichtigt, aber Empfehlungen zu Vätern in derzeit überarbeiteter Leitlinie

Die Prävention und Versorgung von peripartalen psychischen Erkrankungen fokussiert nach wie vor hauptsächlich auf (werdende) Mütter, was sich auch in den identifizierten Versorgungsmodellen zeigt: nur in einem der sechs Dokumente werden die Väter und werdende Väter explizit als Zielgruppe genannt. Zumindest in der Forschung wächst aber das Bewusstsein für die Bedeutung der psychischen Gesundheit des Vaters/Partner*in/Co-Elternteils in der Zeit der Schwangerschaft und im ersten Jahr nach der Geburt des Kindes. Der vorherrschende Fokus in den identifizierten Versorgungsmodellen auf die psychische Gesundheit der Frau und die Mutter-Kind-Beziehung vernachlässigt einerseits die Bedeutung der psychischen Gesundheit und des Wohlbefindens des Vaters/Co-Elternteils/Partner*in. Andererseits birgt dieser Fokus auch die Gefahr, implizit traditionelle Geschlechterrollen sowie die Ansicht zu reproduzieren, dass Schwangerschaft und Kinderbetreuung vor allem in der Verantwortung der Frauen liegen. Daher sind maßgeschneiderte Screening- und Interventions-Ansätze für die väterliche psychische Gesundheit erforderlich. Dies scheint jedoch in den identifizierten Versorgungsmodellen noch nicht ausreichend berücksichtigt zu werden. Eine der beiden eingeschlossenen Leitlinien wird jedoch gerade aktualisiert, und der vorläufige Entwurf enthält auch einige Empfehlungen zur routinemäßigen Identifizierung von psychischen Problemen bei Vätern.

Wichtigkeit von multiprofessioneller Versorgung und Zusammenarbeit verschiedener Sektoren (z. B. Gesundheit- und Sozialsektor)

Die analysierten Dokumente betonen die Wichtigkeit von multiprofessionellen Versorgungsmodellen. Einige der genannten Berufsgruppen gibt es in Österreich (noch) nicht oder sie haben andere Aufgaben als in anderen Ländern (z. B. wird die routinemäßige Schwangerenvorsorge in vielen Ländern von Hebammen und Hausärzt*innen durchgeführt, statt überwiegend von Gynäkolog*innen wie in Österreich). Dies muss bei der Betrachtung der Übertragbarkeit der Ergebnisse berücksichtigt werden. Das Gleiche gilt auch für die Koordination zwischen verschiedenen Sektoren, z. B. dem Gesundheits- und dem Sozialsektor, welche in anderen Ländern stärker miteinander verknüpft zu sein scheinen als in Österreich. Dies kann insbesondere bei weniger schweren psychischen Problemen von Bedeutung sein, die keine medizinische Behandlung erfordern, aber von sozialer Unterstützung profitieren könnten, z. B. durch die „Frühen Hilfen“ in Österreich. Andererseits benö-

tigen Familien, in denen ein Elternteil eine schwere psychische Erkrankung hat, starke Unterstützung durch Sozial- und Kinderschutzdienste. In solchen Situationen ist eine intensive Zusammenarbeit zwischen Geburtshilfe, psychiatrischer Versorgung und Sozialsektor erforderlich.

förderliche und hinderliche Faktoren bei Implementierung von Versorgungsmodellen auf unterschiedlichen Ebenen

Bei der Einführung und Umsetzung von Versorgungsmodellen kann es hilfreich sein, mögliche förderliche und hinderliche Faktoren zu kennen und zu berücksichtigen. Im Rahmen einer Studie zu Implementierungsfaktoren bei Screening und Behandlung von peripartalen psychischen Erkrankungen (MATRIx-Studie) wurden solche Faktoren auf unterschiedlichen Ebenen (z. B. individuelle, interpersonelle, organisatorische, politische, gesellschaftliche Ebene) identifiziert und zusammengefasst. Beispiele für mögliche Barrieren auf der individuellen Ebene sind mangelndes Wissen über peripartale psychische Gesundheit oder Ängste der Frau, als schlechte Mutter gesehen zu werden. Auf interpersoneller Ebene sind als förderliche Faktoren vertrauensvolle Beziehungen und offene Kommunikation und als hinderliche Faktoren z. B. Sprachbarrieren zu nennen. Auf Ebene des Gesundheitspersonals sind förderliche Faktoren u.a. Wissen und Verständnis für peripartale psychische Gesundheit, Zusammenarbeit sowie ausreichend Zeit. Auf organisatorischer Ebene braucht es z. B. klare Überweisungspfade, integrierte Versorgung sowie ausreichend (finanzielle und personelle) Ressourcen. Eine Barriere auf gesellschaftlicher Ebene ist z. B. die Stigmatisierung von psychischen Erkrankungen.

Prävention peripartaler psychischer Probleme auf gesellschaftlicher Ebene in Modellen kaum berücksichtigt

Die Prävention peripartaler psychischer Probleme auf gesellschaftlicher Ebene (anstatt einem Fokus auf individuelle Faktoren) ist ein Thema, das über den Rahmen der meisten identifizierten Modelle hinausgeht. Dazu gehört auch die Art und Weise, wie Kinderbetreuung und Verantwortlichkeiten in einer Gesellschaft organisiert sind, was mit dem gesellschaftlichen Bild und den Erwartungen an Mütter, Väter und andere Betreuungspersonen in Bezug auf die Schwangerschaft und erste Zeit nach der Geburt zusammenhängen kann. Gesundheitsförderung und Prävention sollten nicht nur auf individuelle Verhaltensfaktoren fokussieren, sondern darauf abzielen, gesunde Lebensbedingungen zu schaffen.

offene Fragen: Identifizierung & Versorgung von Vätern/ Co-Elternteilen, Einbeziehung des Kindes, Rolle von Personen mit gelebter Erfahrung

Es bleiben einige offene Fragen, die aus unserer Sicht in den identifizierten Dokumenten nicht ausreichend behandelt wurden. Dazu gehören die Identifizierung und Versorgung von Vätern/Co-Elternteilen/Partner*innen mit peripartalen psychischen Problemen, die explizite Einbeziehung und Berücksichtigung des (psychischen) Wohlbefindens des Säuglings sowie anderer Kinder in der Familie und die spezifische Rolle von Menschen mit gelebter Erfahrung.

Conclusio

Überblick und Synthese internationaler Versorgungsmodelle

Der Bericht bietet einen Überblick über internationale Modelle zur Prävention und Versorgung peripartaler psychischer Erkrankungen. Auf Basis der Informationen aus sechs Dokumenten (zwei nationale und zwei regionale Versorgungsmodelle, zwei evidenzbasierte Leitlinien) aus vier Ländern (UK, Irland, Kanada, Australien) haben wir gemeinsame Merkmale beschrieben und eine Synthese der Versorgungsmodelle skizziert.

„ideales" Modell umfasst z. B.

Primärprävention, Beratung, Screening

evidenzbasierte, zeitnahe Behandlung

Berücksichtigung der psych. Gesundheit des Vaters/Co-Elternteils und der Eltern-Kind-Beziehung

Einbeziehung von Peers

Ein idealtypisches Versorgungsmodell sollte

- evidenzbasiert, bedürfnisorientiert, personenzentriert, gleichberechtigt sein,
- multiprofessionelle, koordinierte Netzwerke umfassen,
- Maßnahmen der Primärprävention, Beratung und Früherkennung beinhalten,
- klar definierte Überweisungswege und abgestufte Betreuungskonzepte haben,
- eine angemessene, evidenzbasierte Behandlung zeitnah bereitstellen,
- neben der psychischen Gesundheit der Mutter auch die des Kindes und des Vaters/Partner*in sowie die Eltern-Kind-Beziehung berücksichtigen,
- Personen mit gelebter Erfahrung miteinbeziehen,
- von Beginn an eine entsprechende Evaluierung einplanen.

Bericht als Basis für Entwicklung und Implementierung von Maßnahmen in Ö

Die Ergebnisse aus diesem Bericht können für die weitere Diskussion genutzt werden und dienen als Grundlage für die Gestaltung, Weiterentwicklung und Umsetzung der Prävention und Versorgung von peripartalen psychischen Erkrankungen in Österreich.

Die Synthese der gemeinsamen Charakteristika der eingeschlossenen Dokumente in Bezug auf die „Komponenten" der Versorgung findet sich in Abbildung 1 auf der folgenden Seite.

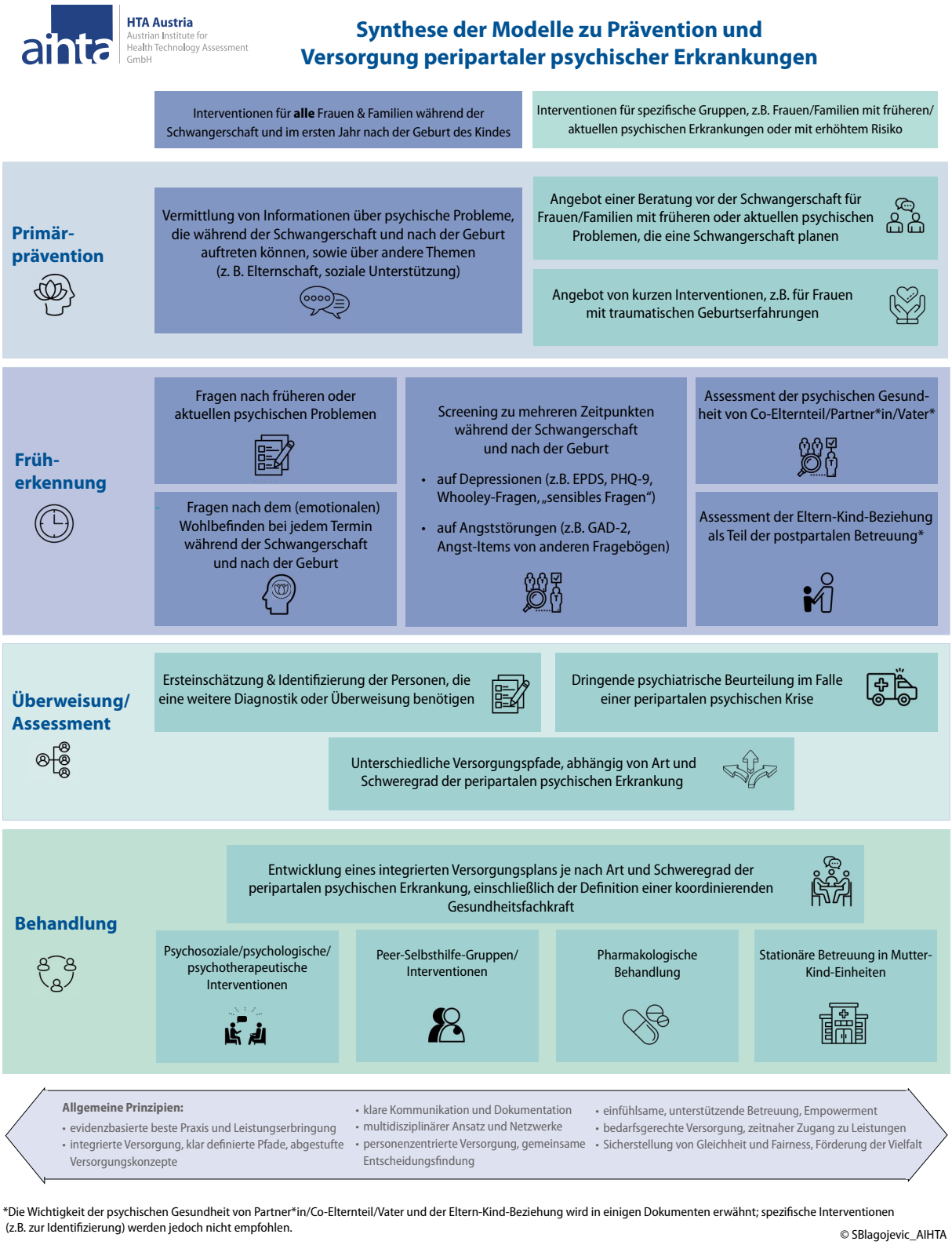

Abbildung 1: Synthese der Modelle zu Prävention und Versorgung peripartaler psychischer Erkrankungen

1 Background

1.1 Definition and prevalence of perinatal mental health problems

Mental health problems are among the most common morbidities of the perinatal period (i.e. pregnancy and postpartum), with potential serious adverse effects on the mother, the child and the family [1]. Up to 20% of women are affected from perinatal mental health problems (such as depression, anxiety disorders or postpartum psychosis) during pregnancy and the first year of life of the child [1, 2], with significant heterogeneity between countries [3]. Depression and anxiety disorders are the most frequent perinatal mental health problems with a prevalence of approximately 15% of women. Serious mental illness requiring hospital admission is much less common: around 2-3 women per 1,000 deliveries are being admitted to a mother-baby unit. 1-2 per 1,000 women who give birth are affected by postpartum psychosis [4].

peripartale psychische Erkrankungen (= in der Schwangerschaft und im ersten Lebensjahr des Kindes), z. B. Depressionen, Angststörungen

bis zu 20 % der Frauen betroffen

Partners (including fathers, co-mothers, and step-parents) may also experience perinatal mental health difficulties: between 5-10% of fathers are affected by perinatal depression and 5-15% experience perinatal anxiety. They may also develop post-traumatic stress symptoms following the birth. The prevalence of perinatal mental health problems in step-parents, co-mothers, trans and gender-diverse parents is still unknown. Partners of women experiencing perinatal mental health problems are particularly vulnerable to mental illness [5]. In up to 3.2% of couples, both parents experience perinatal depression at the same time [6].

rund 10 % der Väter/Partner*innen/ Co-Elternteile auch von peripartalen psych. Problemen betroffen

Maternal mental health problems that occur in the perinatal period are likely to be similar in nature, course and relapse risk to those at other times in a woman's life, with the exception of postpartum psychosis (i.e. the sudden onset of psychotic symptoms after the birth of the child) which is unique to the postnatal period. However, the main difference is a more urgent need for rapid and effective care provision, because of the impact of perinatal mental health problems on both the mother and her baby [4]. A recent report from the World Health Organization (WHO) states that integrating mental health in perinatal programmes is especially important because maternal mental ill-health is common and impacts both mothers and infants [7]. Perinatal mental illness contributes significantly to maternal mortality and adverse neonatal, infant, and child outcomes [8]. These risks for a broad range of negative child outcomes can persist into late adolescence. Research has mostly focused on mothers, but there is growing evidence that paternal mental health is also associated with an increased risk of developmental and psychological disturbances in children [9].

peripartale psych. Probleme in Art und Verlauf ähnlich jenen zu anderen Zeiten, aber potentiell schwerwiegende Auswirkungen auf Mutter/Vater und Kind

daher rasche und effektive Versorgung essentiell

Therefore, perinatal mental health has become a focus of interest in recent years [8], and has become even more important with the COVID-19 pandemic and the associated consequences for families [10].

größerer Fokus in den letzten Jahren

1.2 Perinatal and infant mental health services

Versorgung peripartaler psych. Erkrankungen:

Prävention, Früherkennung und Behandlung

verschiedene Berufsgruppen mit spezifischer Expertise

Fokus auch auf Entwicklung/Wohlbefinden des Kindes und Eltern-Kind-Beziehung

Perinatal mental health services include the prevention, detection and management of perinatal mental health problems, including both new onset problems, recurrences of previous problems, as well as mental health problems already existing before conception [11]. As the promotion of emotional and physical wellbeing and development of the infant is a crucial part of perinatal mental health services, an integrated approach to perinatal and infant mental health (PIMH) services is required, including not only treatment of the parental mental illness, but also addressing, e.g., parent-child relational stress, disrupted parenting behaviours or lack of parenting confidence, as well as viewing the infant as a person with their needs and personality, and working with the parent-child dyad [12]. A range of (health) professionals, organisations, and informal carers may be involved in the delivery of care during the perinatal period. This requires, e.g., coordination, collaboration and integrated care models, clearly defined referral pathways and responsibilities, well trained healthcare professionals, and continuity of care [13, 14]. As the treatments normally used in adult mental health are not always appropriate during the perinatal period (e.g., because of risks due to fetal exposure during pregnancy or breastfeeding), the management of perinatal mental illness needs specialised skills and expertise [15]. Other health professionals such as midwives or paediatricians should also be considered in PIMH care, as they may, for example, be consulted by parents for infant symptoms (e.g. excessive crying, feeding problems) which could be related to the parent's mental health (bidirectional nature of mental health).

zahlreiche Vorteile von qualitativ hochwertiger Versorgung

The benefits of high-quality perinatal mental healthcare include, e.g., earlier identification of mental health problems through better awareness, improved mother-baby interactions, a positive experience of pregnancy, optimal management of new and existing perinatal mental health problems, early intervention, leading, e.g., to fewer unnecessary inpatient admissions [4].

auch klarer volkswirtschaftlicher Nutzen

There are also clear economic benefits of appropriate perinatal mental healthcare services: A report by Bauer et al. from 2014 [16] showed that not effectively managing perinatal mental health problems leads to far more economic costs to the society than the costs of providing appropriate services. The annual costs of perinatal mental health problems have been calculated at the equivalent of 9 billion euros for the UK, of which more than 2/3 relate to the long-term impacts on the child over the life course. This includes costs to health and social care, but also educational and criminal justice sectors.

1.3 Current situation in Austria

viele Aktivitäten in den letzten Jahren, z. B. in UK, Australien

Several countries, such as the UK and Australia, have recently been increasing their efforts in perinatal mental healthcare over the last 5-10 years, e.g., by developing new service delivery models, strengthening care structures or allocating more resources to improve the situation for affected families [8, 17].

Österreich: bisher keine nationale Strategie oder Versorgungsmodell

kein Routine-Screening im Mutter-Kind-Pass

Frühe Hilfen-Netzwerke

In Austria, there is no perinatal mental health strategy or national care model available. Existing services in perinatal and infant mental health are usually uncoordinated and may result in not recognising mental healthcare needs in affected families or in inappropriate care. A national screening programme exists which is called 'Mutter-Kind-Pass' and covers the period of pregnancy until the child's age of 5 years. Routine universal screening or assessment for perinatal mental health problems is not yet included, although it is recommended by several evidence-based guidelines [18]. Additionally, there are a number of services which provide support for families during the perinatal period (e.g., 'Frühe Hilfen'). Regional multi-professional networks for early childhood interventions (so-called 'Frühe-Hilfen-Netzwerke') have been implemented in Austria since 2015. They aim to reach and support families in need (e.g., due to stressful living conditions) during pregnancy and in the first three years of the child [19]. However, the identification of families in need of support can and should be significantly improved and referrals increased.

FWF-finanziertes Forschungsprojekt in Tirol

Ziel: partizipative Entwicklung, Umsetzung und Evaluierung eines Verbesserungsansatzes im Bereich peripartale psychische Erkrankungen

A detailed report on the current situation of perinatal mental healthcare and services in Austria will be published next year as part of the research project 'Co-designing perinatal mental health support in Tyrol'. This 5-year research project is funded by the Austrian Science Fund (*Fonds zur Förderung der wissenschaftlichen Forschung*, FWF) and aims to inform the co-development and implementation of a perinatal mental health intervention in Tyrol. The research project is hosted by the Medical University of Innsbruck, with research partners at the Leopold Frances University Innsbruck, Austrian Institute of Health Technology Assessment, and Ludwig Boltzmann Institute for Rehabilitation Research. The broader objectives of this work are to support an early intervention and prevention approach to perinatal mental illness which aims to:

1. Examine the situation in Tyrol for perinatal mental health support/services
2. Co-design support services focused on parent and infant need, strengthening social support and collaborative services
3. Implement the co-designed intervention to be feasible, acceptable, and sustainable
4. Evaluate impacts, views, and experiences of the intervention

multidisziplinäres Forschungsteam

Einbeziehung von diversen Stakeholdern sowie Personen mit gelebter Erfahrung

This project includes a multidisciplinary medical, health, and social care policy team and will co-develop, implement, and evaluate practice approaches related to locally identified priority areas of early identification, service gaps, and access. The project works with stakeholders to co-develop evidence informed practice approaches and determine the most appropriate study design to evaluate those, including implementation processes to be undertaken. Central to this work is the involvement of people with lived experience and health/community providers. Following workshops to design the proposal, the elements addressed for the above aims include: 'early identification', 'gaps in care' and 'access' as top, 2nd and 3rd priority respectively. Importantly, stakeholders stressed the importance of considering diverse family constellations, including mothers, fathers, and other parents, inclusive of all genders.

2 Project aims and research questions

Scoping-Review als Teil des FWF-Projekts: Überblick über internationale Versorgungsmodelle

The scoping review will provide an overview of international care models and pathways for PIMH from selected countries and analyses and describes their characteristics as well as requirements for delivery of services. The report is conducted as part of the above-mentioned research project 'Co-designing perinatal mental health support in Tyrol' and aims to give international guidance for the co-design workshops with stakeholders.

3 Forschungsfragen

The following research questions (RQ) will be addressed in this review:

- RQ1:
  - a: Which PIMH care models and pathways have been recommended in selected countries of the Global North?
  - b: Which recommendations can be identified in evidence-informed guidelines regarding integrated PIMH care?
- RQ2: What are the characteristics of the identified models and pathways in terms of, e.g., populations addressed, professional groups involved, "components"/different services, coordination of services, health and social care responsibilities, etc.?
- RQ3: Which recommendations for successful service delivery and information on requirements for service delivery can be derived from the identified care models and pathways?

3 Methods

For this scoping review, the following methods were applied:

3.1 Inclusion criteria

Ein- und Ausschlusskriterien

The inclusion criteria for relevant documents for this review can be found in Table 3-1.

Table 3-1: Inclusion and exclusion criteria for relevant care models

	Inclusion criteria	Exclusion criteria
Population	Parents with a mental health problem during pregnancy and in the first year after birth and their infants	-
Intervention	Comprehensive perinatal and infant mental healthcare models and care pathways with information on various components of care (such as prevention, screening, treatment, …)	Models/pathways only focussing on one component of care (e.g., screening) Models/pathways dealing with care for mental illness outside the perinatal period
Categories of interest	Characteristics of care models: e.g., ■ populations addressed ■ professionals involved ■ health and social care responsibilities ■ coordination ■ 'components' of the care models ■ … Requirements for delivery of PIMH care models: e.g., ■ legal framework conditions, resources ■ facilitators and barriers ■ involvement of stakeholders ■ …	-
Study design	Policy/guidance documents, evidence-based guidelines	-
Setting	Europe, Canada, Australia	Other regions (e.g., Asia, Africa)
Languages	English, German	Other languages
Search period	Until July 2022	From July 2022 onwards

nur Leitlinien und Versorgungsmodelle mit „best practice" Empfehlungen zu mehreren Aspekten (z. B. Prävention, Screening, Behandlung)

As we were interested in comprehensive care models or pathways for perinatal mental health, we only included guidelines and documents describing models of care that contained recommendations and information on various aspects of perinatal mental healthcare (prevention, screening, treatment, …) and excluded documents if they focused on one aspect only, e.g., screening for perinatal depression, or if they only covered one specific indication (e.g., postpartum depression). We included guidelines and other documents that give recommendations on the 'ideal' content, organisation and implementation of perinatal mental health care models (not those describing the actual status quo in a country).

Fokus auf Europa, zusätzlich Dokumente aus Australien und Kanada

As the broader vision of this work is to improve PIMH care in Austria, we focused on countries from Europe. Additionally, we included documents from Australia and Canada, because we were aware that those countries were further progressed with perinatal mental health care and could have helpful insights for the Austrian system. We focused on documents in English, but decided to also include German documents if available, because of the potential relevance for the overall project that this review is part of, which is located in Tyrol, Austria.

3.2 Literature search and expert consultation

umfassende Handsuche

To address the above RQs, we conducted a comprehensive hand search for relevant PIMH care models and pathways as well as evidence-based guidelines.

Guideline search

Suche nach evidenzbasierten Leitlinien in mehreren Datenbanken

For identifying relevant evidence-based guidelines, we used a previous AIHTA report [18] as a basis. We further searched in the following databases where documents of this nature are routinely identified:

- PubMed,
- Google/Google Scholar,
- Guidelines International Network (G-I-N),
- TRIP database.

Suchbegriffe

We used the key words 'perinatal mental healthcare', 'perinatal and infant mental healthcare', 'parental mental healthcare' and, if applicable, restricted the search to 'guidelines'.

zusätzlich Suche auf Webseiten von Institutionen, die Leitlinien erstellen

In addition to the databases, we searched the websites of the following guideline developing institutions:

- National Institute for Health and Care Excellence (NICE),
- Scottish Intercollegiate Guidelines Network (SIGN),
- World Health Organization (WHO),
- Association of the Scientific Medical Societies (*Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften*, AWMF),
- U.S. Preventive Services Task Force (USPSTF),
- Canadian Task Force on Preventive Health Care (CTFPHC),
- Royal Australian and New Zealand College of Psychiatrists (RANZCP),
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG).

Search for care models/pathways

Suche nach Versorgungsmodellen und -pfaden

For the search of care models and pathways, we also searched in the above-mentioned databases and used the terms 'perinatal mental health', 'perinatal and infant mental health', 'parental mental health' in combination with the terms 'care model', 'service delivery model', '(care) pathway' and 'integrated care'.

Additionally, we searched on the websites of the following institutions:

mehrere Datenbanken und Institutionen

- Maternal Mental Health Alliance (MMHA),
- Marcé Society for Perinatal Health,
- Global Alliance for Maternal Mental Health,
- Perinatal Anxiety & Depression Australia (PANDA).

spezifische Suche nach Dokumenten aus bestimmten Ländern

After a general search for models and pathways (without country restrictions), we carried out a more specific hand search for relevant documents from certain countries. We searched the websites of the respective national ministries of health and public health institutions. Within Europe, we focused the specific search for relevant documents on countries that were ranked in the Top 30 of the 'Human Development Index' (HDI)[1] and had more than five million inhabitants[2], to increase comparability with Austria.

Auswahlkriterien

Expert consultation

Konsultation von Expert*innen

In addition to the manual literature search, we contacted several relevant experts, for example, from relevant institutions (such as public health institutes) or authors from identified articles on PIMH care, to ask for national models and relevant documents. Our request for national care models and relevant documents was also sent via the mailing list of the Marcé Society for Perinatal Health.

3.3 Data extraction and analysis

Erstellung einer Datenextraktionstabelle für jedes Dokument

We prepared a data extraction table for each of the selected documents. We decided inductively which information to extract. The information for each category was extracted narratively and mostly reproduced verbatim. Specific terminology has been taken over as used in the respective documents. The final data extraction tables include the following categories:

- General information on the document:
  - Title of the document
  - Type of the document
  - Publisher
  - Language
  - Contracting entity/funding
  - Development of the document; involvement of people with lived experience
  - Aim of the document
  - Target users of the document

[1] https://en.wikipedia.org/wiki/Human_Development_Index, accessed 21/10/2022

[2] Countries that fulfil those criteria are: Norway, Sweden, Denmark, Finland, UK, Ireland, Switzerland, Germany, Netherlands, Belgium, France, Spain, Italy, Czech Republic (and Austria).

- Characteristics of the PIMH care model described in the document/ guideline (RQ2):
  - Target populations for the services
  - Involved professionals
  - Organisation of the services
  - 'Components' of the care models: primary prevention, early identification, triage, treatment, services involving people with lived experience, specific services addressing infant (mental) health/parent-infant relationship, specific services addressing the mental health of the partner/co-parent, other services
  - (Cross-sectoral) coordination of services
  - Education, training, continuing professional development
- Requirements for delivery of the PIMH care model (RQ3):
  - (Legal) framework conditions
  - Infrastructure, resources
  - Facilitators and barriers
  - Evaluation, monitoring
- Additional relevant documents

The data extraction tables can be found in the Appendix ("Data extraction").

Zusammenfassung und qualitative Analyse, Länder-Beispiele in Boxen

We summarised and analysed the extracted information of the included documents in chapter 4. The information was summarised across all countries and their respective documents for each extracted category. The content of each category was qualitatively analysed and narratively synthesised. Interesting details from specific countries were highlighted in boxes.

weitere Quellen, die Einschlusskriterien nicht erfüllten

We included documents that specifically described a 'best practice' model of care, including several aspects such as prevention, screening and treatment. However, through hand search and expert consultation, we identified many interesting resources and information for several countries, e.g., on pilot projects or initiatives, as well as documents that focused on one aspect only (e.g., screening for mental health problems), that did not meet our inclusion criteria. We prepared a short data extraction table for these documents, including:

Zusammenfassung der wichtigsten Informationen in Tabellen im Anhang

- Author/publisher and title of document
- Type of document
- Language of document
- Aim/focus of document
- Target population of the services
- Summary of relevant content related to PIMH – prevention and early identification
- Summary of relevant content related to PIMH – treatment
- Additional (expert) information

The tables can be found in the Appendix ("Information from other countries").

3.4 Quality assessment

Qualitätsbewertung der Leitlinien mittels AGREE II

The quality of the included guidelines was assessed using the Appraisal of Guidelines for Research & Evaluation II (AGREE II) Instrument [20]. The AGREE II instrument was developed to assess the methodological rigour and transparency in which a guideline is developed. The tool consists of 23 key items organised within six domains followed by an overall assessment. The six domains are scope & purpose, stakeholder involvement, rigour of development, clarity of presentation, applicability and editorial independence. Each item is rated on a 7-point scale (1-7 points; higher score means better quality).

Auswahl relevanter Items des AGREE II Tools für Einschätzung der Qualität der anderen Dokumente

As we did not identify a specific tool which can be used for the quality assessment of the documents describing the models and care pathways, we decided to select relevant criteria from the AGREE II instrument to be able to get an impression of the quality of those documents. The following 11 items were selected:

- Item 1: The overall objective(s) of the [document] is (are) specifically described.
- Item 3: The population (patients, public, etc.) to whom the [document] is meant to apply is specifically described.
- Item 4: The [document] development group includes individuals from all the relevant professional groups.
- Item 5: The views and preferences of the target population (patients, public, etc.) have been sought.
- Item 6: The target users of the [document] are clearly defined.
- Item 7: Systematic methods were used to search for evidence.
- Item 12: There is an explicit link between the recommendations and the supporting evidence.
- Item 17: Key recommendations are easily identifiable.
- Item 18: The [document] describes facilitators and barriers to its application.
- Item 20: The potential resource implications of applying the recommendations have been considered.
- Item 21: The [document] presents monitoring and/or auditing criteria.

The results of the quality assessment for the guidelines as well as the other documents can be found in Table A-10 in the Appendix.

3.5 Quality assurance

Qualitätssicherung durch 1 interne und 2 externe Reviewerinnen

This report was reviewed by one internal and two external reviewers. The external reviewers were primarily asked to assess the following quality criteria:

- *Technical correctness*: Is the report technically correct (evidence and information used)?
- Does the report *consider the latest findings* in the research area?
- *Adequacy and transparency of method*: Is the method chosen adequate for addressing the research question, and are the methods applied in a transparent manner?
- *Logical structure and consistency* of the report: Is the structure of the report consistent and comprehensible?
- *Formal features*: Does the report fulfil formal criteria of scientific writing (e.g. correct citations)?

The AIHTA considers the external peer review by scientific experts from different disciplines as a method of quality assurance of the scientific work. The responsibility for the report content lies with the AIHTA.

4 Results

4.1 Description of included guidelines and care models/pathways

From the broad range of countries that we searched for relevant documents (European countries listed in the Top 30 of the HDI with more than five million inhabitants, as well as Canada and Australia), we identified six documents from four countries that fulfilled our inclusion criteria: two evidence-based guidelines (from the UK/NICE [21] and Australia/Centre of Perinatal Excellence [COPE] [22]) and four national (UK [23], Ireland [24]) or regional (Canada/Ontario [25], Australia/Western Australia [WA] [26]) care models/pathways.

6 Dokumente aus 4 Ländern erfüllten Einschlusskriterien

First, we give a short overview of the included documents relevant for this review. Second, we summarise general characteristics of the documents and third, we describe similarities and differences in the characteristics of the respective care models and pathways. Last, we summarise information regarding requirements for delivery of PIMH care models from the included documents.

Aufbau des Ergebnis-Kapitels: zuerst Beschreibung der eingeschlossenen Dokumente

United Kingdom

From the UK, we included a guideline with the title 'Antenatal and postnatal mental health' [21, 27, 28] which was published by NICE in 2014 and updated in 2020. Additionally, we included 'The Perinatal Mental Health Care Pathways' [23] and the corresponding 'Implementation Guidance' [4] from the NHS. Both the guideline and the pathways have been developed by the National Collaborating Centre for Mental Health (NCCMH), which is a collaboration of the professional organisations involved in the field of mental health, national service user and carer organisations, academic institutions and NICE. For the pathways, a national Expert Reference Group has developed a series of five pathways, which include the interventions recommended by the NICE guideline. The five pathways address different aspects, namely preconception advice, specialist assessment, emergency assessment, psychological interventions and inpatient care [23].

2 relevante Dokumente aus UK:

„Antenatal and postnatal mental health" (NICE-Leitlinie)

"Perinatal mental health care pathways"

Ireland

We identified a document from Ireland titled 'Specialist Perinatal Mental Health Services – Model of Care for Ireland' [24] which was published by the National Mental Health Division of the Health Service Executive in 2017. The Model of Care described in the document is based on the maternity networks recommended in the National Maternity Strategy [29], which was launched by the Irish Minister for Health in 2016, mapping out the future of maternal and neonatal care in Ireland. Although the main focus of the Irish document was to develop a care model for the specialist (secondary and tertiary care) component of an overall perinatal mental health service, the Working Group also proposed a design for an overall perinatal mental health clinical pathway [24].

1 Dokument aus Irland:

"Specialist perinatal mental health services – model of care for Ireland"

Canada

1 Dokument aus Kanada: regionales Versorgungsmodell "Care pathway for the management of perinatal mental health" (Ontario)

For Canada, we included the 'Care Pathway for the Management of Perinatal Mental Health' [30] and its accompanying 'Guidance Document' [25] from the Provincial Council for Maternal and Child Health (PCMCH) which were tailored provincially for Ontario. There were no similar documents available at a national level in Canada at the time of the literature search for this review[3]. The described care pathway for pregnancy and postpartum includes the following five steps: ASK, ADVISE, ASSESS, ASSIST and ARRANGE [25].

In May 2021, the Canadian Perinatal Mental Health Collaborative (CPMHC), an advocacy organisation with more than 40 National Committee members (healthcare practitioners, researchers, and individuals with lived experience) representing all provinces and territories, released a report with the title 'Time for Action: Why Canada needs a national perinatal mental health strategy now more than ever' [31].

Australia

2 Dokumente aus Australien: "Mental health care in the perinatal period" (COPE-Leitlinie) & "Perinatal and infant mental health model of care" (West-Australien)

For Australia, we identified a clinical guideline which was published by the Centre of Perinatal Excellence (COPE) in 2017, 'Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline' [22][4]. As an example for a care model, we included the document 'Perinatal and Infant Mental Health Model of Care – a framework' that was published by the Western Australian (WA) Department of Health in 2016. The document has two parts: part 1 outlines the development process, the context, evidence base and rationale, whereas part 2 includes recommendations and provides a comprehensive Service Guide, which lists several potential service components [26].

4.2 Quality assessment of the included documents

hohe Qualität der Leitlinien, andere Dokumente niedrigere Scores

We assessed the quality of the two included guidelines using the AGREE II tool. The two guidelines [21, 22] scored 149 and 150 points respectively out of a possible 161 points. This corresponds to 93%. The adapted AGREE II tool which we used for assessing the other documents (see chapter 3.4) resulted in scores between 43 and 61 points out of a possible 77 points, which corresponds to a percentage of 56-79 % [23-26].

[3] Personal information from Allison Hall, Provincial Council for Maternal and Child Health, via e-mail on 29/06/2022.

[4] A draft version of the updated guideline was published for public consultation: https://www.cope.org.au/wp-content/uploads/2022/11/Guidelines-consultation-draft-04Nov22.pdf, accessed 15/11/2022.

4.3 General characteristics of the documents

Type of document, publisher, language

Leitlinien und „Guidance"-Dokumente von unterschiedlichen Institutionen

Two documents are clinical (practice) guidelines [21, 22], two documents are called 'guidance' documents [23, 25], and for two documents, the type of document is not reported [24, 26]. Several types of institutions were publishing the documents, ranging from governmental institutions such as the WA Department of Health [26] to specific mental health [23, 24] or maternal and child health [25] institutions. All documents were written in English.

Contracting entity/funding

Beauftragung & Finanzierung v. a. durch öffentlich finanzierten nationalen Gesundheitsdienst

The two Australian documents were commissioned/funded by the national and state department of health, respectively [22, 26]. The contracting entity and funder of the documents from the UK and Ireland were the respective publicly funded healthcare systems, i.e. National Health Service (NHS) and Health Service Executive (HSE) [21, 23, 24], for the Canadian document [25], there was no information on this aspect.

Development of the model/pathway/guideline

Entwicklung der Leitlinien anhand der jew. Methoden-Manuale

auf Basis der besten verfügbaren Evidenz, unabhängige Arbeitsgruppen

COPE-Leitlinie derzeit in Überarbeitung

All included documents describe how they have been developed, although the level of detail varies. The two guidelines [21, 22] provide the most detailed information on the process of development. Both guidelines were developed according to defined methods (using the NICE manual [32] and the National Health and Medical Research Council (NHMRC) guideline development processes [33]). The guidelines are described as being based on the best available evidence, prepared in the form of a systematic review, and they were developed by independent committees/working groups of experts from various health and social care professions. Guidelines from both institutions are regularly checked and updated if necessary. The NICE guideline was published in 2014 and last updated in 2020; the COPE guideline, which was published in 2017, is currently updated and will be finalised in mid-2023[5], a consultation draft is now available[6].

weniger detaillierte Beschreibung in den anderen Dokumenten

multiprofessionelle Arbeitsgruppen

auch Evidenz berücksichtigt (aber weniger systematisch)

The other documents, describing the care models, provide less detailed information on their development processes. However, all of the four care models were developed by some kind of working group including experts from various disciplines and professions (e.g., Core Working Group and associated sub groups [26], focus group sessions with clinical stakeholders [25], Expert Reference Group including, e.g., experts by experience, carers, practitioners, academics, commissioners, service managers [23], multidisciplinary Working Group with service user representation [24]). Additionally, all of the documents state that the development of the care model was informed by evidence, e.g. identified in a literature review [25], or by using a range of key international, national and state frameworks, plans and reports [26].

[5] Personal information from the Centre of Perinatal Excellence, via e-mail on 23/07/2022.

[6] https://www.cope.org.au/wp-content/uploads/2022/11/Guidelines-consultation-draft-04Nov22.pdf, accessed 15/11/2022. For further information on new recommendations according to the consultation draft from the COPE guideline, see discussion.

Einbeziehung von Personen mit gelebter Erfahrung in die Entwicklung der meisten Dokumente

Five of the six documents [21-24, 26] report that **people with lived experience** were involved in the development of the care models. In three documents, no further information is provided, except that 'experts by experience', 'service user representatives' or 'consumers' were part of the expert working groups [23, 24, 26]. The two guidelines describe the involvement of people with lived experience in more detail: according to the NICE guideline development process, a service user and representatives of a national service user group were part of the guideline development group and contributed to all steps of the guideline development, e.g., writing the review questions, giving advice on most relevant outcomes for service users, helping to ensure that the evidence addressed their views and preferences [21]. In the COPE guideline, the expert working group involved consumers as well as representatives from the Australian organisation PANDA (Perinatal Anxiety & Depression Australia). The perspectives of those affected were also sought in the consultation process [22].

Aims of the documents

Ziele der inkludierten Dokumente: z. B.

Zusammenfassung der Evidenz und Empfehlungen zu Prävention, Identifizierung und Behandlung

Definition von Behandlungspfaden

All care models and guidelines mention their aims and objectives. The two included guidelines [21, 22] aim to summarise the current evidence and give recommendations for the recognition, assessment, prevention and treatment of perinatal mental health problems. Both guidelines cover a range of different mental health problems and address various aspects from prevention to treatment. The UK Pathways [23] aim to outline access to services in a series of pathways for women with a previous or present mental health problem who are planning a pregnancy, are already pregnant or have had a baby recently. The document also includes a Pathways values statement that mentions some general principles (see box/Example 1). The Western Australian model of care [26] aims to define evidence-based best practice and service delivery, focusing on integrated care, a multidisciplinary approach and collaborative decision-making. The objective of the care model from Ontario is to support healthcare professionals in delivering perinatal mental healthcare, including identifying individuals who may need care, directing them to the most suitable care pathway and monitoring via follow-up [25]. The Irish Model of Care [24] specifically outlines the specialist component of perinatal mental health services (i.e., secondary and tertiary care); however, the working group also proposes a design for an overall perinatal mental health clinical pathway.

Example 1: The Pathway values statement (UK)

'This guidance represents a commitment to ensuring that mental health care is delivered in a person-centred, compassionate and supportive way, promoting safety and wellbeing at the forefront. Mental health service provision should be needs-led, responsive and delivered in a way that empowers people to build on their strengths, promotes recovery, supports families and carers, and ensures equality and fairness for all.'

Abbreviations: UK – United Kingdom
Source: [23, p.4]

Target users

Five of the six documents provide information of who are the target users of the documents. These mainly include healthcare professionals caring for women and families in the perinatal period [21, 22, 25, 26] (e.g., mental health practitioners, midwives, general practitioners [GP], obstetricians, paediatricians, etc.), people responsible for service planning [21, 23, 26] as well as families and carers [21-23].

Adressat*innen: Gesundheitspersonal, Zuständige für Leistungsplanung, Familien

4.4 Characteristics of PIMH care models (RQ2)

For the research question 2, we aimed to summarise available information from the included documents describing the characteristics of the recommended PIMH care models, e.g., target populations for the services, involved professionals, organisation and coordination of services, 'components' of the care models.

Zusammenfassung der Charakteristika der Versorgungsmodelle

Target populations for the services

Two documents focus on pregnant and postpartum women as well as women planning a pregnancy, with a past or current mental health problem or who may have an existing or new mental health problem [23, 24]. Three documents [21, 22, 25, 26] define all women, who are planning a pregnancy, are pregnant or have had a baby in the last year, as their target populations; only one of them also explicitly mentions fathers and fathers-to-be [26]. Another document uses the term "pregnant and postpartum individuals" to describe their target population [25]. None of the documents explicitly addresses LGBTQI+ families or non-birthing parents.

Zielgruppen: alle Frauen, die Schwangerschaft planen, schwanger sind, oder ein Kind <1 Jahr haben bzw. mit früheren/aktuellen psych. Erkrankungen

Involved professionals

Five of the six models and guidelines [21, 22, 24-26] provide information regarding the specific professionals involved in the service delivery. In general, this involves all healthcare professionals caring for women and families during the perinatal period. These include, e.g.:

involvierte Berufsgruppen:

- Medical specialisations:
  - GPs
  - Obstetricians
  - Neonatologists
  - Paediatricians
  - Psychiatrists

verschiedene medizinische Fachrichtungen

- Midwifery and nursing specialisations:
  - Midwives
  - Perinatal mental health midwives (see box/Example 4)
  - Maternal and child health nurses
  - Mental health nurses
  - Community psychiatric nurses
  - Practice nurses
  - Public health nurses
  - Community nurses

Hebammen und Pflegepersonal (mit unterschiedlichen Spezialisierungen)

assoziierte Berufsgruppen

- Allied professionals:
  - Clinical psychologists
  - Occupational therapists
  - Social workers
  - Peer support workers
  - Health visitors

spezialisierte peripartale psychische Dienste

Multidisziplinarität und Vernetzung mit anderen Leistungen (z. B. Sozialdienste, Schwangerenbetreuung)

Two documents also provide details of the professionals that should be involved in specialist perinatal mental health services. According to the Irish Model of Care [24], the key disciplines of such a specialist team include a consultant psychiatrist with special interest in perinatal psychiatry, a resident doctor, a mental health nurse, a psychologist, an occupational therapist, a social worker and an administrator. The UK Pathways [23] do not mention specific professionals, but state that specialist perinatal mental health services should consist of specialist community perinatal mental health teams and inpatient mother and baby units. Both community and inpatient teams should be multidisciplinary and linked with other services such as maternity care, health visiting or social care.

Organisation of the services

organisatorische Aspekte: z. B.

Ebenen der Versorgung, Leistungsanbieter*innen, Koordinierung

All documents provide information (with different levels of detail) regarding the organisation of the services, i.e., the levels of care, types of providers and coordination between services. Generally, several different healthcare professionals and levels of care are involved in PIMH care. Universal services are those that all families have access to, including, e.g., primary care, maternity services and health visiting [23, 24, 26]. Targeted services (at primary or secondary level) focus on women, children and families with additional needs or increased risk of poor health [26]. Mental health services and specialist perinatal mental health services provide interventions to women and families with mental health problems. Documents recommend to organise those e.g., in clinical networks linking community teams and mother-baby units (MBU) [21, 23] or in a 'hub and spoke'[7] clinical network model as in Ireland (see box/ Example 2) [24].

Example 2: Clinical network model (Ireland)

The care model from Ireland suggests that specialist perinatal mental health services should be provided based on a 'hub and spoke' clinical network model: in each hospital group, the maternity service with the highest number of deliveries should be the 'hub' (i.e. a more centralised unit with a higher level of skills and knowledge). The other, smaller units are the 'spokes', each of them linked to one of the larger 'hub' hospitals. Each 'hub' should have a specialist perinatal mental health service with multidisciplinary staffing which is led by a consultant psychiatrist in perinatal psychiatry. In the (subordinate) 'spokes' units, the liaison psychiatry team, complemented by a mental health midwife, will provide the input to the maternity service. This team is linked to the 'hub' specialist perinatal mental health team for training, clinical advice and regular meetings.

Source: [24]

[7] The hub-and-spoke organisation is a model in which resources for service delivery are arranged in a network consisting of an anchor facility (hub) that provides a comprehensive range of services, complemented by secondary facilities (spokes) that provide a more limited range of services and refer patients requiring more intensive services to the hub for treatment [34].

klar definierte Überweisungspfade, stufenweise Versorgung, multidisziplinäre Netzwerke

Clearly defined care pathways as well as a stepped-care approaches or frameworks are considered as important and helpful for the organisation and provision of PIMH care [21, 22, 25]. Furthermore, the need of multidisciplinary networks is emphasised to have access to specialist expert advice, e.g., on medication during pregnancy and breastfeeding, to ensure transfer of information and continuity of care, and to help healthcare professionals navigate diverse treatment options [21, 22, 25].

West-Australien: Service Guide mit potentiellen Interventionen und Anbieter*innen für unterschiedliche Zielgruppen

mehrere Versorgungsebenen

The document from Western Australia [26] includes a comprehensive 'Perinatal and Infant Mental Health Service Guide' which lists potential service providers, skill requirements and service components, chronologically from pre-pregnancy, pregnancy, postnatal, infant and early child period, in the primary, secondary and tertiary healthcare level. Services are differentiated into universal services, early identification, targeted services for families with additional needs, management/treatment and intensive treatment (specialist services). The 'guiding principles' are summarised in Example 3 (see box). The 'Perinatal and Infant Mental Health Conceptual Model' shows the different levels of services that are available for families from before pregnancy until early childhood (see Figure 4-1).

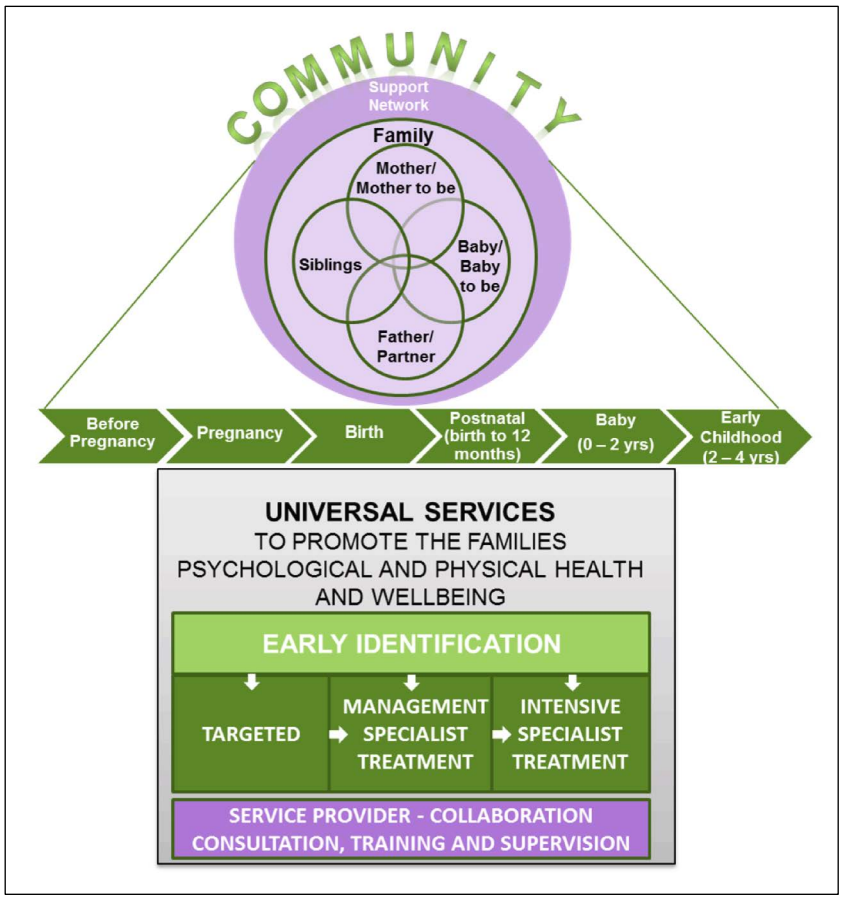

Figure 4-1: Perinatal and Infant Mental Health Conceptual Model, WA model of care (Source: [26])

Example 3: Guiding principles (Western Australian model of care)

'The right care, at the right time, by the right team, and in the right place'

The following guiding principles shall provide a framework for further development of more specific models and pathways of recognised need and care:

- *'Promotion of emotional health and wellbeing of women, their infants/children, and families*
- *Embracing diversity within the population and communities of WA*
- *Substantive equality and access to services that are timely and responsive*
- *Partnerships and collaboration in the provision of care and services*
- *Consumer-centred services that recognise the needs of infants and young children and that seek to optimise the child-caregiver attachment relationship*
- *Accountability within a clearly identified safety and quality framework'*

Abbreviations: WA – Western Australia

Source: [26, p.55]

'Components' of the care models

Komponenten der Versorgungsmodelle

The information regarding the components of the included care models was extracted from the documents using the following categories:

- Primary prevention (including, e.g., counselling, psychoeducation)
- Early identification (e.g., screening)
- Triage (including referral and assessment)
- Treatment (e.g., psychological therapies, pharmacological treatment)
- Services involving people with lived experience (e.g., peer-support group)
- Specific services addressing infant (mental) health/parent-infant relationship
- Specific services addressing mental health of the partner/co-parent
- Other services

Primary prevention

Primärprävention:

This category summarises services and interventions with a focus on prevention and counselling that can be provided at different time points, depending on the respective target group. For women with new, pre-existing or past mental health problems or at risk for mental illness who are planning a pregnancy, pre-conception advice or planning is recommended in three documents [21, 23, 25]. This should include, e.g., how pregnancy and childbirth might affect a mental health problem and how a mental health problem and its treatment might affect the woman, the fetus and baby, as well as parenting (including breastfeeding) [21, 23]. The pre-conception advice should be given by specialist community perinatal mental health services. Women should be supported in making informed decisions, together with their practitioner, by assuring access to good quality advice, information and support [23]. Pre-conception planning also aims to optimise management before getting pregnant, including prevention strategies such as improving health behaviours (e.g., nutrition, physical activity, sleep patterns), promoting a supportive environment, and reviewing psychological interventions and/or medication currently or previously used. Planning the pharmacological management during pregnancy and breastfeeding should consider benefits and risks of medication use and should be made using a shared decision-making approach [25].

Beratung vor einer Schwangerschaft für Frauen mit bereits bestehenden psychischen Erkrankungen

z. B. zu Medikation, Präventionsstrategien (z. B. Ernährung, Bewegung, Schlaf und soziale Unterstützung)

Bereitstellungen von Informationen für (werdende) Eltern

z. B. zu psychischer Gesundheit allgemein, Symptomen von peripartalen psych. Erkrankungen, soziale Unterstützung, kindliche Entwicklung

aufsuchende Hilfen, Gruppenangebote

Three documents [21, 22, 26] recommend to provide all women, families and expectant parents with information on mental health and problems that may arise during pregnancy and postpartum, so that they understand that mental health problems are common during these periods and that enquiring about mental health problems is important. Other relevant topics include, e.g., emotional health in general, normal adjustment experiences as parents, social support, infant development, couple cooperation as well as information specific for fathers-to-be. This information can be disseminated through different information channels (e.g., verbal information distributed by various primary care providers, print material, social media). Other suggested service components from the WA Service Guide are, e.g., a home visit by a child health nurse who asks about wellbeing, gives information and checks if further support is necessary, social support groups, playgroups, peer support (groups), telephone support lines as well as information on the child's self-regulation, feeding, sleeping, emotional health, parenting issues and parent-child relationship. In general, the WA care model [26] recommends to develop a comprehensive approach to perinatal and infant/child mental health promotion, illness prevention, detection, and early intervention, which requires broad action across different settings and target groups, e.g., to promote healthy attitudes and behaviours in all women of childbearing age.

Gesprächsangebote für Frauen, v.a. bei Komplikationen oder Trauma

Two documents also recommend to give women the opportunity to talk about their pregnancy and birth experiences, especially in the case of complications or trauma [24, 26]. According to the care model from Ireland [26], this can be one of the tasks of the so-called mental health midwives, who were developed following the recommendations from the Irish care model. They are expected to make an important contribution to the prevention of perinatal mental illness, among other tasks (see box/Example 4).

Example 4: Perinatal Mental Health Midwives (Ireland)

Following the recommendations from the Irish model of care, the role of the Perinatal Mental Health Midwife was developed and is now a key team member in all maternity hospitals in Ireland. PMH midwives work with midwives and obstetricians at all levels of care from booking and review clinics to postnatal wards. The aim of their work is to ensure that women with perinatal mental health problems and their families receive the mental health care and support they need. Their work includes, e.g., offering brief interventions for pregnancy related symptoms and individual or group interventions for women with traumatic birth experiences, raising awareness of perinatal mental health problems, organising early management and treatment, providing advice to colleagues and to women and families on topics such as the identification, assessment and management of perinatal mental health problems. A range of benefits can be expected from the work of the PMH midwives according to the Irish care model, e.g., raising awareness in pregnant women and their families of the emerging signs of mental health problems, promoting positive mental health of mothers which is important to the physical and psychological wellbeing of families, reducing the stigma and discrimination associated with mental health problems as well as providing adequate education and training for staff in maternity hospitals and in (student) midwives. A self-assessment framework document was developed to support new and existing PMH midwives.

Abbreviations: PMH – perinatal mental health

Sources: [24, 35]

Early identification

Früherkennung:

Screening auf peripartale psychische Probleme bzw. Erkrankungen empfohlen

zu mehreren Zeitpunkten in Schwangerschaft und nach Geburt

Detection and screening are an important and detailed part of almost all documents, except for the UK Pathways [23], which focus more on the care pathways for already identified mental health problems.[8] In the remaining five documents [21, 22, 24-26], the processes for identifying mental health problems are described in more or less detail. All of them recommend to screen for mental health problems in the perinatal period. However, the Irish model of care [24] only mentions the mental health screening at the booking visit at the beginning of pregnancy and does not contain information on postnatal screening. The other documents recommend to screen at the beginning of pregnancy [21, 22, 26], at all contacts during pregnancy and postnatal period [21, 25] and to repeat screening at least once later in pregnancy, at 6-12 weeks after birth and at least once later in the first postnatal year [22].

verschiedene Screening-Tools verfügbar

Depressionen: "Whooley Questions"

Regarding screening tools, two documents [21, 24] suggest to use the Whooley questions:

- 'During the past month, have you often been bothered by feeling down, depressed or hopeless?'
- 'During the past month, have you often been bothered by having little interest or pleasure in doing things?'

According to [24], a third question should be considered if a woman answers 'yes' to the initial questions:

- 'Is this something you need or want help with?'

Edinburg Postnatal Depression Scale (EPDS)

Patient Health Questionnaire (PHQ-9)

"sensibles Fragen" (ohne spezifisches Tool)

The NICE guideline recommends to use the Edinburgh Postnatal Depression Scale (EPDS) or the Patient Health Questionnaire (PHQ-9) if the woman responds positively to the Whooley question, if she is at risk or if there is clinical concern [21]. Two other documents [22, 26], however, recommend to use the EPDS as a primary screening instrument for all women. One care model [25] states that healthcare professionals, in addition to being alert to risk factors and signs or symptoms, should 'sensitively ask' about mental health, wellbeing or specific symptoms, and no specific tools are required. However, several validated tools for identifying depression and anxiety disorders are included in the documentation tool and can be used to improve identification. The document further mentions that the dialogue about the woman's mental health and wellbeing should include the person's context and diversity, considering, e.g., the person's age, gender identity, race, ethnicity, ability and disability, and other factors [25].

Angststörungen: Generalized Anxiety Disorder Scale (GAD-2) oder Angst-Items von anderen Tools

The two guidelines also give specific recommendations regarding screening for anxiety disorder, which can be provided using the 2-item Generalized Anxiety Disorder Scale (GAD-2) [21] or the anxiety items from other screening tools (e.g., EPDS, Depression, Anxiety and Stress Scale [DASS]) or from psychosocial assessment tools (e.g., Antenatal Risk Questionnaire [ANRQ]) [22].

Befragung nach früheren oder aktuellen psych. Erkrankungen und Behandlungen sowie Familenanamnese

Additionally, two documents state that all women should be asked at the booking appointment at the beginning of pregnancy about any past or present mental illness, past or present treatment for mental health problems (including inpatient care and medication) [21, 24] as well as severe perinatal mental illness in a first-degree relative [21]. The COPE guideline recommends to

[8] However, the UK Pathways state that all women should be asked about their mental health at each routine antenatal and postnatal contact.

assess psychosocial risk factors during pregnancy and after birth, for which the ANRQ can be used. The ANRQ is a 13-item structured questionnaire that covers, e.g., relationship with partner, recent stressful life events, anxiety, social support, past history of depression or other mental health conditions as well as treatment, having experienced abuse [22]. Asking about the woman's (emotional) wellbeing at every antenatal and postnatal visit is also recommended [22, 25].

Screening auf Alkohol- und Drogenkonsum

One document additionally provides recommendations regarding alcohol and drug misuse. The Alcohol Use Disorder Identification Test (AUDIT) should be applied if alcohol misuse is suspected. Regarding drug use, the guideline refers to another NICE guideline on drug use [21]. The WA service components also include screening for risk of harm to parent, fetus or other children from violence or drug and alcohol use (without further information on how to provide the screening) [26].

Durchführung des Screenings durch z. B. Hebamme, Pflegeperson, Hausarzt/ärztin oder Gynäkolog*in

Regarding the healthcare professionals involved, the screening is recommended to be carried out during the 'booking visit' by the midwife or GP from two documents [21, 24]. The COPE guideline recommends that screening is conducted wherever a woman seeks antenatal and postnatal care, e.g., in general practice (by the GP or a practice nurse), in midwifery and maternal and child healthcare (by midwives and maternal and child health nurses) or in obstetric practice (by the obstetrician or a practice midwife) [22]. The other documents do not specify which healthcare professional should provide the screening. However, the care model from Canada/Ontario [25] mentions that pregnant and postpartum individuals who need help with their mental health could also be identified through the individual's support system (e.g., family, partner) or through other services, such as social services or agencies assisting in the case of domestic violence. Healthcare professionals should be aware of possible services providing support, such as the 'Healthy Babies Healthy Children (HBHC) Program' (see box/Example 5).

Example 5: 'Healthy Babies Healthy Children (HBHC) Program' (Canada/Ontario)

The HBHC Program is a free and voluntary programme which is delivered by Ontario's public health units together with hospitals and other community partners and funded by the Ministry of Children, Community and Social Services. Universal screening and targeted assessment are used to identify families where the child's healthy development is at risk. It is a home-visiting programme which gives families information on relevant topics such as connecting with your baby, taking care of yourself and your family, as well as other services available in the community. The programme is addressed to pregnant women and their families with children from birth until school entry.

Sources: [25, 36]

Voraussetzungen für Screening

Example 6 (see box) summarises the requirements for screening from the WA service model pointing out that screening procedures always require a defined follow-up or referral pathway including available services for those where risks or mental health problems have been identified during the screening [26].

Example 6: Requirements for screening (Australia/WA)

One of the recommendations from the Western Australian framework is to '*develop a comprehensive approach to perinatal and infant/child mental health promotion, illness prevention, detection, and early intervention*'. The authors of the document point out, that screening is used for identifying people at increased risk and should always lead to further assessment if necessary. This means that professional services have to be available so that a follow-up of identified problems can be ensured. Any screening protocol needs to have defined referral pathways.

Abbreviations: WA – Western Australia
Source: [26]

Triage

Diagnostik/Überweisung:

After the identification of women with or at risk of mental health problems, the next steps are further assessment and referral, if necessary. Five of the six documents provide information on this care component [21-25]. The Perinatal Mental Health Care Pathways from the UK [23] include detailed information on five different pathways covering different mental health problems and severities during pre-conception, pregnancy and the postnatal period (see Figure 4-2).

verschiedene Pfade je nach Art und Schweregrad der psych. Erkrankung

z. B. auf psych. Gesundheit spezialisierte Hebamme, spezialisierter Dienst für peripartale psychische Gesundheit

In case of a known or suspected mental health problem, women are referred to the perinatal mental health services [23, 24]. The Irish care model suggests a mental health triage system: women with milder anxiety/depression, fear of pregnancy or previous birth trauma will be referred to a mental health midwife. Women with moderate or severe mental illness or complex mental health issues will be further assessed by the specialist perinatal mental health service [24]. According to the NICE guideline, this should be available within two weeks of referral and should include a range of risk factors, e.g., own and family history of any mental health problem, physical wellbeing, alcohol and drug misuse, the woman's experience of pregnancy, the mother-baby relationship, social networks, living conditions, domestic violence, sexual abuse or childhood maltreatment [21]. One document recommends that the healthcare professional determines the level of severity of the mental health concern. For common mental health problems such as depression or anxiety, the recommended screening tools (e.g., PHQ, GAD, EPDS) can help to assess the severity, in combination with clinical assessment [25].

bei peripartaler psychiatrischer Krise (z. B. Suizidrisiko) dringende psychiatrische Beurteilung

In case of a referral for a perinatal mental health crisis, an immediate assessment and an urgent mental healthcare plan need to be in place [23], e.g. when a woman is identified as at risk of suicide [22]. An emergency psychiatric assessment has to be initiated if there is uncertainty about whether a woman develops mania or psychosis, or if there are concerns about the safety of the woman and/or her family [25].

Überweisungs- und Diagnostikpfade abhängig von Setting und Umfeld

According to the COPE guideline, referral and assessment pathways depend on the setting (e.g., GP, maternity service) and the location (e.g., urban, rural). Whatever pathway is applied, coordinated care, clear communication and documentation are considered as crucial. It is also emphasised that clear guidelines for the use and interpretation of the psychosocial tool or interview regarding the threshold for referral are needed [22].

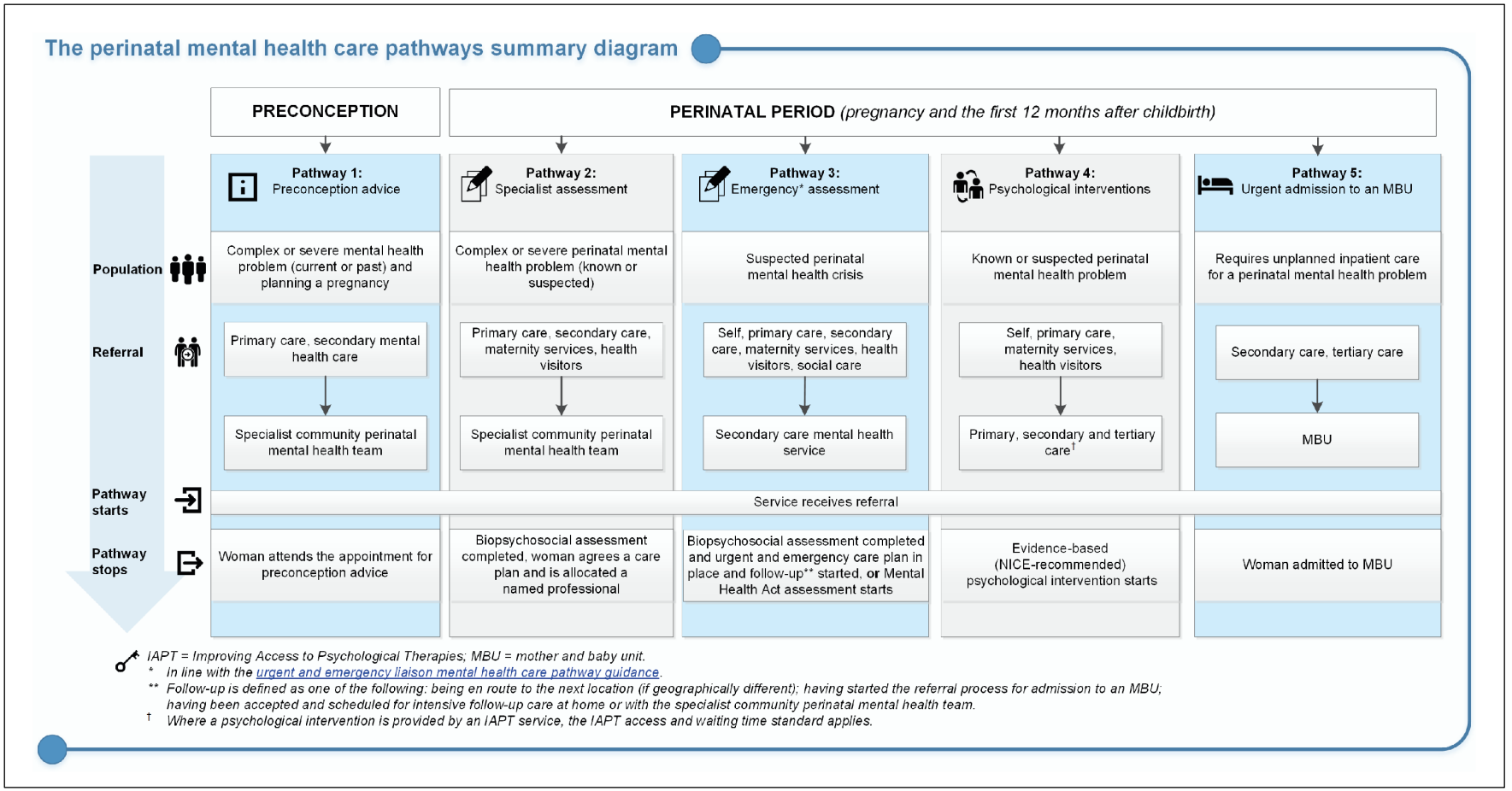

Figure 4-2: Perinatal Mental Health Care Pathways (UK) (Source: [23])

Treatment

Behandlung:

All included documents contain information about care and treatment of perinatal mental health problems, which involves psychosocial/psychological/psychotherapeutic interventions, pharmacological treatment as well as other important aspects. The structure and the level of detail of this information are very heterogeneous across the six documents. Some documents give recommendations for specific mental health problems (e.g., depression), others differentiate between different types of treatment such as psychological interventions and medication, or have developed specific pathways [23], treatment steps [25] or lists of potential service components [26].

allgemeine Aspekte

Information über Behandlungsoptionen, gemeinsames Erstellen eines individuellen Behandlungsplans

General aspects: the two guidelines emphasise that treatment and prevention options as well as any concerns about the pregnancy or the baby should be discussed with the woman (and her partner, family or carer). They should receive information on, e.g., potential benefits of psychological interventions and psychotropic medication, possible harms as well as consequences of no treatment. Treatment options that are available when breastfeeding should also be discussed [21, 22]. The individual care plan should be created together with the woman (and her partner/family) [25, 26]. Interventions for mental health problems during the perinatal period should be provided within a stepped-care model of service delivery [21, 25, 26] (see box/Example 7). The COPE guideline [22] also summarises different approaches that may be appropriate, depending on the individual situation (see box/Example 8).

psychologische/ psychosoziale/ psychotherapeutische Interventionen

Psychological/psychosocial/psychotherapeutic interventions: some of the documents mention specific psychological interventions for certain mental ilnesses. For example, for depression and anxiety disorders, the recommendations range from structured psychoeducation, facilitated/guided self-help and social support groups to directive counselling and structured psychological interventions such as cognitive behavioural therapy (CBT) and interpersonal psychotherapy (IPT) [21, 22, 25], depending on the severity of the symptoms.

medikamentöse Behandlung

Pharmacological treatment: both guidelines [21, 22] include recommendations on pharmacological treatment of certain perinatal mental health illnesses. However, as these recommendations are very specific, we refrained from extracting them into our tables (see Appendix), but we provide the reference and page number for further information.

stationäre Behandlung in Mutter-Kind-Einheiten

Inpatient treatment: Women who need inpatient care should have urgent access to a specialised mother-baby unit (MBU) in the hospital to avoid separation from her infant. Staff with specialist expertise to manage complex or severe perinatal mental health problems are needed [23, 25]. Special attention should also be paid to the rest of the family, e.g., support and counselling for other children in the family [24].

weitere Dienste, z. B. Suchtbehandlung

Some documents also mention other services than the ones listed above, e.g., *addiction services* which are described as an important component of primary care. They should be available in the community, but also within easy reach of maternity services [24].

Example 7: Treatment steps (Canada/Ontario)

The care model from Canada/Ontario defines four Treatment steps, depending on the nature and severity of the person's symptoms, and their impact on functioning and wellbeing.

Table 4-1: Treatment Steps according to the care model from Ontario

Treatment Step	Symptoms	Interventions
Treatment Step 1: Psychosocial Interventions (Community Support)	Common mental health concerns such as depression or anxiety, where symptoms are mild or subclinical (may include patients for whom you are taking a watch-and-wait approach)	■ Self-help (perinatal-specific): e.g., self-directed workbooks ■ Guided self-help: e.g., internet- or paper-based self-guided intervention that may include assistance from a trained coach ■ Peer support and supportive counselling: e.g., mother-to-mother support, and public health nurse telephone/home visits, facilitated support groups
Treatment Step 2: Psychological Interventions and Antidepressant Medication	Common mental health concerns of mild severity that do not remit with Step 1 interventions and Common mental health concerns of moderate severity or greater	■ Cognitive Behavioural Therapy (CBT) and Interpersonal Psychotherapy (IPT): CBT and IPT are first-line treatments for perinatal depression and anxiety ■ Medication (within scope of primary care provider): antidepressants can be used (and/or psychological intervention) when (1) psychological intervention alone is insufficient, (2) symptoms are severe, or (3) preferred by the person
Treatment Step 3: Additional Specialised Interventions	Mild or moderate mental health concerns that do not remit with Step 2 interventions and Severe mental health concerns (severe depression or other severe mental illnesses such as bipolar disorder or schizophrenia)	■ Medication ■ Other: refer to local acute care centre with specialty psychiatric services. May include: specialised psychotherapy, pharmacological follow-up, somatic treatment options, neurostimulation, electroconvulsive therapy ■ Partial or full hospitalisation
Treatment Step 4: Urgent Care and Hospitalisation	Suspected mania or psychosis and Discloses intention or plan for suicide, self-harm or harm to fetus/infant	■ Immediate action ■ Urgent risk assessment – safety first. A person with possible mania, psychosis, thoughts of harming self or baby should NOT be left alone or with baby until an appropriate assessment is complete. ■ Provider is concerned about mania, psychosis or harm to self or others: Initiate plan to transfer patient for emergency psychiatric assessment ■ Provider assesses that there is no active intent or plan for harm to self or others, and that patient has appropriate support, as well as capacity to access crisis services if symptoms worsen acutely: ■ Mobilise patient's support system ■ Ensure the individual has contact information for crisis services ■ Maintain close follow-up, follow treatment steps 2 and 3 as appropriate ■ Maintain and update plan of action with patient and patient's support system, including providers in patient's circle of care

Source: [25]

Example 8: Management and treatment approaches (Australia/COPE)

The COPE guideline lists potential approaches for different situations, such as:

- *Women with moderate to severe symptoms:* a comprehensive mental health assessment will be required, subsequent management will probably involve pharmacological treatment, ongoing psychosocial support and possibly psychological therapy
- *Women with a past history of a severe mental health problem:* a comprehensive mental health assessment will be required before or early in pregnancy, as well as additional support
- *Women with mild to moderate symptoms:* a comprehensive mental health assessment may be required; psychological therapy may be beneficial in addition to psychosocial support
- *Women experiencing mild depressive or anxiety symptoms in the early postnatal period:* practical and emotional support may be helpful (e.g., advice on parenting, unsettled infants, sleep deprivation), monitoring is required
- *Women without current symptoms but experiencing significant psychosocial risk:* may benefit from psychosocial support
- *Women with a pre-existing mental health condition:* may already be under the care of a GP, psychologist and/or psychiatrist; comprehensive mental health assessment is required in case of a (suspected) recurrence or new onset of severe mental health condition, suicidal thoughts or evidence of harm to herself or infant/children

Abbreviations: COPE – Centre of Perinatal Excellence
Source: [22]

Services involving people with lived experience

Einbeziehung von Personen mit gelebter Erfahrung:

Five of the six documents mention services such as peer support groups or other interventions involving people with lived experience; however, detailed information are not available [21, 22, 24-26]. The two guidelines do not contain specific recommendations on this topic, but state that women with depressive symptoms in the postnatal period should be informed of the potential benefits of a social support group, which are often facilitated by peer volunteers (mothers with a history of perinatal mental health problems) who are trained to deliver interventions. These groups mainly aim to bring women with similar experiences into contact with each other and to give the opportunity for sharing their problems and feelings [21, 22]. In the care model from Canada/Ontario, 'peer support and supportive counselling' is part of 'treatment step 1 (psychosocial interventions/community support)', which is recommended for mild or subclinical symptoms of common mental health concerns such as depression or anxiety [25]. The service guide of the WA framework [26] lists 'facilitation of access to a wide range of health and support services, including peer support groups, tailored to the woman and her family's needs' as one of several potential service components for postnatal mental healthcare and emphasises the importance of access to peer support workers who bring lived-experience of perinatal mental health problems. The Irish model of care mentions that 'voluntary and self-help organisations' are part of an overall perinatal mental healthcare model [24].

keine detaillierten Informationen in den identifizierten Dokumenten

Peer-Selbsthilfegruppen z. B. als mögliche Intervention bei leichteren Symptomen

Specific services addressing infant (mental) health/parent-infant relationship

spezifische Leistungen mit Fokus auf die kindliche (psych.) Gesundheit bzw. Eltern-Kind-Beziehung:

Assessment der Mutter-Kind-Interaktion von Leitlinien empfohlen …

Information regarding specific services that address infant (mental) health and/or parent-infant relationship can be found in four of the six documents [21, 22, 24, 26]. Both guidelines recommend to assess the mother-infant relationship, including verbal interaction, emotional sensitivity and physical care, at all postnatal contacts [21]/as an integral part of postnatal care [22] and to discuss any concerns of the mother about her relationship with her baby. Further intervention to improve mother-infant relationship should be considered if necessary. Additionally, the NICE guideline recommends to 'acknowledge the woman's role in caring for her baby and support her to do this in a non-judgmental and compassionate way' [21]. The Irish model of care [24] lists parent-infant services as one of several components of the proposed clinical

pathway for perinatal mental health services. These services are provided at primary care level for mothers together with their infants in case of problems with the mother-infant relationship. The WA care model emphasises that mental illness in one family member can affect the wellbeing of other family members. Thus, it is important to create integrated services providing coordinated care that includes and considers the support needs of all family members in a family-centred approach. Regarding early identification, observation of parent-infant interaction as well as a bio-psychosocial assessment of infant and caregiver (including parental mental health, family functioning, parent-infant relationship) is listed as service component. Another relevant service component is described as 'observation and assessment of mother-infant interaction and referral to mother-infant relationship therapies'. Preventative attachment-based therapeutic approaches to support the parent-infant relationship are also listed as potential service components [26].

… tw. Beispiele für Interventionen zur Unterstützung der Eltern-Kind-Beziehung

Specific services addressing the mental health of the partner/co-parent

None of the included documents mentioned specific services addressing the mental health of the partner or co-parent. However, the NICE guideline recommends 'to take into account, assess and address the needs of partners, families and carers that might affect a woman with a mental health problem in pregnancy and the postnatal period', including the wellbeing of the baby or other children, the role of the partner, family and carer in providing support and the woman's relationship with her partner, family and carer (and how it is affected by the mental health problem) [21]. The UK Pathways document emphasises that the contribution from partners and families to the recovery from perinatal mental health problems is crucial and that partners and carers should therefore be able to 'access support as individuals and in their caring role' [23]. The COPE guideline includes a chapter on perinatal mental health in men in the background section, dealing with, e.g., psychosocial factors associated with men's perinatal mental health, depression and anxiety, screening, treatment and support mechanisms. However, there are no specific recommendations addressing perinatal mental health in fathers, partners or co-parents [22].

spezifische Leistungen mit Fokus auf die psych. Gesundheit der Väter/ Co-Elternteile:

Wichtigkeit in Dokumenten erwähnt, aber keine spezifischen Empfehlungen

Other services

The following services are mentioned by the included documents, but do not fit into any of the other categories. The model of care from Ireland states that **social work services** for children and families are very important, because they identify vulnerable families and ensure that these families get appropriate support, such as parent-infant services [24]. The UK Pathways [23] also mention 'wider local authority services' which are referring to local government and other agencies to address any social needs and to ensure access to support with, e.g., housing, employment or debts. These services are part of a wider system of care for women and families that includes universal services (primary care, maternity services, health visiting), psychological services, secondary care mental health services, children and young people's mental health services as well as specialist perinatal mental health services.

andere Leistungen: z. B.

Sozialarbeit …

The WA model of care [26] describes not only those services that should be available to all women and families but also has a strong focus on **targeted services to meet the needs of vulnerable groups**. The document recommends to identify those in need early through provision of primary care services and community-based outreach programmes, to facilitate access to services that address different aspects of mental health, reducing the need for referral where possible, to strengthen the collaboration between services and to disseminate

… gezielte Angebote für vulnerable Familien

information to both consumers and professionals about the needs of vulnerable groups and relevant services. The Service Guide lists several potentially relevant service components of targeted services, e.g., detailed bio-psychosocial assessment to identify risks, culturally sensitive and specific support services and groups, family-centred approach to involve partners, children and carers in care planning, home visiting to provide psychoeducation and to identify areas for support, practical in-home support focusing on parenting capacity, monitoring parental mental health, family functioning, psychosocial risk, parent-infant relationship using validated tools, (therapeutic) playgroups, etc.

(Cross-sectoral) coordination of services

(sektoren-übergreifende) Koordination von Leistungen:

Erstellung eines integrierten Behandlungsplans, inkl. Definition einer koordinierenden Gesundheitsfachkraft

Kontinuität der Versorgung

Three documents [21, 24, 26] provide information regarding (cross-sectoral) coordination of services. The NICE guideline [21] recommends that an integrated care plan should be developed for and together with women with a perinatal mental health problem, including defining the roles of all healthcare professionals, e.g., who is responsible for coordinating the integrated care plan. It is the responsibility of the coordinating healthcare professional to ensure, e.g., effective sharing of information with all services involved and with the woman herself, timely provision of all interventions and the consideration of mental health and wellbeing as part of all care plans. The Irish model of care [24] specifically describes that the nursing/midwifery professions play a key role in ensuring continuity of care between different services and levels of care. It is further recommended that mental health midwives and the specialist services develop close links with the community mental health nurses in the adult mental health community services to ensure seamless care for women.

Strategien zur sektoren-übergreifenden Zusammenarbeit

z. B. klare Überweisungs-/ Behandlungspfade und Protokolle

The WA model of care [26] also includes a recommendation dealing with planning, integration and coordination of services: 'Perinatal and infant/child services work together to establish referral, care and treatment pathways across agencies and the continuum of care to ensure a family's experience of services is seamless, equitable and inclusive' [26, p.63]. The document states that cross-sector collaboration within and between government and non-government agencies is needed to improve continuity of care. Recommended strategies include, e.g., to review handover protocols across all services, to develop clear referral and treatment pathways across private and public community and hospital services and to extend availability and accessibility of services appropriate to the needs of vulnerable groups.

Education, training, continuing professional development

Aus-, Fort- und Weiterbildung:

zu z. B. peripartalen psych. Erkrankungen, Screening-Methoden, Überweisungspfaden

für alle Berufsgruppen, die in der Schwangeren- und postpartalen Betreuung beteiligt sind

Five of the six documents [21-24, 26] contain information regarding education, training and continuing professional development of healthcare professionals involved in perinatal and infant mental healthcare. All of the five documents emphasise the importance of appropriate training and supervision. Training should cover, e.g., mental health problems, assessment methods and tools, and referral pathways [21, 22]. According to the UK Pathways [23], Health Education England has developed a multidisciplinary competency framework for perinatal mental health that defines essential skills and knowledge for all healthcare professionals involved in perinatal mental healthcare. Training requirements were also defined for the professionals of the specialist perinatal mental health team outlined in the care model from Ireland, e.g., consultant psychiatrists, mental health nurses and mental health midwives [24]. Training and supervision should not only be available to those healthcare professionals involved in the care of perinatal women with mental health

problems, but also for all professionals involved in the care of pregnant and postnatal women [22, 24], for example regarding woman-centred communication skills, psychosocial assessment and culturally safe care [22].

Wichtigkeit von Supervision, v. a. aufgrund der hohen emotionalen Belastung

One document also describes the importance of supervision and competence development because of the emotional challenges of working with women and families with perinatal mental health problems. Many professionals are highly motivated to work in the field of perinatal and infant mental health, but underestimate the emotional challenges. Additionally, they may have experiences and competence in working with adults, but not with babies and infants, and vice versa. It is therefore crucial to ensure that the staff have timely opportunities for supervision and reflection which can reduce the burden on healthcare professionals, promote employee retention and improve service provision and continuity of care [26].

4.5 Requirements for delivery of PIMH care models (RQ3)

Informationen zu Anforderungen an die Leistungserbringung

For research question 3, we aimed to identify information regarding requirements for service delivery from the included documents, e.g., framework conditions, infrastructure, facilitators and barriers, evaluation.

(Legal) framework conditions

Rahmenbedingungen: z. B.

Einrichtung von Netzwerken innerhalb jeder Krankenhausgruppe mit lokal definierten Prozessen

Two of the documents provide information that we summarised in the category '(legal) framework conditions' [22, 24]. According to the Irish care model, maternity networks should be established within each hospital group, based on strong corporate and clinical governance. They should have a local document describing in detail the integrated care pathway, the sharing of relevant information between services, the transition across healthcare settings and the referral pathways [24]. COPE will facilitate the implementation of the guideline through its membership, online channels and innovative dissemination approaches, e.g. training programmes and material for health professionals which are available from the COPE website [22].

Infrastructure, resources

Infrastruktur, Ressourcen:

Details zu personellen Ressourcen in Irland-Modell (s. Box)

UK: Netzwerke mit Mutter-Kind-Stationen und Verlinkung mit gemeindenahen psych. Diensten

Four of the six documents include some information on necessary infrastructure and resources [21-24]. Only one of the care models provides details on necessary resources related to staffing of a specialist perinatal mental health team (see box/Example 9) [24]. The UK documents [21, 23] give recommendations, but do not provide specific information on necessary resources: It is recommended that each managed perinatal mental health network has designated specialist inpatient services and covers a population with between 25,000 and 50,000 live births a year. Specialist perinatal inpatient services should include MBUs (typically with six to 12 beds) that are staffed by specialist perinatal mental health professionals and be able to appropriately care for babies. They should provide a full range of therapeutic services and be linked with general medicine and mental health services as well as with community-based mental health services. To understand local demands, a joint strategic needs assessment should be carried out. Responsible commissioners are asked to develop a plan setting out the short, medium, and long-term steps to close gaps between the current situation and the new pathways model.

COPE-Leitlinie: volkswirtschaftliche Einsparungen durch systematisches Screening

The COPE guideline assumes that the guideline's recommendations do not require a lot of additional resources, because they cover tools and treatments that are already used in clinical care in Australia. Moreover, the guideline considers it possible that the systematic assessment and screening for mental health problems in the perinatal period will result in cost-savings from a system's or societal perspective [22].

Example 9: necessary resources for staffing a specialist perinatal mental health team (Ireland)

The Irish model of care provides details on necessary resources related to staffing of a specialist perinatal mental health team: for the consultant psychiatrist, 1 session of ½ day should be calculated per 1,000 deliveries; where a full-time consultant psychiatrist is required, the team should include:

- 2 whole time equivalent WTE mental health nurses (if the role is to extend to community visits, additional nurse staffing would be required),
- 1 WTE non-consultant hospital doctor (NCHD),
- 1 WTE psychologist,
- 1 WTE occupational therapist,
- 1 WTE social worker and
- 1 WTE administrator.

The care model recommends to have one mother-baby unit (MBU) with 6 beds per 15,000 deliveries and also defines staffing for a 6-10 bedded MBU:

- 9 WTE mental health nurses (2 per shift),
- 2.5 WTE nursery nurse (for extended day time hours),
- 0.5 WTE consultant psychiatrist,
- 1 WTE NCHD,
- 0.5 WTE psychologist,
- 0.5 WTE occupational therapist,
- 0.5 WTE social worker,
- 1 WTE administrator,
- link midwife for daily visits.

Abbreviations: WTE – whole time equivalent, NCHD – non-consultant hospital doctor, MBU – mother-baby unit

Source: [24]

Facilitators and barriers

förderliche und hinderliche Faktoren:

Four of the documents mention facilitating factors and/or barriers for the implementation of guideline recommendations or care models [22-24, 26].

Facilitators include, e.g.:

förderlich: z. B. „Capacity building"

- *Capacity building* for healthcare professionals to work in a family centred way, e.g., through a competent and resourced workforce, education about perinatal mental health, training programmes, supervision [22, 24, 26]

innovative Kommunikation/ Technologien

- *Innovative communication and technology*: e.g., telehealth as an effective way of providing assessment, consultation and treatment for individuals and families living in remote areas; development of a digital screening platform to facilitate screening (i.e. undertake screening electronically), because one of the greatest barriers to screening are time-restricted appointments; development of a perinatal mental health website to provide best practice information, factsheets, screening aids, online training programme [22, 26]

- *Involvement of key stakeholders* in the development of the guideline, considering health and community care infrastructure to facilitate guideline implementation [22]

Einbeziehung der Stakeholder

- *Co-production and implementation* of local service development plans for perinatal mental health services in collaboration with women using the services, their families and carers, as well as local mental healthcare providers and organisations [23]

partizipative Entwicklung und Umsetzung

- *Quality and safety*: safe and high quality care should be regulated by standards, policies, guidelines and frameworks to provide the best possible care and to give guidance for the management of perinatal mental health problems [24, 26]

Entwicklung von Standards, Leitlinien

Only one document [22] lists potential barriers for the implementation, such as:

Barrieren: z. B.

- *Low screening in the private sector*
- *Lack of time* to undertake screening and assessment
- *Barriers among women*, e.g.: stigma, preferring to discuss mental health problems with significant others or wanting to manage mental health problems on their own, normalising their emotional difficulties
- *Lack of validated screening tools for women of non-English speaking backgrounds*
- *Limited uptake of referral* (subsequent mental health assessment for women who screen positive and treatment)

Zeitmangel, Stigmatisierung, geringe Inanspruchnahme von Überweisungen

Evaluation, monitoring

Five of the six documents provide some information on evaluation and monitoring [21-24, 26]. In general, they are all planning to carry out some kind of evaluation, by using key performance indicators [26], monthly data reporting of each specialist team [24], monitoring of screening rates [22], a range of outcome measures [23] or quality measures assessed through local data collection [21]. The NICE Quality standards [28] provide the most detailed information on this topic (see box/Example 10). The UK Pathways recommends that routine outcome measurement needs to be carried out in a way that is acceptable to both the woman and the healthcare professional, e.g., by using brief validated outcome measures that are not time-consuming, and by having electronic record systems that support the collection, aggregation and feedback of outcomes [23].

Evaluation, Monitoring:

z. B. mittels Leistungsindikatoren, Qualitätsmessung

detaillierte Informationen in NICE-Leitlinie

Example 10: Quality Standards (UK/NICE)

NICE quality standards are a set of prioritised statements that were developed to improve the three dimensions of quality (patient safety, patient experience and clinical effectiveness) for a particular area of health or care. The quality standard for antenatal and postnatal mental health aims to contribute to improvements in maternal wellbeing, service user experience of mental health services, quality of life for women with severe mental illness, neonatal and infant health and wellbeing and suicide rate.

The following seven quality statements have been formulated:

- *Statement 1:* Women and girls 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 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.

Each of the 7 Statements has quality measures, e.g., for Statement 4:

Structure: Evidence of arrangements for healthcare professionals to ask women about their emotional wellbeing at all routine antenatal and postnatal contacts.

Process: The proportion of routine antenatal and postnatal contacts at which woman are asked about their emotional wellbeing by a healthcare professional.

Outcome:
a) Women's satisfaction with being able to discuss any concerns or worries at routine appointments
b) Identification of mental health problems

Abbreviations: UK – United Kingdom, NICE – National Institute for Health and Care Excellence
Source: [28]

4.6 Synthesis of components of care models

Synthese der Komponenten der Versorgungsmodelle

A central part of the included documents were the actual components of care. In the following, we synthesise common characteristics of the care models, that are also summarised in a visualisation (see Figure 4-3).

allgemeine Prinzipien,

First of all, several **general principles for PIMH care** were mentioned in some of the documents, e.g.,

z. B. integrierte, evidenzbasierte, multidisziplinäre, personenzentrierte Versorgung

- Evidence-based best practice and service delivery
- Integrated/coordinated care, clearly defined pathways, stepped-care approaches
- Clear communication and documentation
- Multidisciplinary approach and networks
- Person-/women-/consumer-centred care, collaborative decision-making
- Compassionate, supportive, empowering care
- Needs-based care with timely access to services
- Ensuring equity and fairness, embracing diversity

Primärprävention: Informationen zu peripartaler psych. Gesundheit; Beratung für Frauen mit psych. Erkrankungen vor Beginn der Schwangerschaft

Regarding **primary prevention**, information on mental health in general and problems that may arise during pregnancy and after birth (e.g., emerging signs and symptoms of perinatal mental health problems) as well as other relevant topics (such as social support, parenting issues or infant development) should be given to all women, families and expectant parents. Various ways of dissemination can be used, e.g., print material, verbal information or home visits. More specifically, for women with new, pre-existing or past mental health problems, or at risk for mental illness, pre-conception advice or planning

should be provided. This includes giving information (e.g., on medication and breastfeeding) and optimising management (e.g., improving health behaviours such as nutrition, physical activity or sleeping; reviewing psychological or pharmacological treatment). In the postpartum period, primary prevention may also include the offer of brief interventions, e.g., for women with traumatic birth experiences or who experienced complications during pregnancy and/or birth.

Early identification of people with perinatal mental health problems is a crucial component of PIMH care. Screening of mothers[9] for mental health problems in the perinatal period is recommended by all included documents, mostly at several time points: at the beginning of the pregnancy, later in pregnancy, at 6-12 weeks after birth, and at least once later during the first year postpartum. Several screening methods for depression are available and mentioned in the documents: the Whooley questions, the EPDS, the PHQ-9 as well as 'sensitively asking' without using a specific tool. The GAD-2 or the anxiety items from other tools can be used to screen for anxiety disorders. Furthermore, asking for past or present mental health problems, including treatment, should be included in appointments in early pregnancy. If alcohol misuse is suspected, the AUDIT tool can be applied. The (emotional) wellbeing should be addressed at every visit during pregnancy and postpartum.

Früherkennung: Screening der (werdenden) Mutter mittels Screening-Fragebögen, zu mehreren Zeitpunkten

Fragen nach (emotionalem) Wohlbefinden bei jedem Termin

Triage in mental health includes an initial assessment and the identification of persons who need further assessment or referral. Different pathways can be designed, depending on the type and severity of mental health problems. For example, women with mild depression or anxiety symptoms can be referred to a 'mental health midwife', whereas women with moderate or severe mental illness are assessed by the specialist perinatal mental health services. In the case of a perinatal mental health crisis (e.g., risk of mania, psychosis or suicide), an urgent or emergency psychiatric assessment is needed. Referral and assessment pathways also depend on the setting and location. However, coordinated care and clear communication are essential in any case.

Diagnostik/Überweisung: unterschiedliche Pfade je nach Art und Schweregrad der psych. Erkrankung

Treatment of perinatal mental health problems includes mainly psychosocial, psychological and psychotherapeutic interventions (e.g., structured psychoeducation, guided self-help, social support groups, directive counselling, CBT, IPT; depending on the severity of the symptoms) and pharmacological treatment. If inpatient care is required, women should have timely access to mother-baby units in the hospital. A stepped-care model of service delivery is recommended. Generally, treatment options should be discussed with the woman, her partner and family, leading to an individual care plan.

Behandlung: abgestufte Versorgung

psychologische/-therapeutische Behandlung, Medikamente

Women with perinatal mental health problems (especially with only mild or subclinical symptoms) should be informed of and could benefit from social support groups facilitated by **peer volunteers** who bring lived-experience of perinatal mental health problems.

Selbsthilfegruppen mit Personen mit gelebter Erfahrung

It is important to also assess the **parent-infant relationship** as part of postnatal care and to discuss any concerns of the parents. Documents describe that mental illness in one family member affects the wellbeing of the whole family, therefore they argue that it is crucial to provide integrated care that includes and considers the needs of all family members. Some documents also give examples for interventions aiming to improve the parent-infant interaction.

Adressierung der Eltern-Kind-Beziehung

[9] The documents usually refer to women/mothers, only one document uses the term 'pregnant and postpartum *individuals*' instead

psych. Gesundheit der Väter/Co-Elternteile

In the included care models, all services are mainly focused on the (expectant) mothers. The mental health of the **co-parent/partner/father** is briefly addressed in some of the documents, but specific services are not mentioned.

gezielte Angebote für vulnerable Familien

Additional components of the care models are, e.g., **targeted services for vulnerable families** that can be identified by, e.g., social work services. Important aspects include facilitating service access, strengthening the collaboration between services or providing home visits to identify areas of support.

integrierter individueller Behandlungsplan

Regarding **(cross-sectoral) coordination** of services, it is recommended to develop an integrated care plan including defining a coordinating healthcare professional (e.g., nurse, midwife) who ensures, e.g., sharing of information with all services and people involved, continuity of care, and timely provision of the interventions.

The synthesis of the common characteristics of the care models is summarised in a visualisation (see Figure 4-3).

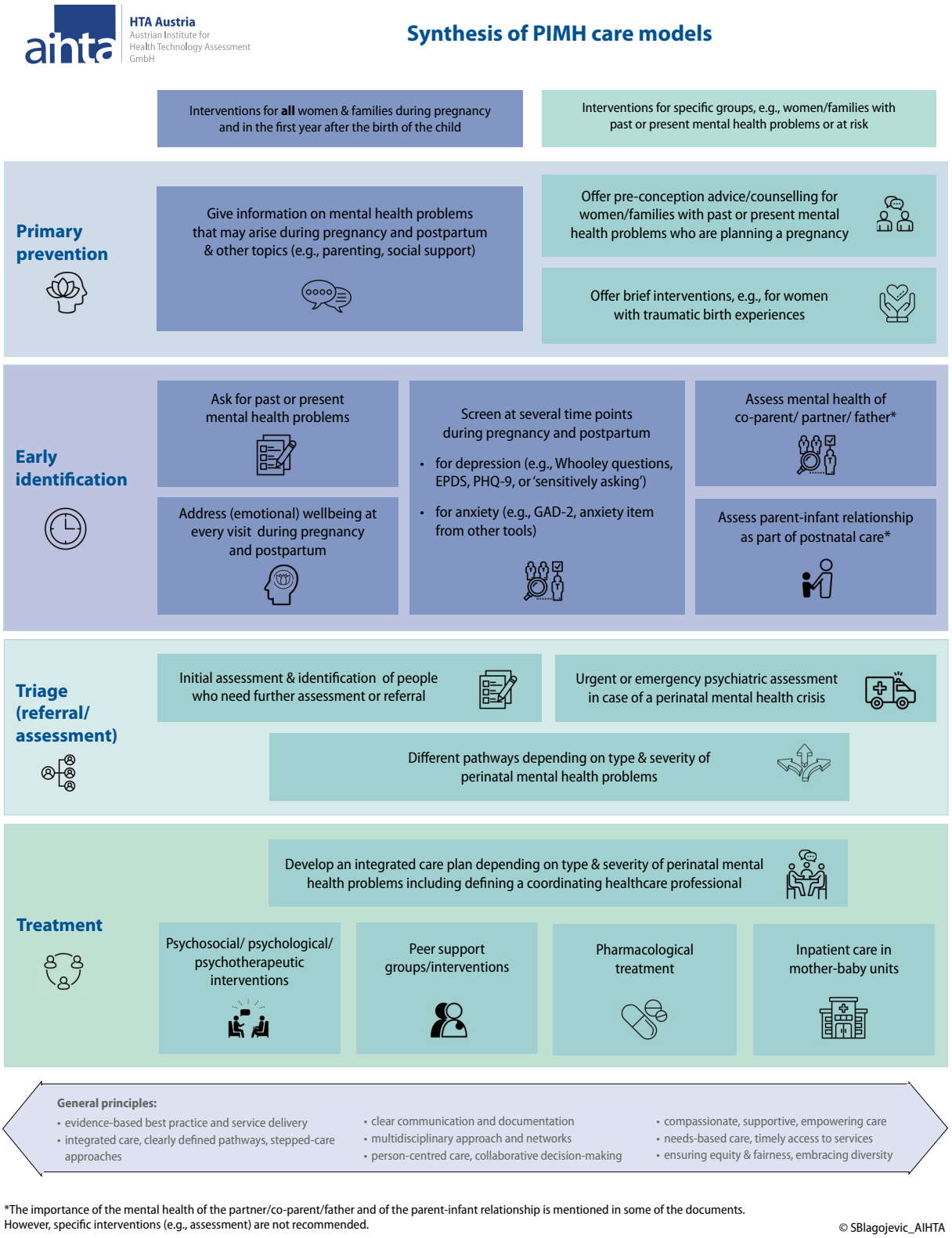

Figure 4-3: Synthesis of the components of the included PIMH care models

5 Discussion

This scoping review aimed at identifying and summarising perinatal and infant mental healthcare models and pathways as well as guidelines to give an overview of common characteristics and best-practice examples.

Scoping-Review zu Versorgungsmodellen und Leitlinien

Summary of the results

We included two evidence-based guidelines from the UK [21] and Australia [22], as well as four documents describing care models for a national (UK [23], Ireland [24]) or regional (Canada/Ontario [25], Australia/Western Australia [26]) context. Common aspects of the included documents regarding their development are: first, the consideration of available evidence, and second, the constitution of a multiprofessional working group, involving experts from various disciplines but also people with lived experience. Target users of those documents include healthcare professionals that are involved in the care of families in the perinatal period, people responsible for care planning and families.

2 Leitlinien (UK, Australien) und 4 Versorgungsmodelle (national: UK, Irland; regional: Ontario/Kanada, West-Australien) identifiziert

Regarding the characteristics of PIMH care models (RQ2), the target groups of the care models and pathways are pregnant and postpartum individuals and those planning a pregnancy in general, or those with a past or current mental health problem or who may have an existing or new mental health problem. The included documents mention a broad range of professionals involved in service delivery which reflects the need of multiprofessional and interdisciplinary teams. The involved professionals were grouped into three categories, which are medical specialisations, midwifery and nursing specialisations and allied professionals. The documents emphasise that clearly defined pathways and stepped-care approaches are important for PIMH care organisation and provision. Another important aspect is the education, training and continuing professional development of healthcare professionals involved in PIMH care. Training (e.g., regarding woman-centred communication and psychosocial assessment) and supervision should not only be available for those involved in specialist PIMH care, but for all professionals working with pregnant and postpartum women and families.

gemeinsame Aspekte der Dokumente:

Zielgruppen, multiprofessionelle Teams, klar definierte Überweisungspfade, abgestufte Versorgung, Ausbildung, Supervision

All six documents provide information on several aspects of PIMH care, including primary prevention, early identification, triage processes and treatment. A synthesis of the common characteristics of the included documents regarding these 'components' and a visualisation of this synthesised model of care can be found in chapter 4.6.

Synthese der Komponenten der Versorgungsmodelle (s. Abbildung)

One research question (RQ3) aimed at summarising information from the documents on requirements for service delivery. Examples are, e.g., the establishment of maternity networks within hospitals with defined integrated care pathways as well as transition and referral processes, or the dissemination via website with training programmes and online material for healthcare professionals. Some of the documents provide detailed information on necessary resources for perinatal mental healthcare and mention possible facilitators and barriers for the implementation of such services (see below, 'barriers and facilitators'). Most care models and guidelines also emphasise the importance of evaluation and monitoring by using key performance indicators or regular data reporting.

Anforderungen an die Leistungserbringung

z. B. Ressourcen, förderliche und hinderliche Faktoren bei der Implementierung

Discussion of the findings

Development and quality

Entwicklungsprozess und Qualität der Dokumente heterogen

The development process and quality of the included documents were heterogeneous. The two guidelines described their development processes in a lot of detail; the rest of the documents, however, only provided some information regarding how they identified and considered the evidence or how they included the views and preferences of those affected. Additionally, while there is a commonly used quality appraisal tool for guidelines (AGREE II), we could not identify a tool that could be used for appraising the other documents. Therefore, we selected relevant items from the AGREE II tool and used those to give an impression of the quality of the documents (see chapter 3.4 and Appendix, "Quality assessment of the included guidelines and documents"). While the guidelines scored high on the tool (93%), the documents describing care models and pathways were rated lower (56-79% of the maximum possible score, based on the selected items). However, as there are no agreed processes of developing and reporting such care models and pathways, the interpretation of the quality scores remains unclear.

Qualitätsbewertung mittels AGREE II: hohes Ergebnis der Leitlinien

Other guidelines

2 Leitlinien mit Empfehlungen für gesamte Versorgung

For this scoping review, we included two evidence-based guidelines that provide recommendations on PIMH care, including prevention, screening, referral and treatment. Obviously, there are several other guidelines on perinatal mental health problems. However, most of them do not provide a detailed overview of the whole care model, but focus only on one specific aspect (e.g., screening for perinatal depression). Other guidelines integrate aspects of PIMH care into other topics, e.g. the German '*Kinderschutzleitlinie*' ('Child protection guideline') [37] which contains recommendations on the early identification of maternal, psychosocial and family stress factors during pregnancy or after birth to be able to provide appropriate support and assistance. An AIHTA overview from 2021 concluded that a majority of the identified evidence-based guidelines recommended asking about psychosocial stress factors and support needs as well as routine screening for depression and anxiety disorders during pregnancy and after birth [18].

zahlreiche weitere Leitlinien fokussieren auf einzelne Aspekte (z. B. Screening)

Routine-Screening überwiegend empfohlen

kanadische Leitlinie gegen Screening mittels Fragebogen

Interestingly, a few guideline institutions come to different conclusions, e.g., the Canadian Task Force on Preventive Health Care (CTFPHC), which recommends 'against instrument-based depression screening using a questionnaire with cut-off score to distinguish *screen positive* and *screen negative* administered to all individuals during pregnancy and the postpartum period' in their recently updated guideline [38]. However, this recommendation is based on the CTFPHC assumption that care providers will ask about and be alert to mental health as part of usual care. The recommendation against screening has been strongly criticised by the Canadian Perinatal Mental Health Collaborative (CPMHC) [39].

aber Fragen nach psych. Gesundheit und Wachsamkeit des Gesundheitspersonals empfohlen

Mangel an Leitlinien in vielen europäischen Ländern

A systematic review of European clinical practice guidelines with recommendations for peripartum depression concluded that clinical practice guidelines are lacking in many European countries and that the existing guidelines show fundamental discrepancy in recommendations and are partly of low methodological quality [40].

Information from other countries

Einschluss von "best practice" Dokumenten und Leitlinien

For this scoping review, we aimed to include 'best practice' documents describing PIMH care models and pathways as well as evidence-based guidelines that focus on several aspects of care, including prevention, screening, referral, management of mental health problems (instead of giving recommendations for only one aspect, e.g., screening for perinatal mental health problems) during pregnancy *and* the postpartum period until the first birthday of the child (instead of, e.g., covering only the antenatal period). We identified documents and guidelines from four countries (UK, Ireland, Canada, Australia) that met our inclusion criteria. However, we came across several other articles, documents or projects from other countries, either through hand search or expert consultation. In order to complement the picture of the four English-speaking countries with other information, this has been summarised in tables in the appendix (see chapter "Information from other countries"). These countries include Norway, Sweden, Denmark, Finland, Switzerland, Germany, Netherlands, Belgium, France, Spain, Italy and Czech Republic. 13 resources were identified, of which one report ('The first 1,000 days in the Nordic countries') [41] gives information for all Nordic countries (i.e. Norway, Sweden, Denmark, Finland). In addition to this comprehensive report, we further considered five guidelines, four articles, one book chapter, one national strategy and one presentation of a pilot project, and we complemented these resources with information from the expert consultation. Nine of these documents are in English, four are written in the respective country language (Norwegian, Swedish, Finnish, German).

zahlreiche weitere Quellen aus 12 anderen europäischen Ländern identifiziert

Informationen in Tabellen im Anhang zusammengefasst

Bericht zu Situation in Norwegen, Schweden, Dänemark, Finnland

The Nordic countries report [41] presents an overview of the situation in each participating country and gives good practice examples. Generally speaking, the four countries (Norway, Sweden, Denmark, Finland) seem to give a high priority to mental health during the perinatal period, even if, e.g., screening for mental illness is not universally regulated and standardised in all countries. In Finland, however, psychosocial risk factors should be screened and regularly monitored according to national guidelines, including smoking, alcohol use, mental health, violence and socioeconomic status. There is an extensive health examination at pregnancy weeks 13-18 which is also used for depression screening using the EPDS. Infant and child healthcare in Finland also includes the regular assessment of psychosocial risk factors, especially during the extensive health examinations at the child's age of four and 18 months, where both parents and the child's siblings are invited to participate, to be able to pay attention to the whole family's health and wellbeing.

hohe Priorität für peripartale psychische Gesundheit

z. B. Finnland: EPDS-Screening; kindliche Untersuchungen berücksichtigen gesamte Familie

Deutschland: keine spezifischen Leitlinien oder Versorgungsmodelle, aber zahlreiche Projekte; z. B. „UPlusE": Erweiterung der Routine-Untersuchungen um Screenings auf Depressionen, Belastungsfaktoren und Störungen der Eltern-Kind-Beziehung

For countries other than those Nordic countries, the identified information was much less detailed. For example, in Germany, there are – like in Austria – no specific guidelines or care models available so far. However, several disorder-specific German guidelines, e.g. the national guidelines for unipolar depression, bipolar disorders, or schizophrenia, have a chapter on the perinatal period. There are several regional projects in Germany to screen for depression and anxiety as well as psychosocial risk factors in pregnant and postpartum women, however, there is no nationwide routine programme implemented so far. The 'UPlusE' project has recently received funding for a national rollout.[10] In this approach, the existing routine examinations according to the German maternity and child health guidelines are extended by standardised screenings for depression, disturbances in the parent-child relationship

[10] information from the external reviewer

and psychosocial stress factors through gynaecologists and paediatricians. Affected families can be referred to appropriate services (e.g., psychiatry, psychotherapy, 'Frühe Hilfen', counselling centres for pregnancy or parents). The aim is to ensure low-threshold and complex care for families in a stable and cross-sectoral care network [42]. The German 'Frühe Hilfen' network is a nationwide implemented, low-threshold, multiprofessional, coordinated network which is particularly aimed at families in stressful situations, e.g., parents with mental illness. Examples of specific interventions that are offered within the 'Frühe Hilfen' network are, e.g., the use of programmes to promote parent-child relationship and parent-child interaction [43].

Target groups

Fokus auf Eltern, Kind, Eltern-Kind-Beziehung und familiäre Situation als Ganzes nötig

in Dokumenten nur teilweise berücksichtigt

In perinatal mental healthcare, it is necessary to assess the parent, the infant and the parent-infant relationship as well as the family situation as a whole (including partners, co-parents, other children, …). Infant mental health has an impact on maternal and paternal wellbeing and parents' mental health can affect infant wellbeing. Although some of the included documents emphasise the importance of parent-infant relationships, specific recommendations e.g., on identification and treatment, are lacking. Services that are mentioned, include, e.g., preventative attachment-based therapeutic approaches. Infants can be particularly vulnerable should their primary caregiver not be able to provide them with a secure relationship. Considering the parent-infant relationship can be an opportunity for building parents' strengths and helping the parent get to know their baby, despite the challenges they might experience with their mental health.

bisher Fokus überwiegend auf Mütter

immer mehr Forschung zur psych. Gesundheit der Väter/Co-Elternteile

in Dokumenten kaum berücksichtigt

Perinatal mental healthcare is still mainly focused on mothers, but there is increasing awareness of the mental health of fathers in the period of pregnancy and the first year after the child was born, at least in research. A dyadic approach (mother and partner) is needed when addressing psychosocial problems in families [44, 45]. Fathers and fathers-to-be were explicitly mentioned as target groups in only one of the six included documents. None of the care models included specific services addressing the mental health of partners or co-parents; however, the importance of considering the needs and wellbeing of the whole family was mentioned. Interestingly, in Sweden, since 2019, infant and child health services began to implement an individual counselling session on mental health for the other parent at one of the health visits 3-5 months after the birth of the child [41].

Fokus auf psych. Gesundheit der Frauen und auf Mutter-Kind-Beziehung

→ implizite Reproduktion traditioneller Geschlechterrollen

Väter/Co-Elternteile sollten zukünftig stärker berücksichtigt werden

aber: bisher mangelnde Evidenz

The predominant focus in the identified care models on the woman's mental health and the mother-child relationship, from our point of view, not only disregards the importance of the mental health and wellbeing of the father/co-parent/partner, but also bears the risk of implicitly reproducing traditional gender roles and the view that pregnancy and early childcare are, above all, the women's responsibility. However, one of the reasons for this mother-centred approach could also be the available evidence: a recent systematic review concluded that there is a lack of evidence on the assessment of mental health of fathers, co-mothers, step-parents and other partners in the perinatal period [5]. Recently, paternal mental health is receiving more attention in perinatal mental health research. The emerging field of paternal perinatal mental health shows that the exclusion of fathers, e.g., regarding research on the impact of fathers' mental health on child outcomes, neglects an important factor in the perinatal mental health of the family. Not only maternal mental health, but also paternal mental health is associated with the mental health and developmental outcomes of the infant through the child's lifespan. There-

fore, tailored screening approaches for paternal mental health are needed [46]. This seems not yet to be sufficiently addressed in the identified care models.

derzeit Aktualisierung der COPE-Leitlinie

However, a draft of the included COPE guideline, which is currently being updated, has been published on the COPE website in November 2022 for public consultation. It suggests that future documents may pay more attention to the mental health of the fathers, partners or co-parents. The consultation draft[11] now includes specific recommendations addressing the mental health of the fathers/partners: e.g., it is recommended to offer fathers and partners mental health screening in the perinatal period (as early as practical in pregnancy and from 3-6 months after the birth with repeated screening when clinically indicated). As the evidence on the use of mental health screening tools in fathers and partners is limited, the guideline does not universally recommend one screening tool over another. However, the use of the EPDS and the K10[12] should be considered, because of their brevity and current use in maternity and postnatal settings (EPDS), and in primary care settings (K10) in Australia. Psychosocial assessment should also be offered as early as practical in pregnancy and the postnatal period (in combination with mental health screening). Interestingly, the recommendations on the assessment of the parent-infant interaction still exclusively refer to the mothers. It has to be noted that all recommendations regarding mental health assessment for fathers and partners are consensus-based recommendations, which are defined as recommendations 'formulated in the absence of quality evidence, after a systematic review of the evidence was conducted and failed to identify sufficient admissible evidence on the clinical question'.

Draft beinhaltet spezifische Empehlungen zu Assessment/Screening auf psych. Erkrankungen der Väter/Partner*innen

limitierte Evidenz zu Screening-Tools

konsensbasierte Empfehlungen

keine spezifische Adressierung von LGBTQI+ Familien oder Adoptiveltern in den Dokumenten

The majority of the documents that were included in this review focus on women, only one [25] uses the term 'pregnant and postpartum individuals' instead. LGBTQI+ families, non-birthing partners or adoptive parents are not explicitly addressed in the included care models. It is important that service provision is inclusive with regard to sexual and gender identity as well as to people who experience marginalization, such as persons with disabilities or Black, Indigenous and People of Color (BIPOC) [31].

Multiprofessional care

multiprofessionelle Teams

gemeinsame Entscheidungsfindung

Behandlungsplan mit koordinierender Gesundheitsfachkraft

The management of perinatal mental health problems needs specialised expertise and skills, as the treatments from adult mental health can often not be applied, e.g., because of risks due to fetal exposure during pregnancy or breastfeeding [15]. A crucial aspect of PIMH care is collaboration and communication between different service providers, as well as with the women and families (shared decision-making) [47]. The included documents emphasise the need for multiprofessional teams that share the care for parents with perinatal mental health problems. For example, it was recommended to develop an integrated care plan and to define a coordinating healthcare professional to ensure the implementation of the care plan. However, there was no further detailed information of how sharing care can be realised across different sectors.

[11] https://www.cope.org.au/wp-content/uploads/2022/11/Guidelines-consultation-draft-04Nov22.pdf, accessed 15/11/2022. The final updated guideline is planned to be published in summer 2023.

[12] K10 = Kessler Psychological Distress Scale (10 item)

div. medizinische Fachrichtungen, Hebammen- & Pflegespezialisierungen, assoziierte Berufsgruppen involviert

tw. in Ö nicht vorhanden oder andere Aufgaben

The involved professionals in the identified care models included several medical specialisations (e.g., GPs, obstetricians, paediatricians, psychiatrists), midwifery and nursing specialisations (e.g., perinatal mental health midwives, child and maternal health nurses) and allied health professionals (e.g., clinical psychologists, peer support workers, health visitors). Some of these professions do not exist in Austria, or have different roles compared to other countries (e.g., routine prenatal care is provided by midwives and GPs in many countries, whereas in Austria, prenatal care is mainly provided by gynaecologists). Also, in other countries than those covered in this report, other professional groups may exist, e.g., in Germany, doctors specialised in psychosomatic may also play an important role in perinatal mental health care. This must be taken into account when considering the transferability of the results.

Koordination verschiedener Sektoren, v. a. Gesundheit & Soziales

z. B. Frühe Hilfen, Sozial- & Kinderschutzdienste

The same also applies to the coordination between different sectors, i.e. the health and social sector. Regarding cross-sectoral collaboration, there was not much information provided in the included documents; however, these sectors seem to be more integrated in other countries than in Austria. Integrated health and social care may be important, especially in the case of less severe mental health problems that do not require medical treatment, but could benefit from social support, e.g., by the 'Frühe Hilfen' in Austria. However, although many less severe problems may be managed by social interventions (without psychiatric intervention), families where a parent has a severe mental illness needs strong support from social and child protection services. In these situations, intensive collaboration between obstetric care, psychiatric care and social care is needed.

Bsp. Niederlande: Versorgung durch „POP-Teams" aus Psychiatrie, Geburtshilfe und Pädiatrie

An interesting example for multiprofessional care was identified from the Netherlands, where they have so-called 'POP (psychiatry, obstetrics, paediatrics) teams', which include psychologists, psychiatrists, gynaecologists, midwives, paediatricians, and social workers. When a person is referred, e.g., from primary healthcare, POP teams can offer a range of treatment options and interventions, such as pre-conception counselling, psychological treatment (e.g., CBT) and/or pharmacological treatment (see Appendix, Table A-8) [44].

Barriers and facilitators

förderliche und hinderliche Faktoren bei der Implementierung von Leistungen

Our scoping review also aimed at summarising relevant information regarding service delivery requirements, e.g. barriers and facilitators that were mentioned in the documents. As facilitating factors, care models mentioned capacity building for healthcare professionals, involvement of key stakeholders, collaboration with women using the services as well as their families and carers, the development of standards, policies, guidelines and frameworks to determine safe and high-quality care and to give guidance for the management of perinatal mental health problems, and the use of innovative communication and technology. Barriers for the implementation were only addressed in one document and included lack of time for screening and assessment, barriers among women (e.g., not wanting to discuss mental health problems with healthcare professionals), the lack of validated screening tools for non-English speaking people or limited uptake of referral.

MATRIx Studie: Identifizierung zahlreicher Faktoren auf unterschiedlichen Ebenen

The MATRIx study [48] identified a wide range of barriers and facilitators at individual, healthcare professional, and organisational level to the implementation of assessment, care, referral, and treatment for perinatal mental health into health and social care services. These include:

- *Individual factors:* e.g., knowledge about perinatal mental illness, health beliefs, previous experiences, family
- *Healthcare professional factors:* e.g., collaborative working, clear communication between healthcare professionals, workload and time, training, supervision
- *Interpersonal factors:* trusting relationships, privacy and confidentiality, continuity of carer, language barriers, open and honest communication
- *Organisational factors:* e.g., referral pathways, organizational structures, service integration, resources, appropriate and timely services
- *Political factors:* policy, funding
- *Societal factors:* stigma, culture [13].

Strategien für die Verbesserung der Implementierung: z. B. Co-Produktion der Leistungen, ausreichende Finanzierung

The authors of the MATRIx study recommend that perinatal mental health services are women-centred, flexible, and provided by well-trained, empathetic healthcare professionals. Furthermore, organisational and political structures should be designed to facilitate continuity of care (i.e. consistency in the midwife or healthcare professional that provides care for women and their babies throughout pregnancy, labour, and the postnatal period). Strategies to improve implementation include, e.g., co-production of services, appropriate funding and implementation team meetings [13].

Empfehlungen der MATRIx-Studie:

z. B. qualitativ hochwertige Aus- und Fortbildung, ausreichend Personal, Förderung von Zusammenarbeit, klare Kommunikation

The MATRIx study authors provide recommendations to improve perinatal mental health services for different groups of stakeholders (i.e. policy makers, service managers, health professionals, women and families) [49]. The recommendations for policy mainly target funding issues and efforts to reduce health inequalities. Service managers should, e.g., provide high quality training for all staff who have contact with perinatal women, provide an adequate number of staff, encourage team working and multidisciplinary collaboration, develop clear guidelines, reduce language barriers and ensure continuity of care across the care pathway. On the part of the healthcare professionals, recommendations are, e.g., to attend training and continuing professional development, to provide assessment in a woman-centred way, to validate women's concerns and to communicate clearly and openly with other healthcare professionals.

mangelndes Wissen zu postpartaler Depression = weitere Barriere

A systematic review found that perinatal depression literacy among frontline health professionals was moderate. The authors concluded that the lack of knowledge (regarding, the definition, prevalence, symptoms, risk factors, screening tools and treatment), which was found in several of the included studies, could act as barrier to providing appropriate care. This highlights the need for training for healthcare professionals to increase their confidence and skills in the management of perinatal depression [50].

'Missing' topics

vereinzelt auch Interventionen, die über individuelle Ebene hinausgehen

z. B. Aktivitäten in Gemeinden, Stadtplanung, Arbeitsplatzgestaltung

The 'Perinatal and Infant Mental Health Service Guide' of the WA document [26] lists a range of possible service components from pre-pregnancy until early childhood. In the data extraction, we focused on the periods of pregnancy, postnatal care and infancy, and we mainly extracted interventions that are targeted directly to parent(s), infant and family. However, the Service Guide also provides further service components that are not directed to the families, but refer to other important aspects such as town planning or community level activities. These include, e.g., community level activities and events which promote healthy functioning and support for young families; advocating for effective town planning to enhance community identity, safety

and support, and advocating for workplace and employer support during the perinatal period both financially and practically. These suggestions partly relate well to the sustainable development goals, particularly goal 11 'Make cities and human settlements inclusive, safe, resilient and sustainable'[13].

Prävention auf gesellschaftlicher Ebene

inkludiert auch Organisation & Verantwortung von Kinderbetreuung in einer Gesellschaft

Prevention of perinatal mental health problems on a societal level (rather than focusing on individual factors) is a topic that was beyond the scope of most identified care models and pathways. This also includes the ways in which childcare and responsibilities are organised in a society, which can be linked to the societal image and expectations from mothers, fathers and other carers regarding the perinatal period. From our point of view, this aspect needs more attention when thinking about prevention in this sensitive period of a family's life. Hence, health promotion and prevention should not only focus on individual behavioural factors, but should aim to create healthy living conditions.

wenig Berücksichtigung von Alkohol- und Drogenkonsum in den identifizierten Dokumenten

Another important topic that was not very present in the included documents is the area of alcohol and substance use. The before mentioned report 'The first 1,000 days in the Nordic countries' [41] gives detailed information on that topic for every Nordic country. In the included care models and guidelines, however, information on that topic was limited. This could either mean that other, separate documents are available in the respective countries (that we have not found in our literature search) or that this topic is still underrepresented in the field of perinatal mental health care.

offene Fragen: psychische Gesundheit von Vater/Co-Elternteil und Kind(ern), Rolle von Peers

There remain some open questions that were not adequately addressed in the identified documents, from our point of view. These include the identification and care for fathers/co-parents/partners with perinatal mental health problems, the explicit inclusion and consideration of the (mental) wellbeing of the infant as well as other children in the family, and the specific role of people with lived experiences.

Current activities in the field of PIMH

derzeit zahlreiche (Forschungs-) aktivitäten in Europa und weltweit

z. B. Riseup-PPD Netzwerk

WHO "Guide for integration of perinatal mental health in maternal and child health services" kürzlich publiziert

Perinatal mental health is currently a very dynamic field and there are a lot of research and policy activities ongoing in Europe and worldwide. For example, the Riseup-PPD[14] network is a multidisciplinary research network for peripartum depression disorder funded by the Horizon 2020 Framework Programme of the European Union through the European Cooperation in Science and Technology (COST). It aims at filling gaps in research and practice on peripartum depression disorder and at increasing social awareness. Several articles have already been published, e.g. on European guidelines [40] or on perinatal depression literacy among healthcare professionals [50] (see above). Another example is the WHO 'Guide for integration of perinatal mental health in maternal and child health services', which was published in September 2022 (i.e. after the literature search for this report was finished) [51]. This is a highly relevant document that is 'intended to be used to develop and sustain high-quality, integrated mental health services for women during the perinatal period. It brings together the best available evidence to support MCH providers in promoting good mental health, identifying symptoms of mental health problems and responding in a way that is adapted to their context.' [51, p.2]. The content of the WHO Guide aligns well with the findings from this report. For example, a stepped-care approach is recommended to address mental health and treat mental illness (see Figure 5-1).

[13] https://sdgs.un.org/goals/goal11, accessed 10/10/2022

[14] https://www.riseupppd18138.com/, accessed 18/11/2022

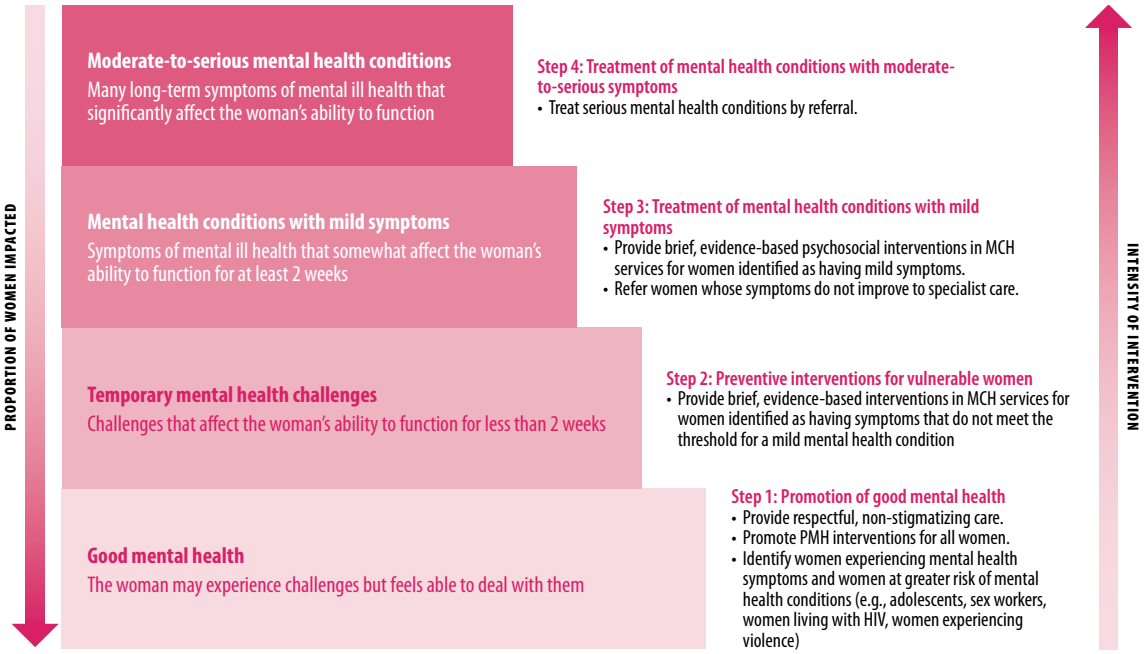

Figure 5-1: Stepped care approach to mental health (Source: [51])

Empfehlungen für die Integration von peripartaler psychischer Gesundheit in bestehende Leistungen für Mütter und Kinder

The target users of the WHO Guide are primarily programme managers, health service administrators and policy-makers who are responsible for planning and managing perinatal services and want to integrate mental health care into maternal and child health services. This should include screening of all women for PMH conditions, identification of those women who would benefit from mental health support and referrals to other services for additional support. The first step 'planning' consists of forming a core working team, conducting a situation analysis and a needs assessment, developing a plan and a budget, and setting targets. The second step is called 'preparing for implementation' and includes adaptation for context and culture, workforce (e.g., training, supervision) and coordination of care [51]. Interestingly, services mentioned in this Guide also mainly focus on women, as did most of the documents that were included in this report. However, it is mentioned that partners and other family members who are involved in the care, have a higher risk for developing anxiety or depression in the perinatal period. Therefore, services should be inclusive of the mental health of the whole family and PMH services should be designed for all caregivers [51].

Limitations

Limitationen: nur Englisch- und deutschsprachige Quellen

Fokus auf Länder des globalen Nordens

nur Länder abgedeckt, die schriftliche Leitlinien oder Best Practice-Modelle haben

We are aware of the following limitations of our review: First, as we only included documents written in English or German language, we could not include care models from countries if there was no English or German version available. However, with our search methods, we did not identify any specific documents in other languages with comparable scope and content as the documents that we included. Information from other countries that we identified, but did not fulfil our inclusion criteria (e.g., articles describing the current situation of PIMH care in a country, interesting pilot projects), were summarised in tables (see Appendix, chapter "Information from other countries") and referred to in the discussion. However, some countries may have comprehensive care models in place without having a written guideline or

best-practice model; these implemented practices that do not have corresponding written documents would have been missed. Also, the review focuses on countries of the global north; while this has the advantage of increasing transferability to Austria, we may have missed interesting concepts and models which could include components or inspirations worth considering in the global north including Austria (e.g., more primary care focus, more self-help, …).

Handsuche und Konsultation von Expert*innen

keine Garantie auf Vollständigkeit

Further, we refrained from conducting a systematic literature search, as those care models and pathways are usually not published in scientific journals ('grey literature'). We comprehensively searched several relevant websites and also asked several experts, but we may have missed relevant documents. Another limitation could be that we searched for national guidelines and documents, although we included some regional documents. It could well be that many countries are organised more locally, with health and social care solutions needing to address more regional needs.

Synthese und Visualisierung fokussiert auf gemeinsame Charakteristika

Last, the summary of the 'best practice' models of care, including the visualisation, focuses on the most important aspects and common characteristics of the included documents and cannot consider every detail from the included models of care. Further information on the respective care models, pathways, and guidelines can be found in the detailed data extraction tables in the Appendix (see chapter "Data extraction").

6 Conclusion

This scoping review provides an overview of international good practice models for perinatal and infant mental health care models and pathways. Based on the information from six documents (two national and two regional care models, two evidence-based guidelines) from four countries (UK, Ireland, Canada, Australia), we described common characteristics and outlined an 'ideal' care model. This care model should

Überblick & Synthese internationaler Versorgungsmodelle; „ideales" Modell umfasst z. B.:

- be evidence-based, needs-based, person-centred, and equitable
- provide compassionate, supportive, empowering care, based on collaborative decision-making

personenzentrierte, bedarfsorientierte, einfühlsame Versorgung;

- include integrated pathways and multiprofessional, coordinated networks
- integrate interventions of primary prevention, counselling and effective early identification and screening

Primärprävention, Beratung, Screening;

- have clearly defined referral pathways and stepped-care approaches
- provide appropriate evidence-based treatment with timely access

evidenzbasierte, zeitnahe Behandlung;

- consider not only the mental health and wellbeing of the mother, but also of the child(ren) and the father/partner/co-parent, as well as the parent-infant relationship

Berücksichtigung der psych. Gesundheit des Vaters/Co-Elternteils und der Eltern-Kind-Beziehung;

- include people with lived experiences when designing and implementing PIMH care but also when supporting people with perinatal mental health problems e.g., by providing peer-support groups

Einbeziehung von Peers

- plan evaluation and/or monitoring of newly implemented interventions from the beginning

The results from this report can be used for further discussion and serve as a basis for designing, further developing and implementing PIMH care in Austria.

Bericht als Basis für Entwicklung und Implementierung von Maßnahmen in Ö

7 References

[1] Howard L. M., Molyneaux E., Dennis C. L., Rochat T., Stein A. and Milgrom J. Non-psychotic mental disorders in the perinatal period. Lancet. 2014;384(9956):1775-1788. Epub 2014/12/03. DOI: 10.1016/S0140-6736(14)61276-9.

[2] O'Hara M. W. and Wisner K. L. Perinatal mental illness: definition, description and aetiology. Best Pract Res Clin Obstet Gynaecol. 2014;28(1):3-12. Epub 2013/10/22. DOI: 10.1016/j.bpobgyn.2013.09.002.

[3] Hahn-Holbrook J., Cornwell-Hinrichs T. and Anaya I. Economic and Health Predictors of National Postpartum Depression Prevalence: A Systematic Review, Meta-analysis, and Meta-Regression of 291 Studies from 56 Countries. Front Psychiatry. 2017;8:248. Epub 2018/02/17. DOI: 10.3389/fpsyt.2017.00248.

[4] National Collaborating Centre for Mental Health. The Perinatal Mental Health Care Pathways. Full implementation guidance. London: 2018 [cited 11/07/2022]. Available from: https://www.rcpsych.ac.uk/docs/default-source/improving-care/nccmh/perinatal/nccmh-the-perinatal-mental-health-care-pathways-full-implementation-guidance.pdf?sfvrsn=73c19277_2.

[5] Darwin Z., Domoney J., Iles J., Bristow F., Siew J. and Sethna V. Assessing the Mental Health of Fathers, Other Co-parents, and Partners in the Perinatal Period: Mixed Methods Evidence Synthesis. Front Psychiatry. 2020;11:585479. Epub 2021/01/30. DOI: 10.3389/fpsyt.2020.585479.

[6] Smythe K. L., Petersen I. and Schartau P. Prevalence of Perinatal Depression and Anxiety in Both Parents: A Systematic Review and Meta-analysis. JAMA Netw Open. 2022;5(6):e2218969. Epub 2022/06/25. DOI: 10.1001/jamanetworkopen.2022.18969.

[7] World Health Organization (WHO). World mental health report: transforming mental health for all. Geneva: World Health Organization: 2022 [cited 19/08/2022]. Available from: https://www.who.int/publications/i/item/9789240049338.

[8] Howard L. M. and Khalifeh H. Perinatal mental health: a review of progress and challenges. World Psychiatry. 2020;19(3):313-327. Epub 2020/09/16. DOI: 10.1002/wps.20769.

[9] Stein A., Pearson R. M., Goodman S. H., Rapa E., Rahman A., McCallum M., et al. Effects of perinatal mental disorders on the fetus and child. Lancet. 2014;384(9956):1800-1819. Epub 2014/12/03. DOI: 10.1016/S0140-6736(14)61277-0.

[10] Papworth R., Harris A., Durcan G., Wilton J. and Sinclair C. Maternal mental health during a pandemic. A rapid evidence review of Covid-19's impact. London, Centre for Maternal Health: 2021 [cited 27/04/2022]. Available from: https://maternalmentalhealthalliance.org/wp-content/uploads/CentreforMH_MaternalMHPandemic_FullReport.pdf.

[11] Joint Commissioning Panel for Mental Health. Guidance for commissioners of perinatal mental health services. 2012 [cited 25/04/2022]. Available from: https://mentalhealthpartnerships.com/wp-content/uploads/sites/3/jcpmh-perinatal-guide.pdf.

[12] Lim I., Newman-Morris V., Hill R., Hoehn E., Kowalenko N., Matacz R., et al. You can't have one without the other: The case for integrated perinatal and infant mental health services. Aust N Z J Psychiatry. 2022:48674221083874. Epub 2022/03/09. DOI: 10.1177/00048674221083874.

[13] Webb R., Uddin N., Ford E., Easter A., Shakespeare J., Roberts N., et al. Barriers and facilitators to implementing perinatal mental health care in health and social care settings: a systematic review. Lancet Psychiatry. 2021;8(6):521-534. Epub 2021/04/11. DOI: 10.1016/S2215-0366(20)30467-3.

[14] Royal College of Psychiatrists. Perinatal mental health services: Recommendations for the provision of services for childbearing women. 2021 [cited 27/04/2022]. Available from: https://www.rcpsych.ac.uk/improving-care/campaigning-for-better-mental-health-policy/college-reports/2021-college-reports/perinatal-mental-health-services-CR232.

[15] Galbally M., Blankley G., Power J. and Snellen M. Perinatal mental health services: what are they and why do we need them? Australas Psychiatry. 2013;21(2):165-170. Epub 2013/02/22. DOI: 10.1177/1039856213476924.

[16] Bauer A., Parsonage M., Knapp M., Iemmi V. and Adelaja B. The costs of perinatal mental health problems. 2014 [cited 30/09/2022]. Available from: https://www.centreformentalhealth.org.uk/sites/default/files/2018-09/costsofperinatal.pdf.

[17] Royal Australian and New Zealand College of Psychiatrists. Perinatal mental health services. Position statement 57. 2021 [cited 27/04/2022]. Available from: https://www.ranzcp.org/news-policy/policy-and-advocacy/position-statements/perinatal-mental-health-services.

[18] Reinsperger I. Parent-Child-Pass Update 2020/21 – Screenings for mental health, nutrition and social competence. AIHTA Policy Brief 005. Vienna: 2021 [cited 30/11/2022. Available from: https://eprints.aihta.at/1303/.

[19] Antony G., Bengough T., Marbler C. and Sagerschnig S. The Austrian Early Childhood Intervention Programme: Support for families with young children in burdened life circumstances to improve relational health and well-being (A brief overview). Perspectives in Infant Mental Health (World Association for Infant Mental Health). 2021;29(1):16-21.

[20] Brouwers M, Kho ME, Browman GP, Burgers JS, Cluzeau F, Feder G, et al. AGREE II: Advancing guideline development, reporting and evaluation in healthcare. Can Med Assoc J. 2010. DOI: doi:10.1503/cmaj.090449.

[21] National Institute for Health and Care Excellence (NICE). Antenatal and postnatal mental health: clinical management and service guidance. Clinical guideline CG192. 2014 (last updated February 2020) [cited 28/07/2022]. Available from: https://www.nice.org.uk/guidance/cg192/resources/antenatal-and-postnatal-mental-health-clinical-management-and-service-guidance-pdf-35109869806789.

[22] Austin M.-P., Highet N. and and the Expert Working Group. Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline. Melbourne: 2017 [cited 28/07/2022]. Available from: https://www.cope.org.au/wp-content/uploads/2018/05/COPE-Perinatal-MH-Guideline_Final-2018.pdf.

[23] NHS England, NHS Improvement and National Collaborating Centre for Mental Health. The Perinatal Mental Health Care Pathways. 2018 [cited 11/07/2022]. Available from: https://www.england.nhs.uk/wp-content/uploads/2018/05/perinatal-mental-health-care-pathway.pdf.

[24] National Mental Health Division and Health Service Executive. Specialist Perinatal Mental Health Services. Model of Care for Ireland. 2017 [cited 12/07/2022]. Available from: https://www.lenus.ie/bitstream/handle/10147/622681/Specialist-Perinatal-Mental-Health-Services-Model-of-Care-2017.pdf.

[25] Provincial Council for Maternal and Child Health (PCMCH). Perinatal mental health. Guidance for the identification and management of mental health in pregnant or postpartum individuals. 2021 [cited 02/08/2022]. Available from: https://www.pcmch.on.ca/wp-content/uploads/PCMCH-Perinatal-Mental-Health-Guidance-Document_July2021.pdf.

[26] Western Australian Department of Health. Perinatal and Infant Mental Health Model of Care – a framework. Perth: North Metropolitan Health Service, Western Australian Department of Health, Western Australia: 2016 [cited 03/08/2022]. Available from: https://ww2.health.wa.gov.au/~/media/Files/Corporate/general-documents/Mental-Health-Network/Perinatal-and-Infant-Mental-Health-Model-of-Care.pdf.

[27] National Collaborating Centre for Mental Health (NCCMH). Antenatal and postnatal mental health. The NICE guideline on clinical management and service guidance. Updated edition. 2018 [cited 29/07/2022]. Available from: https://www.nice.org.uk/guidance/cg192/evidence/full-guideline-pdf-4840896925.

[28] National Institute for Health and Care Excellence (NICE). Antenatal and postnatal mental health. Quality standard [QS115]. 2016 [cited 08/08/2022]. Available from: https://www.nice.org.uk/guidance/qs115/chapter/Introduction.

[29] Department of Health (Ireland). Creating a better future together. National Maternity Strategy 2016-2026. 2016 [cited 09/09/2022]. Available from: https://assets.gov.ie/18835/ac61fd2b66164349a1547110d4b0003f.pdf.

[30] Provincial Council for Maternal and Child Health (PCMCH). Care Pathway for the Management of Perinatal Mental Health. 2021 [cited 02/08/2022]. Available from: https://www.pcmch.on.ca/wp-content/uploads/PCMCH-Care-Pathway-for-the-Management-of-Perinatal-Mental-Health_23July2021.pdf.

[31] Canadian Perinatal Mental Health Collaborative (CPMHC). Time for Action: Why Canada needs a national perinatal mental health strategy now more than ever. 2021 [cited 09/09/2022]. Available from: https://cpmhc.ca/wp-content/uploads/2022/06/EN-Time-for-Action-CPMHC-Report-2021_FINAL.pdf.

[32] National Institute for Health and Care Excellence (NICE). Developing NICE guidelines: the manual. Process and methods [PMG20]. 2014 [cited 28/07/2022]. Available from: https://www.nice.org.uk/process/pmg20/chapter/introduction.

[33] National Health and Medical Research Council (NHMRC). 2016 NHMRC Standards for Guidelines. 2016 [cited 12/09/2022]. Available from: https://www.nhmrc.gov.au/guidelinesforguidelines/standards.

[34] Elrod J. K. and Fortenberry J. L., Jr. The hub-and-spoke organization design: an avenue for serving patients well. BMC Health Serv Res. 2017;17(Suppl 1):457. Epub 2017/07/20. DOI: 10.1186/s12913-017-2341-x.

[35] Office of the Nursing & Midwifery Services Director. National self-assessment framework to enhance knowledge and skills for the perinatal mental health (PMH) midwife, clinical midwife manager 2 (CMM2). 2021 [cited 14/09/2022]. Available from: https://www.hse.ie/eng/services/list/4/mental-health-services/specialist-perinatal-mental-health/national-self-assessment-framework.pdf.

[36] Ontario Agency for Health Protection and Promotion (Public Health Ontario). Healthy Babies Healthy Children Process Implementation Evaluation: Executive Summary. 2014 [cited 26/09/2022]. Available from: https://www.publichealthontario.ca/-/media/Documents/H/2014/hbhc-exec.pdf?sc_lang=en.

[37] Blesken M., Franke I., Freiberg J., Kraft M., Kurylowicz L., Rohde M., et al. AWMF S3(+) Child abuse and neglect guideline: involving Youth Welfare and Education Services (Child Protection Guideline) 2019 (update 2021) [cited 03/10/2022]. Available from: https://www.pcmch.on.ca/wp-content/uploads/PCMCH-Care-Pathway-for-the-Management-of-Perinatal-Mental-Health_23July2021.pdf.

[38] Canadian Task Force on Preventive Health Care (CTFPHC). Depression during pregnancy and the postpartum period. 2022 [cited 05/10/2022]. Available from: https://canadiantaskforce.ca/guidelines/published-guidelines/depression-during-pregnancy-and-the-postpartum-period/.

[39] Canadian Perinatal Mental Health Collaborative (CPMHC). New Recommendation Against Perinatal Mental Health Screening Has Potential to Further Jeopardize the Health and Well-Being of Mothers, Birthing Persons, and Families in Canada 2022 [cited 05/10/2022]. Available from: https://cpmhc.ca/2022/07/29/new-recommendation-against-perinatal-mental-health-screening-has-potential-to-further-jeopardize-the-health-and-well-being-of-mothers-birthing-persons-and-families-in-canada/.

[40] Motrico E., Moreno-Peral P., Uriko K., Hancheva C., Brekalo M., Ajaz E., et al. Clinical practice guidelines with recommendations for peripartum depression: A European systematic review. Acta Psychiatr Scand. 2022;146(4):325-339. Epub 2022/07/16. DOI: 10.1111/acps.13478.

[41] Danielsdottir S. and Ingudottir J. The First 1000 Days in the Nordic Countries: A Situation Analysis. Copenhagen: Nordic Council of Ministers: 2020 [cited 11/08/2022]. Available from: https://first1000days.is/wp-content/uploads/2022/03/The-First-1000-Days-in-the-Nordic-Countries-A-Situation-Analysis.pdf.

[42] Simen S., Kittel-Schneider S. and Turmes L. [UPlusE – Peripartum screening for parental depression. From pilot project to nationwide provision]. Presentation at the 10th Marcé Symposium, Bochum: 2022 [cited 12/08/2022]. Available from: http://marce-gesellschaft.de/wp-content/uploads/2022/05/UPlusE-Marce%CC%81-Tagung-Bochum-2022pdf.pdf.

[43] Nationales Zentrum Frühe Hilfen Deutschland. Frühe Hilfen – ein Überblick. [cited 17/11/2022]. Available from: https://www.fruehehilfen.de/fileadmin/user_upload/fruehehilfen.de/pdf/Publikation-NZFH-Infopapier-Fruehe-Hilfen-Ein-Ueberblick-b.pdf.

[44] Leppers I., Veth C. P. M., de Waardt D. A., Migchels H. and Traa M. J. Perinatal mental health around the world: priorities for research and service development in The Netherlands. BJPsych Int. 2021. DOI: doi:10.1192/bji.2021.47.

[45] Fisher S. D. Paternal Mental Health: Why Is It Relevant? Am J Lifestyle Med. 2017;11(3):200-211. Epub 2016/02/16. DOI: 10.1177/1559827616629895.

[46] Fisher S. D., Cobo J., Figueiredo B., Fletcher R., Garfield C. F., Hanley J., et al. Expanding the international conversation with fathers' mental health: toward an era of inclusion in perinatal research and practice. Arch Womens Ment Health. 2021;24(5):841-848. Epub 2021/08/26. DOI: 10.1007/s00737-021-01171-y.

[47] Myors K. A., Cleary M., Johnson M. and Schmied V. A mixed methods study of collaboration between perinatal and infant mental health clinicians and other service providers: Do they sit in silos? BMC Health Serv Res. 2015;15:316. Epub 2015/08/12. DOI: 10.1186/s12913-015-0977-y.

[48] The MATRIx study team. MATRIx Informing Perinatal Mental Health Services. Perinatal Mental Health Assessment and Treatment: An Evidence Synthesis and Conceptual Framework of Barriers and Facilitators to Implementation. [cited 15/11/2022]. Available from: https://www.matrixstudy.org/.

[49] The MATRIx study team. Recommendations [cited 15/11/2022]. Available from: https://www.matrixstudy.org/recommendations.

[50] Branquinho M., Shakeel N., Horsch A. and Fonseca A. Frontline health professionals' perinatal depression literacy: A systematic review. Midwifery. 2022;111:103365. Epub 2022/06/01. DOI: 10.1016/j.midw.2022.103365.

[51] World Health Organization (WHO). Guide for integration of perinatal mental health in maternal and child health services. Geneva: 2022 [cited 21/11/2022]. Available from: https://www.who.int/publications/i/item/9789240057142.

[52] Healthy Human Development Table and Public Health Ontario. Perinatal Mental Health Toolkit for Ontario Public Health Units. 2018 [cited 08/09/2022]. Available from: https://www.publichealthontario.ca/-/media/documents/h/2018/hhdt-toolkit-perinatal-mental-health.pdf?sc_lang=en.

[53] Helsedirektoratet [Norwegian Directorate of Health]. [Pregnancy Care. National professional guideline]. [cited 11/08/2022]. Available from: https://www.helsedirektoratet.no/retningslinjer/svangerskapsomsorgen. Norwegian.

[54] Helsedirektoratet [Norwegian Directorate of Health]. National guideline for health promotion and preventive work in the child and youth health centres and school health service. [cited 11/08/2022]. Available from: https://www.helsedirektoratet.no/retningslinjer/helsestasjons-og-skolehelsetjenesten/dokumenter-helsestasjons-og-skolehelsetjenesten/National%20guideline%20for%20health%20promotion%20and%20preventive%20 work%20in%20the%20child%20.pdf/_/attachment/inline/854312bb-434e-4aab-b7eb-125d558eb434:a0aaa3fec5902792de20d18abfddeee13bd377c8/National%20guideline%20for%20health%20promotion%20and%20preventive%20work%20in%20the%20child%20.pdf.

[55] Rikshandboken [The National Handbook for Child Health Services]. [Depression in new mothers]. 2019 [cited 11/08/2022]. Available from: https://www.rikshandboken-bhv.se/livsvillkor--levnadsvanor/foraldraskap/depression-hos-nyblivna-mammor/. Swedish.

[56] Rikshandboken [The National Handbook for Child Health Services]. [Screening with the EPDS for depression in new mothers]. 2020 [cited 11/08/2022]. Available from: https://www.rikshandboken-bhv.se/metoder--riktlinjer/screening-med-epds/. Swedish.

[57] Rikshandboken [The National Handbook for Child Health Services]. [Supportive calls to depressed, new mothers]. 2020 [cited 11/08/2022]. Available from: https://www.rikshandboken-bhv.se/metoder--riktlinjer/stodjande-samtal-till-nedstamda-nyblivna-mammor/. Swedish.

[58] Hakulinen T., Pakarinen A. and Uotila-Laine H. [EPDS mood form in screening for depression during pregnancy and after childbirth]. NEUKO database: 2021 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00002?toc=1111796_bc. Finnish.

[59] Hyytinen P., Saisto T. and Riekki T. [Treatment of depression and anxiety during pregnancy and after childbirth]. NEUKO database: 2022 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00085?toc=1112236. Finnish.

[60] Isosävi S., Airo R. and Rouhe H. [Considering trauma experiences during the perinatal period]. NEUKO database: 2022 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00089?toc=1112236. Finnish.

[61] Jahnukainen J., Hakulinen T. and Hietanen-Peltola M. [Assessment of mental health and psychocial wellbeing]. NEUKO database: 2021 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00061?toc=1112236. Finnish.

[62] Korpilahti U., Tupola S. and Piispa M. [Violence prevention – support, identify and intervene early]. NEUKO database: 2021 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00063?toc=1112236. Finnish.

[63] Markkula J. [Use of alcohol and other substances]. NEUKO database: 2021 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00041?toc=1112236. Finnish.

[64] Ollila H. [Use of tobacco and nicotine products]. NEUKO database: 2021 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00005?toc=1112236. Finnish.

[65] Rieckki T. and Jussila H. [Identifying and preventing depression and anxiety during pregnancy and postpartum]. NEUKO database: 2022 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00084?toc=1112236. Finnish.

[66] Riekki T. and Jussila H. [Bipolar disorder and psychosis in pregnant and postpartum mothers]. NEUKO database: 2022 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00090?toc=1112236. Finnish.

[67] Silvan E. and Airo R. [Fear of childbirth]. NEUKO database: 2022 [cited 11/08/2022]. Available from: https://www.terveysportti.fi/apps/dtk/nko/article/nla00102?toc=1112236. Finnish.

[68] Van Damme R., Van Parys A. S., Vogels C., Roelens K. and Lemmens G. M. D. A mental health care protocol for the screening, detection and treatment of perinatal anxiety and depressive disorders in Flanders. J Psychosom Res. 2020;128:109865. Epub 2019/12/16. DOI: 10.1016/j.jpsychores.2019.109865.

[69] Sutter-Dallay A. L., Glangeaud-Freudenthal N. M. and Gressier F. Perinatal mental health around the world: priorities for research and service development in France. BJPsych Int. 2020;17(3):53-55. Epub 2021/07/22. DOI: 10.1192/bji.2020.18.

[70] Berger A., Schenk K., Ging A., Walther S. and Cignacco E. Perinatal mental health care from the user and provider perspective: protocol for a qualitative study in Switzerland. Reprod Health. 2020;17(1):26. Epub 2020/02/19. DOI: 10.1186/s12978-020-0882-7.

[71] Working Group of the Clinical Practice Guidelines for Care in Pregnancy and Puerperium. Clinical Practice Guideline for Care in Pregnancy and Puerperium. 2014 [cited 12/08/2022]. Available from: https://portal.guiasalud.es/wp-content/uploads/2020/11/gpc_533_embarazo_aetsa_compl_en_caduc.pdf.

[72] Brenna V., Mazza U., Vergani L. and Percudani M. Perinatal Mental Health: Innovative Programmes in Lombardy Region. In: Percudani M., Bramante A., Brenna V. and Pariante C., editors. Key Topics in Perinatal Mental Health. Cham: Springer; 2022.

[73] Grussu P., Lega I., Quatraro R. M. and Donati S. Perinatal mental health around the world: priorities for research and service development in Italy. BJPsych Int. 2020;17(1):8-10. Epub 2020/02/01. DOI: 10.1192/bji.2019.31.

[74] Ministerstvo zdravotnictví Ceske Republiky [Ministry of Health of the Czech Republic]. National Mental Health Action Plan 2020-2030. 2020 [cited 12/08/2022]. Available from: https://www.mzcr.cz/wp-content/uploads/2020/01/National-Mental-Health-Action-Plan-2020-2030.pdf.

Appendix

Data extraction

United Kingdom

NICE Guideline

Table A-1: Data extraction table, NICE guideline

Country, year [ref]	UK/NICE guideline, 2014 [21, 27, 28][15]
Title of the document	Antenatal and postnatal mental health: clinical management and service guidance: NICE guideline [21] Full guideline [27] Quality standard [28]
Type of document	Clinical Guideline
Publisher	National Institute for Health and Care Excellence (NICE)
Language	English
Contracting entity/funding	n.r.[16]
Development of the model/pathway	NICE guidelines are developed and updated according to the processes and methods described in 'Developing NICE guidelines: the manual' [32]. NICE develops guidelines according to core principles, e.g., ■ the guideline is based on the best available evidence of what works, and what it costs ■ the guideline is developed by independent and unbiased committees of experts, from across a range of health and social care professions ■ all committees include at least 2 lay members ■ all guidelines are regularly checked, and updated if necessary This guideline has been commissioned by NICE and developed within the National Collaborating Centre for Mental Health (NCCMH). The NCCMH is a collaboration of the professional organisations involved in the field of mental health, national service user and carer organisations, a number of academic institutions and NICE. The NCCMH is funded by NICE and is led by a partnership between the Royal College of Psychiatrists and the British Psychological Society's Centre for Outcomes Research and Effectiveness, based at University College London. The Guideline Development Group (GDG) included women who have experienced a mental health problem in the pregnancy or the postnatal period, and professionals from psychiatry, clinical psychology, general practice, nursing, health visitors, obstetrics, midwifery and the private and voluntary sectors, and a mother infant specialist.
■ **involvement of people with lived experience**	Individuals with direct experience of services gave an integral service-user focus to the GDG and the guideline. The GDG included a service user and representatives of a national service user group. They contributed as full GDG members to writing the review questions, providing advice on outcomes most relevant to service users, helping to ensure that the evidence addressed their views and preferences, highlighting sensitive issues and terminology relevant to the guideline, and bringing service user research to the attention of the GDG. In drafting the guideline, they reviewed the chapter on experience of care and identified recommendations from the service user perspective.
Aim of the document	This guideline makes recommendations for the recognition, assessment, care and treating of mental health problems in women during pregnancy and the postnatal period (up to 1 year after childbirth) and in women who are planning a pregnancy. The guideline covers depression, anxiety disorders, eating disorders, drug- and alcohol-use disorders and severe mental illness (such as psychosis, bipolar disorder and schizophrenia). It covers subthreshold symptoms as well as mild, moderate and severe mental health problems. It promotes early detection and good management of mental health problems to improve women's quality of life during pregnancy and in the year after giving birth.
Target users of the document	The guideline is intended for use by: ■ Professional groups who share in the treatment and care for women with a mental health problem in pregnancy or the postnatal period, including psychiatrists, clinical psychologists, mental health nurses, community psychiatric nurses (CPNs), other community nurses, general practitioners (GPs), midwives, neonatologists, obstetricians, health visitors, social workers, counsellors, practice nurses, occupational therapists, pharmacists and others

[15] The guideline was last updated in February 2020.

[16] Any new guidelines developed by NICE are usually agreed with the relevant commissioning body (NHS England or the Department of Health and Social Care) [32].

Country, year [ref]	UK/NICE guideline, 2014 [21, 27, 28][15]
Target users of the document *(continuation)*	■ Professionals in other health and non-health sectors who may have direct contact with or are involved in the provision of health and other public services for women with a mental health problem in pregnancy or the postnatal period; these may include accident and emergency staff, paramedical staff, prison doctors, the police and professionals who work in the criminal justice and education sectors. ■ Those with responsibility for planning services for women with a mental health problem in pregnancy or the postnatal period, and their partners, families or carers, including directors of public health and NHS Trust managers.
Characteristics of the PIMH care model described in the document/guideline	
Target populations for the services	Women who are planning to have a baby, are pregnant, or have had a baby or been pregnant on the past year
Involved professionals	Professional groups who share in the treatment and care for women with a mental health problem in pregnancy or the postnatal period, including psychiatrists, clinical psychologists, mental health nurses, community psychiatric nurses (CPNs), other community nurses, GPs, midwives, neonatologists, obstetricians, health visitors, social workers, counsellors, practice nurses, occupational therapists, pharmacists and others
Organisation of the services	Clinical networks should be established for perinatal mental health services, managed by a coordinating board of healthcare professionals, commissioners, managers, and service users and carers. These networks should provide: ■ a specialist multidisciplinary perinatal service in each locality, which provides direct services, consultation and advice to maternity services, other mental health services and community services; in areas of high morbidity these services may be provided by separate specialist perinatal teams ■ access to specialist expert advice on the risks and benefits of psychotropic medication during pregnancy and breastfeeding ■ clear referral and management protocols for services across all levels of the existing stepped-care frameworks for mental health problems, to ensure effective transfer of information and continuity of care ■ pathways of care for service users, with defined roles and competencies for all professional groups involved.
"Components" of the care model	
■ **Primary prevention**	■ Discuss with all women of childbearing potential who have a new, existing or past mental health problem: ▪ the use of contraception and any plans for a pregnancy ▪ how pregnancy and childbirth might affect a mental health problem, including the risk of relapse ▪ how a mental health problem and its treatment might affect the woman, the fetus and baby ▪ how a mental health problem and its treatment might affect parenting ■ Provide culturally relevant information on mental health problems in pregnancy and the postnatal period to the woman and, if she agrees, her partner, family or carer. Ensure that the woman understands that mental health problems are not uncommon during these periods and instil hope about treatment.
■ **Early identification**	■ Recognise that women who have a mental health problem (or are worried that they might have) may be: ▪ unwilling to disclose or discuss their problem because of fear of stigma, negative perceptions of them as a mother or fear that their baby might be taken into care ▪ reluctant to engage, or have difficulty in engaging, in treatment because of avoidance associated with their mental health problem or dependence on alcohol or drugs. **Depression and anxiety disorders:** ■ Recognise that the range and prevalence of anxiety disorders (including generalised anxiety disorder, obsessive-compulsive disorder, panic disorder, phobias, post-traumatic stress disorder and social anxiety disorder) and depression are under-recognised throughout pregnancy and the postnatal period. ■ At a woman's first contact with primary care or her booking visit, and during the early postnatal period, consider asking the following depression identification questions as part of a general discussion about a womam's mental health and wellbeing: ▪ During the past month, have you often been bothered by feeling down, depressed or hopeless? ▪ During the past month, have you often been bothered by having little interest or pleasure in doing things? Also consider asking about anxiety using the 2-item Generalized Anxiety Disorder scale (GAD-2): ▪ Over the last 2 weeks, how often have you been bothered by feeling nervous, anxious or on edge? ▪ Over the last 2 weeks, how often have you been bothered by not being able to stop or control worrying? (For questions about anxiety: an answer of 'not at all' scores 0; 'several days' scores 1; 'more than half of the days' scores 2; 'nearly every day' scores 3.) ■ If a woman responds positively to either of the depression identification questions, is at risk of developing a mental health problem, or there is clinical concern, consider: ▪ using the Edinburgh Postnatal Depression Scale (EPDS) or the Patient Health Questionnaire (PHQ-9) as part of a full assessment or ▪ referring the woman to her GP or, if a severe mental health problem is suspected, to a mental health professional. ■ If a woman scores 3 or more on the GAD-2 scale, consider: ▪ using the GAD-7 scale for further assessment or ▪ referring the woman to her GP or, if a severe mental health problem is suspected, to a mental health professional.

Country, year [ref]	UK/NICE guideline, 2014 [21, 27, 28][15]
■ **Early identification** *(continuation)*	■ If a woman scores less than 3 on the GAD-2 scale, but you are still concerned she may have an anxiety disorder, ask the following question: ■ Do you find yourself avoiding places or activities and does this cause you problems? If she responds positively, consider: ■ using the GAD-7 scale for further assessment or ■ referring the woman to her GP or, if a severe mental health problem is suspected, to a mental health professional. ■ At all contacts after the first contact with primary care or the booking visit, the health visitor, and other healthcare professionals who have regular contact with a woman in pregnancy and the postnatal period (first year after birth), should consider: ■ asking the 2 depression identification questions and the GAD-2 as part of a general discussion about her mental health and wellbeing and ■ using the EPDS or the PHQ-9 as part of monitoring. **Severe mental illness:** ■ At a woman's first contact with services in pregnancy and the postnatal period, ask about: ■ any past or present severe mental illness ■ past or present treatment by a specialist mental health service, including inpatient care ■ any severe perinatal mental illness in a first-degree relative (mother, sister or daughter). ■ Refer to a secondary mental health service (preferably a specialist perinatal mental health service) for assessment and treatment, all women who: ■ have or are suspected to have severe mental illness ■ have any history of severe mental illness (during pregnancy or the postnatal period or at any other time). Ensure that the woman's GP knows about the referral. ■ If a woman has any past or present severe mental illness or there is a family history of severe perinatal mental illness in a first-degree relative, be alert for possible symptoms of postpartum psychosis in the first 2 weeks after childbirth. ■ If a woman has sudden onset of symptoms suggesting postpartum psychosis, refer her to a secondary mental health service (preferably a specialist perinatal mental health service) for immediate assessment (within 4 hours of referral). **Alcohol and drug misuse:** ■ If alcohol misuse is suspected, use the Alcohol Use Disorder Identfication Test (AUDIT) as an identification tool in line with the NICE guideline on alcohol use disorders. ■ If drug misuse is suspected, follow the recommendations on identification and assessment of the NICE guideline on drug misuse.
■ **Triage**	■ Consider referring a woman to a secondary mental health service (preferably a specialist perinatal mental health service) for preconception counselling if she has a current or past severe mental health problem and is planning a pregnancy. ■ All healthcare professionals referring a woman to a maternity service should ensure that communications with that service (including those relating to initial referral) share information on any past and present mental health problem. ■ When a woman with a known or suspected mental health problem is referred in pregnancy or the postnatal period, assess for treatment within 2 weeks of referral and provide psychological interventions within 1 month of initial assessment. **Assessment and diagnosis:** ■ Assessment and diagnosis of a suspected mental health problem in pregnancy and the postnatal period should include: ■ history of any mental health problem, including in pregnancy or the postnatal period ■ physical wellbeing (including weight, smoking, nutrition and activity level) and history of any physical health problem ■ alcohol and drug misuse ■ the woman's attitude towards the pregnancy, including denial of pregnancy ■ the woman's experience of pregnancy and any problems experienced by her, the fetus or the baby ■ the mother-baby relationship ■ any past or present treatment for a mental health problem, and response to any treatment ■ social networks and quality of interpersonal relationships ■ living conditions and social isolation ■ family history (first-degree relative) of mental health problems ■ domestic violence and abuse, sexual abuse, trauma or childhood maltreatment ■ housing, employment, economic and immigration status ■ responsibilities as a carer for other children and young people or other adults ■ Carry out a risk assessment in conjunction with the woman and, if she agrees, her partner, family or carer. Focus on areas that are likely to present possible risks such as self-neglect, self-harm, suicidal thoughts and intent, risks to others (including the baby), smoking, drug or alcohol misuse and domestic violence and abuse. ■ If there is a risk of, or there are concerns about, suspected child maltreatment, follow local safeguarding protocols.

Country, year [ref]	UK/NICE guideline, 2014 [21, 27, 28][15]
■ **Triage** *(continuation)*	■ If there is a risk of self-harm or suicide: ■ assess whether the woman has adequate social support and is aware of sources of help ■ arrange help appropriate to the level of risk ■ inform all relevant healthcare professionals (including the GP and those identified in the care plan) ■ advise the woman, and her partner, family or carer, to seek further help if the situation deteriorates.
■ **Treatment** (e.g., psychological therapies, pharmacological treatment)	**Treatment decisions, advice and monitoring:** ■ Discuss treatment and prevention options and any particular concerns the woman has about the pregnancy or the fetus or baby. Provide information to the woman and, if she agrees, her partner, family or carer, about: ■ the potential benefits of psychological interventions and psychotropic medication ■ the possible consequences of no treatment ■ the possible harms associated with treatment ■ what might happen if treatment is changed or stopped, particularly if psychotropic medication is stopped abruptly. ■ Discuss breastfeeding with all women who may need to take psychotropic medication in pregnancy or in the postnatal period. Explain to them the benefits of breastfeeding, the potential risks associated with taking psychotropic medication when breastfeeding and with stopping some medications in order to breastfeed. Discuss treatment options that would enable a woman to breastfeed if she wishes and support women who choose not to breastfeed. ■ If needed, seek more detailed advice about the possible risks of mental health problems or the benefits and harms of treatment in pregnancy and the postnatal period from a secondary mental health service (preferably a specialist perinatal mental health service). This might include advice on the risks and possible harms of taking psychotropic medication while breastfeeding and how medication might affect a woman's ability to care for her baby (for example, sedation). ■ Mental health professionals providing detailed advice about the possible risks of mental health problems or the benefits and harms of treatment in pregnancy and the postnatal period should include discussion of the following, depending on individual circumstances: ■ the uncertainty about the benefits, risks and harms of treatments for mental health problems in pregnancy and the postnatal period ■ the likely benefit of each treatment, taking into account the severity of the mental health problem ■ the woman's response to any previous treatment ■ the background risk of harm to the woman and the fetus or baby associated with the mental health problem and the risk to mental health and parenting associated with no treatment ■ the possibility of the sudden onset of symptoms of mental health problems in pregnancy and the postnatal period, particularly in the first few weeks after childbirth (for example, in bipolar disorder) ■ the risks or harms to the woman and the fetus or baby associated with each treament option ■ the need for prompt treatment because of the potential effect of an untreated mental health problem on the fetus or baby ■ the risk or harms to the woman and the fetus or baby associated with stopping or changing a treatment ■ When discussing likely benefits and risks of treatment with the woman and, if she agrees, with her partner, family or carer: ■ acknowledge the woman's central role in reaching a decision about her treatment and that the role of the professional is to inform that decision with balanced and up-to-date information and advice ■ use absolute values based on a common denominator (that is, numbers out of 100 or 1,000) ■ acknowledge and describe, if possible, the uncertainty around any estimate of risk, harm or benefit ■ use high-quality decision aids in a variety of numerical and pictorial formats that focus on a personalised view of the risks and benefits ■ consider providing records of the consultation, in a variety of visual, verbal or audio formats ■ Healthcare professionals working in universal services and those caring for women in mental health services should: ■ assess the level of contact and support needed by women with a mental health problem (current or past) and those at risk of developing one ■ agree the level of contact and support with each woman, including those who are not having treatment for a mental health problem ■ monitor regularly for symptoms thoughout pregnancy and the postnatal period, particularly in the first few weeks after childbirth. **Starting, using and stopping treatment:** ■ Before starting any treatment in pregnancy and the postnatal period, discuss with the woman the higher threshold for pharmacological interventions arising from the changing risk-benefit ratio for psychotropic medication at this time and the likely benefits of a psychological intervention. ■ If the optimal treatment for a woman with a mental health problem is psychotropic medication combined with a psychological intervention, but she declines or stops taking psychotropic medication in pregnancy or the postnatal period, ensure that ■ she is adequately supported ■ has the opportunity to discuss the risk associated with stopping psychotropic medication and ■ is offered, or can continue with, a psychological intervention.

Country, year [ref]	UK/NICE guideline, 2014 [21, 27, 28][15]
■ **Treatment** *(continuation 1)*	■ When psychotropic medication is started in pregnancy and the postnatal period, consider seeking advice, preferably from a specialist in perinatal mental health, and ▪ choose the drug with the lowest risk profile for the woman, fetus and baby, taking into account a woman's previous response to medication ▪ use the lowest effective dose (this is particularly important when the risks of adverse effects to the woman, fetus and baby may be dose related), but note that sub-therapeutic doses may also expose the fetus to risks and not treat the mental health problem effectively ▪ use a single drug, if possible, in preference to 2 or more drugs ▪ take into account that dosages may need to be adjusted in pregnancy ■ Specific recommendations on: ▪ tricyclic antidepressants (TCA), selective serotonin reuptake inhibitor (SSRI), (serotonin-)noradrenaline reuptake inhibitor [(S)NRI] – [21, p.26f] ▪ benzodiazepines – [21, p.27f] ▪ antipsychotic medication – [21, p.28] ▪ anticonvulsants for mental health problems – [21, p.29] ▪ lithium – [21, p.30] **Providing interventions in pregnancy and the postnatal period:** ■ All interventions for mental health problems in pregnancy and the postnatal period should be delivered by competent practitioners. Psychological and psychosocial interventions should be based on the relevant treatment manual(s), which should guide the structure and duration of the intervention. Practitioners should consider using competence frameworks developed from the relevant treatment manual(s) and for all interventions practitioners should: ▪ receive regular high-quality supervision ▪ use routine outcome measures and ensure that the woman is involved in reviewing the efficacy of the treatment ▪ engage in monitoring and evaluation of treatment adherence and practitioner competence – for example, by using video and audio tapes, and external audit and scrutiny where appropriate. ■ Provide interventions for mental health problems in pregnancy and the postnatal period within a stepped-care model of service delivery. ■ Specific recommendations on: ▪ interventions for depression, e.g., facilitated self-help, cognitive behavioural therapy (CBT), ways of reducing medication safely, ways of monitoring/adjusting medication use [21, p.38f] ▪ interventions for anxiety disorders, e.g. facilitated self-help, CBT, ways of reducing medication safely, ways of adjusting medication [21, p.39f] ▪ interventions for eating disorders, e.g., psychological intervention, monitoring woman's condition and fetal growth, advising about feeding the baby [21, p.41] ▪ interventions for alcohol and drug misuse, e.g., brief psychosocial interventions, refer to specialist substance misuse service, assisted alcohol withdrawal, detoxification [21, p.41f] ▪ interventions for severe mental illness (e.g., bipolar disorder, psychosis), e.g., CBT, interpersonal psychotherapy (IPT), behavioural couples therapy, structured individual, group and family interventions [21, p.42f] ▪ interventions for sleep problems, e.g., advising about sleep hygiene [21, p.43] **Considerations for women and their babies in the postnatal period:** ■ After childbirth, review and assess the need for starting, restarting or adjusting psychotropic medication as soon as a woman with a past or present severe mental illness is medically stable. ■ If a woman has taken psychotropic medication during pregnancy, carry out a full neonatal assessment of the newborn baby, bearing in mind: ▪ the variation in the onset of adverse effects of psychotropic medication ▪ the need for further monitoring ▪ the need to inform relevant healthcare professionals and the woman and her partner, family or carer of any further monitoring, particularly if the woman has been discharged early. ■ If there has been alcohol or drug misuse in pregnancy, offer treatment and support after childbirth to both the woman and the baby, including: ▪ a full neonatal assessment for any congenital abnormalities or neonatal adaptation syndrome ▪ continuing psychological treatment and support for the woman ▪ monitoring of the baby. **Traumatic birth, stillbirth and miscarriage:** ■ Offer advice and support to women who have had a traumatic birth or miscarriage and wish to talk about their experience. Take into account the effect of the birth or miscarriage on the partner and encourage them to accept support from family and friends. ■ Offer women who have post-traumatic stress disorder, which has resulted from a traumatic birth, miscarriage, stillbirth or neonatal death, a high-intensity psychological intervention (trauma-focused CBT or eye-movement desensitisation and reprocessing [EMDR]) in line with the NICE guideline on post-traumatic stress disorder.

Country, year [ref]	UK/NICE guideline, 2014 [21, 27, 28][15]
■ **Treatment** *(continuation 2)*	**The organisation of services:** ■ Women who need inpatient care for a mental health problem within 12 months of childbirth should normally be admitted to a specialist mother and baby unit, unless there are specific reasons for not doing so.
■ **Involvement of people with lived experience** (e.g., peer-support groups)	(*no specific recommendation in the NICE guideline [21], but there is some information in the full guideline [27]*): ■ Peer-mediated support is a system of giving and receiving help founded on key principles of respect, shared responsibility, and mutual agreement of what is helpful and is primarily in one direction with a clearly defined peer supporter and recipient of support. Peer volunteers who are mothers themselves and also have a history of antenatal or postnatal mental health problems are recruited and trained to deliver interventions. These interventions can include befriending and mentoring. ■ Support groups also provide an opportunity for peer support but are usually facilitated by a healthcare professional and discussions are usually structured around a series of pre-defined topic areas (for instance, transition to motherhood, postnatal stress management, co-parenting challenges). However, the primary goal of these interventions is to enable mutual support by bringing women into contact with other women who are having similar experiences and providing opportunities for sharing problems and solutions.
■ **Specific services addressing infant (mental) health/ parent-infant relationship**	■ Acknowledge the woman's role in caring for her baby and support her to do this in a non-judgmental and compassionate way. ■ Recognise that some women with a mental health problem may experience difficulties with the mother-baby relationship. Assess the nature of this relationship, including verbal interaction, emotional sensitivity and physical care, at all postnatal contacts. Discuss any concerns that the woman has about her relationship with her baby and provide information and treatment for the mental health problem. ■ Consider further intervention to improve the mother-baby relationship if any problems in the relationship have not resolved.
■ **Specific services addressing the mental health of the partner/co-parent**	(*no specific services mentioned*) ■ Take into account and, if appropriate, assess and address the needs of partners, families and carers that might affect a woman with a mental health problem in pregnancy and the postnatal period. These include: ▪ the welfare of the baby and other dependent children and adults ▪ the role of the partner, family or carer in providing support ▪ the potential effect of any mental health problem on the woman's relationship with her partner, family or carer
■ **Other services**	n.r.
(Cross-sectoral) coordination of services	Develop an integrated care plan for a woman with a mental health problem in pregnancy and the postnatal period that sets out: ■ the care and treatment for the mental health problem ■ the roles of all healthcare professionals, including who is responsible for: ▪ coordinating the integrated care plan ▪ the schedule of monitoring ▪ providing the interventions and agreeing the outcomes with the woman The healthcare professional responsible for coordinating the integrated care plan should ensure that: ■ everyone involved in a woman's care is aware of their responsibilities ■ there is effective sharing of information with all services involved and with the woman herself ■ mental health (including mental wellbeing) is taken into account as part of all care plans ■ all interventions for mental health problems are delivered in a timely manner, taking into account the stage of the pregnancy or age of the baby. The quality standard for antenatal and postnatal mental health specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole antenatal and postnatal mental health care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to women with a mental health problem in pregnancy and the postnatal period.
Education, training, continuing professional development	Managers and senior healthcare professionals responsible for perinatal mental health services (including those working in maternity and primary care services) should ensure that: ■ there are clearly specified care pathways so that all primary and secondary healthcare professionals involved in the care of women during pregnancy and the postnatal period know how to access assessment and treatment ■ staff have supervision and training, covering mental health problems, assessment methods and referral routes, to allow them to follow the care pathway. All healthcare professionals involved in antenatal and postnatal mental health should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard.

Country, year [ref]	UK/NICE guideline, 2014 [21, 27, 28][15]
Requirements for delivery of the PIMH care model	
(Legal) framework conditions	n.r.
Infrastructure, resources	Each managed perinatal mental health network should have designated specialist inpatient services and cover a population where there are between 25,000 and 50,000 live births a year, depending on the local psychiatric morbidity rates. Specialist perinatal inpatient services should: ■ provide facilities designed specifically for mothers and babies (typically with 6 to 12 beds) ■ be staffed by specialist perinatal mental health staff ■ be staffed to provide appropriate care for babies ■ have effective liaison with general medical and mental health services ■ have available the full range of therapeutic services ■ be closely integrated with community-based mental health services to ensure continuity of care and minimum length of stay.
Facilitators and barriers	n.r.

Evaluation, monitoring	The NICE Quality Standard [28] includes a set of prioritised statements designed to drive measurable improvements in the 3 dimensions of quality – patient safety, patient experience and clinical effectiveness. For each of the 7 quality statements, quality measures regarding structure, process and outcomes are defined.
	List of quality statements:
	1. Women and girls of childbearing potential are not prescribed valproate to treat a mental health problem [28, p.10f].
	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 [28, p.13f].
	3. Pregnant women with a previous severe mental health problem or any current mental health problem are given information at their booking appointment about how their mental health problem and its treatment might affect them or their baby [28, p.17f].
	4. Women are asked about their emotional wellbeing at each routine antenatal and postnatal contact [28, p.21f] *(see below)*.
	5. Women with a suspected mental health problem in pregnancy or the postnatal period receive a comprehensive mental health assessment [28, p.26f.].
	6. Women referred for psychological interventions in pregnancy or the postnatal period start treatment within 6 weeks of referral [28, p.30f].
	7. 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 [28, p.33f]. (developmental)
	e.g., Quality statement 4:
	Women are asked about their emotional wellbeing at each routine antenatal and postnatal contact.
	Quality measures (assessed through local data collection)
	■ ***Structure:*** Evidence of arrangements for healthcare professionals to ask women about their emotional wellbeing at all routine antenatal and postnatal contacts.
	■ ***Process:*** The proportion of routine antenatal and postnatal contacts at which woman are asked about their emotional wellbeing by a healthcare professional (Numerator – the number in the denominator at which women were asked about their emotional wellbeing by a healthcare professional; Denominator – the number of routine antenatal and postnatal contacts).
	■ ***Outcome:***
	  ■ Women's satisfaction with being able to discuss any concerns or worries at routine appointments.
	  ■ Identification of mental health problems.
	■ *Further details see [28], p. 21f.*

Additional relevant documents	-

Abbreviations: CBT – cognitive behavioural therapy, EPDS – Edinburgh Postnatal Depression Scale, GAD – Generalized Anxiety Disorder scale, GDG – Guideline Development Group, GP – general practitioner, NICE – National Institute for Health and Care Excellence, n.r. – not reported, p – page, PHQ-0 – Patient Health Questionnaire, UK United Kingdom

UK Pathways

Table A-2: Data extraction table, UK

Country, year [ref]	**UK, 2018 [4, 23]**
Title of the document	The Perinatal Mental Health Care Pathways [23] The Perinatal Mental Health Care Pathways, Full Implementation Guidance [4]
Type of document	Guidance
Publisher	National Collaborating Centre for Mental Health (NCCMH)
Language	English
Contracting entity/funding	NHS England, NHS Improvement
Development of the model/pathway	The perinatal mental health care pathways and the accompanying guidance have been developed by the NCCMH following a process agreed with the National Institute for Health and Care Excellence (NICE), with involvement from an Expert Reference Group including experts by experience, carers, practitioners, academics, commissioners, service managers and representatives from national NHS arm's-length bodies.
■ **involvement of people with lived experience**	2 experts by experience were part of the Expert Reference Group
Aim of the document	This guidance introduces a series of pathways that outline access to services for women with a mental health problem in the perinatal period (defined as pregnancy and the first 12 months after childbirth) or with a past or current mental health problem who are planning a pregnancy. **The pathway values statement:** This guidance represents a commitment to ensuring that mental health care is delivered in a person-centred, compassionate and supportive way, promoting safety and wellbeing at the forefront. Mental health service provision should be needs-led, responsive and delivered in a way that empowers people to build on their strengths, promotes recovery, supports families and carers, and ensures equality and fairness for all.
Target users of the document	This guidance is primarily aimed at clinical commissioning group (CCG) mental health commissioners and providers of perinatal mental health services, statutory and non-statutory social care providers and local authorities, working collaboratively with women who use perinatal mental health services and their families and carers.
Characteristics of the PIMH care model described in the document/guideline	
Target populations for the services	Women with a mental health problem in the perinatal period (defined as pregnancy and the first 12 months after childbirth) or with a past or current mental health problem who are planning a pregnancy
Involved professionals	Specialist perinatal mental health services include: ■ Specialist community perinatal mental health teams, which offer psychiatric and psychological assessments and care for women with complex or severe mental health problems during the perinatal period. They also provide preconception advice for women with a complex or severe mental health problem (current or past) who are planning a pregnancy ■ Inpatient mother and baby units (MBUs), which are commissioned by NHS England. They provide inpatient care for women with complex or severe mental health problems during the last trimester of pregnancy and the first 12 months after childbirth. A primary function of MBUs is to enable women to receive inpatient care while remaining with their baby. ■ Both community and inpatient teams should be multidisciplinary and have strong links with maternity services, health visiting, primary care and social care.
Organisation of the services	Key partners and providers include: ■ Universal services, including primary care, maternity services and health visiting ■ Mental health services, including Improving Access to Psychological Therapies (IAPT) and secondary care mental health services ■ Specialist perinatal mental health services, including community teams and MBUs ■ Perinatal mental health networks ■ Adult and children's social care, which can support the woman and her family during recovery and the discharge process ■ Wider local authorities and social care, which can address any key social needs and ensure access to support for example housing, employment, debt and benefits The delivery of care should be collaborative, take the whole pathway into account, and be underpinned by local awareness and high-quality training and development.

Country, year [ref]	UK, 2018 [4, 23]
"Components" of the care model	
■ **Primary prevention**	**Pathway 1: Preconception advice** *Women with a complex or severe mental health problem (current or past) who are planning a pregnancy should receive timely preconception advice from a specialist community perinatal mental health service before they become pregnant.* Advice and monitoring can help prevent many avoidable mental health problems and minimise the risks associated with pregnancy, particularly in women at high risk of mental illness. Access to good quality advice, information and support will help women make informed decisions during their pregnancy. These decisions should be jointly planned, in advance, by the woman with the practitioner. Preconception advice may include: ■ the use of contraception and any plans for a pregnancy ■ how pregnancy and childbirth might affect a mental health problem (including the risk of relapse) ■ how a mental health problem and its treatment might affect the woman and her parenting style, and the unborn baby or baby, including the implications of medication and for breastfeeding. Women with a complex or severe mental health problem (current or past), who are planning a pregnancy, should be referred to a specialist community perinatal mental health service for preconception advice. Referrals will typically be made from primary care, or from secondary mental health care. Preconception advice should include a review of current medication, as well as any benefits or risks associated with stopping or changing treatment. If a woman has a long-term mental health problem, it may be preferable for specialist advice to be provided for both the woman and the primary or secondary care team.
■ **Early identification**	n.r.
■ **Triage**	**Pathway 2: Specialist assessment** *Women referred to a specialist community perinatal mental health team with a complex or severe perinatal mental health problem (known or suspected) should have timely access to a biopsychosocial assessment. Where a need for ongoing care or intervention is identified, the woman should also have an agreed care plan in place and have been allocated to a named professional.* To improve identification rates and reduce the long-term adverse outcomes of undiagnosed and untreated mental health problems, it is crucial that all women are asked about their mental health at each routine antenatal and postnatal contact. If a mental health problem is suspected, a face-to-face assessment should be conducted to identify any potential mental health problems during the pregnancy or the postnatal period. This helps ensure that at the earliest possible opportunity women are offered, and able to access, timely and appropriate treatment that emphasises recovery. If the assessment confirms a perinatal mental health problem that requires intervention from a specialist community perinatal mental health team, the pathway stops when: ■ the woman has had a biopsychosocial assessment ■ a care plan of NICE-recommended treatment has been agreed with the woman and is in place ■ the woman has been allocated to a named professional. If the woman does not require further intervention from a specialist community perinatal mental health team, she leaves the pathway once she has been told the outcome of the assessment and been discharged. The service should then still ensure that the woman receives any help that she needs. This may include an onward referral to an appropriate service, such as IAPT or primary or secondary care. Principles for developing a care plan: ■ It is important that a coordinated, agreed care plan is jointly developed with the woman and clinician. The care plan should emphasise a recovery-based approach, with the woman at the centre. This may include the use of psychological interventions or referral to an MBU, as described in Pathways 4 and 5, respectively. A care plan might also include elective admission for those women known to be at high risk of relapse in the perinatal period, or for a parenting assessment. ■ Once a care plan has been agreed, treatment should start as soon as possible, at a time that is most appropriate to the woman's needs. ■ When a woman has more complex needs (for example, learning disabilities or acquired cognitive impairment), consideration should be given to whether a specialist should be consulted during the assessment and when developing the care plan. As part of this, if harmful or dependent drug or alcohol use is identified in pregnancy or the postnatal period, the woman should be referred to a specialist drug/alcohol service for advice and treatment. The GP and referrer should also be informed of the outcome of the assessment. **Pathway 3: emergency assessment** *On receiving the referral for a perinatal mental health crisis, the mental health professional should contact the most appropriate person (the woman in crisis, family member/carer, or health or social care professional) without delay and agree the next steps to be provided in the woman's care and support. This should be done in line with national guidance such as the urgent and emergency liaison mental health care pathway guidance. Failure to provide an emergency referral and adequate assessment or start treatment immediately poses significant risk to the mother and baby.*

Country, year [ref]	UK, 2018 [4, 23]
■ **Triage** *(continuation)*	*The woman should:* ■ *have had a biopsychosocial assessment and an urgent and emergency mental health care plan in place,* ***and*** ■ *as a minimum, be en route to their next location if geographically different,* ***or*** ■ *have started the referral process for admission to a mother-baby unit (MBU),* ***or*** ■ *have been accepted and scheduled for intensive follow-up care at home or by the specialist community perinatal mental health team* ***or*** ■ *have immediate access to care and support if she is waiting for an admission to an MBU* ***or*** ■ *have started assessment under the Mental Health Act.* A woman may experience a mental health crisis during the perinatal period for a variety of reasons, for example, onset of postpartum psychosis (which can lead to rapid deterioration), or a severe depression that places the mother and baby at risk of harm. When the woman (or anyone else) suspects a crisis, a referral should be made immediately for an emergency assessment. This may be carried out by a secondary care mental health service, such as a crisis resolution and home treatment team or a liaison mental health team. A specialist community perinatal mental health team should lead or support this assessment where possible. If the woman is not experiencing a mental health crisis or the crisis has resolved, she can leave the pathway. The service should ensure that the woman receives appropriate follow-up support.
■ **Treatment** (e.g., psychological therapies, pharmacological treatment)	**Pathway 4: Psychological interventions** *Women with a known or suspected mental health problem who are referred in pregnancy or the postnatal period should receive timely access to evidence-based (NICE-recommended) psychological interventions.* Many women who develop a perinatal mental health problem will have depression or an anxiety disorder. Psychological interventions (either alone or in conjunction with pharmacological treatment) are extremely effective for treating depression and anxiety disorders, and many women prefer them to taking medication. They are also recommended for the treatment of a range of other perinatal mental health problems including severe mental illness and eating disorders. Psychological interventions may be provided via primary, secondary or tertiary care. Following assessment, if it is decided that the woman requires psychological therapy, the pathway stops when she has started an evidence-based (NICE-recommended) psychological intervention. Some women may benefit from a single assessment and advice session and need no further treatment or are signposted to another appropriate service. If it is judged that the woman does not require treatment, she will leave the pathway. **Pathway 5: Inpatient care (MBUs)** *Women who need unplanned inpatient care should have urgent access to an MBU.* A small number of women with a complex or severe mental health problem will need unplanned inpatient care during the perinatal period. In these situations, both mother and baby should have urgent access to an MBU. MBUs provide support and care for the mother in her parenting role, and have staff with specialist expertise to manage complex or severe perinatal mental health problems.
■ **Involvement of people with lived experience** (e.g., peer-support groups)	n.r.
■ **Specific services addressing infant (mental) health/ parent-infant relationship**	n.r.
■ **Specific services addressing the mental health of the partner/ co-parent**	*(no specific services mentioned)* Families and carers play an invaluable role in helping people to recover from perinatal mental health problems. It is vital their contribution as expert partners in care is recognised and valued. This includes being able to access support as individuals and in their caring role.
■ **Other services**	Specialist perinatal mental health services form part of a wider system of care working with women and families: ■ Universal services: These services include primary care, maternity services and health visiting, which work with women across the perinatal period. They play an important role in identifying mental health problems. ■ Improving Acess to Psychological Therapies (IAPT) services: These services successfully treat many women experiencing depression and anxiety disorders (such as generalised anxiety, social anxiety, obsessive-compulsive and post-traumatic stress disorders) during the perinatal period. ■ Secondary care mental health services: Many women with complex or severe problems will already be in contact with secondary care services. In such situations, the team may share or continue care and case management with support from specialist perinatal mental health services. ■ Children and young people's mental health services: These services ensure timely, age-appropriate care, advice and support can be offered to young people with perinatal mental health needs. The relationship with infant mental health work is also important to complement and support the ambitions of improving perinatal mental health care. ■ Wider local authority services: This includes close working with local government and other agencies to address any key social needs and ensure access to support (for example, housing, employment, debt and benefits).

Country, year [ref]	UK, 2018 [4, 23]
(Cross-sectoral) coordination of services	n.r.
Education, training, continuing professional development	The right workforce, with the right capacity and skill mix, is essential for ensuring the delivery of NICE-recommended care. Health Education England (HEE) has developed and published a tiered, multidisciplinary competency framework for perinatal mental health. The framework sets out the essential skills and knowledge necessary for all staff involved in the care of women with perinatal mental health problems. It sets out standards needed in education and training including raising awareness of perinatal mental health problems, knowledge and skills for those that have regular contact with women with perinatal mental health problems and knowledge and skills for those in leadership. HEE will also develop the framework digitally to improve ease of access and use.
Requirements for delivery of the PIMH care model	
(Legal) framework conditions	n.r.
Infrastructure, resources	The following is expected from commissioners, to support their preparations for implementing the pathway, including developing the capacity and capability of perinatal mental health services: ■ **Joint strategic planning:** Key to delivering these new ambitions will be the joint development of integrated care pathways that encourage multi-agency working between primary and secondary care, mental and physical health services, children's and adult services and health and social care. Plans and decisions for change should be grounded in evidence and co-produced with key partners, service users and the wider public. ■ **Understanding local demand:** Effective approaches to reducing differences in access, experience of care and clinical outcomes are built from the best available evidence on why and how such variations occur. Commissioners should develop a rich picture of the current and future needs of the local population. This should be outlined in a Joint Strategic Needs Assessment. Commissioners should, e.g., estimate local incidence rates of perinatal mental health problems, understand local referral rates, understand the local demographic profile and variance in incidence and referral rates, arrive at a local estimate by combining the factors above. ■ **Building a case for change:** Commissioners should work with providers and wider stakeholders to agree on an objective or future service model. Following the development of an outline service model, a plan should be produced that sets out the short, medium and long-term steps required to fill the gaps between the current model and the new model of pathways ■ **Managing the local system:** Once future quality standards, performance and workforce requirements have been outlined, an options appraisal for service reconfiguration, recruitment and workforce development will need to be considered jointly with providers. This may include establishing task and finish design and implementation groups, with clear reporting structures, to support, oversee and review the development and implementation of these changes. ■ **Monitoring the new system and the impact of change:** Agree data quality improvement and performance monitoring plans; electronic care records and information systems; create and agree a benefits realisation plan
Facilitators and barriers	Commissioners should ensure that local service development plans for perinatal mental health services: ■ are co-produced and implemented in collaboration with women using the services, their families and carers, as well as local mental health care providers, staff and partner organisations ■ have equity of access for all adults.
Evaluation, monitoring	Clearly defined outcomes that are collected routinely are an essential part of measuring and monitoring the effectiveness of a service. The Expert Reference Group has recommended a range of outcome measures that are relevant to one or more pathway(s). The group recognises that the needs of women with perinatal mental health problems and how they will be assessed could vary in frequency and duration, depending on the areas being assessed and the purpose of the assessment. In addition to their recommendations, the decision about which outcome measure to use should be informed by the specific disorder and established sources, such as existing NICE guidance, the IAPT dataset and the International Consortium for Health Outcome Measurements. Routine outcome measurement needs to be delivered in a way that is acceptable to both the woman and the practitioner. This can be achieved by using brief validated outcome measures that require little time to complete, and by having electronic records systems that support the collection, aggregation and feedback of outcomes at the individual and service level. Both of these should form part of any routine outcome system. Access to routine feedback has been demonstrated to improve outcomes and reviewing of individual measures can also aid clinical decisions.
Additional relevant documents	

Abbreciations: MBU – mother and baby unit, NHS – National Health Service, n.r. – not reported

Ireland

Table A-3: Data extraction table, Ireland

Country, year [ref]	Ireland, 2017 [24]
Title of the document	Specialist Perinatal Mental Health Services. Model of Care for Ireland.
Type of document	n.r.
Publisher	National Mental Health Division, Health Service Executive
Language	English
Contracting entity/funding	Health Service Executive
Development of the model/pathway	The Model of Care for Specialist Perinatal Mental Health Services and the overall Perinatal Mental Health Clinical Pathway was developed by a multidisciplinary Working Group with service user representation chaired by the National Clinical Advisor in Mental Health. The Model is informed by national and international epidemiological evidence of need.
■ **involvement of people with lived experience**	Service users were represented in the working group
Aim of the document	The Working Group considered the specialist (secondary and tertiary care) component of an overall perinatal mental health service. 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.
Target users of the document	n.r.
Characteristics of the PIMH care model described in the document/guideline	
Target populations for the services	Pregnant women and women with a baby up to one year old who may have an existing or new mental health problem; women with severe mental health problems who are planning a pregnancy

Involved professionals	Involved services/professionals in perinatal mental health services:
	■ Health promotion
	■ General practitioners
	■ Practice nurses
	■ Public health nurses
	■ Primary care team
	■ Midwives
	■ Obstetricians
	■ Secondary care community and inpatient mental health services
	■ Specialist perinatal mental health services; with the following key disciplines:
	  ■ Consultant Psychiatrist with a special interest in perinatal psychiatry
	  ■ Non Consultant Hospital Doctor[17]
	  ■ Mental Health Nurses
	  ■ Psychologist
	  ■ Occupational Therapist
	  ■ Social Worker
	  ■ Administrator

Organisation of the services	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 a hub and spoke clinical network model with the 3 maternity hospitals in Dublin being hubs for their respective hospital groups. The 3 maternity units with the highest number of deliveries will be the hubs for the other 3 hospital groups. 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 that each spoke has a mental health nurse at CNS (Clinical Nurse Specialist) level with dedicated time for the role. Each hub within a hospital group should have a specialist perinatal mental health service. It's staffing is multidisciplinary and led by a consultant psychiatrist in perinatal psychiatry. In the remaining maternity units (13) referred to as "spokes", the liaison psychiatry team continues to provide the input to the maternity service with the addition of a mental health midwife. This team will be linked to the hub specialist perinatal mental health teams for advice, regular meetings, training, education and clinical opinions.

[17] A non-consultant hospital doctor (also known as junior doctor) is a term used in Ireland to describe qualified medical practitioners who work under the (direct or nominal) supervision of a consultant in a particular specialty (see https://en.wikipedia.org/wiki/Non-consultant_hospital_doctor, accessed 12/07/2022)

Country, year [ref]	Ireland, 2017 [24]
"Components" of the care model	
■ **Primary prevention**	**Mental Health Midwives:** the primary role of this midwife is to promote parity between physical and mental health care in maternity services. 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. Such midwives can offer brief interventions for pregnancy related symptoms and they may also provide interventions individually or in group format for women with traumatic birth experiences whether physically or emotionally based. 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.
■ **Early identification**	■ **General Practitioners:** assessment of physical and emotional health is made by the GP and women are booked into the appropriate antenatal clinic; the GP should inform the antenatal clinic of any past or current mental health issues/illnesses (referral to the relevant Specialist Perinatal Mental Health Services in case of a history of bipolar disorder) ■ **General Practitioners, Practice Nurses and Public Health Nurses:** the GP, Practice Nurse and Public Health Nurse should enquire about emotional health at each contact with the mother and baby; 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 ■ **Mental health screening at the Booking Visit:** the midwife should enquire about emotional as well as physical issues and consider referral to the mental health midwife if there are any identified risks (e.g., previous traumatic birth). Open questions to encourage discussion about mental health problems are helpful in identifying at risk women. It is recommended that the Whooley questions are used as they are non-threatening and promote further discussion about mental health. **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 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? ■ Have you ever attended a mental health service in the past? ■ Have you ever required inpatient care for a mental health issue? ■ Are you currently or have you recently taken medication for your mental health?
■ **Triage**	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 severe problems by the Specialist Perinatal Mental Health Team. A combined mental health referral triage system is recommended to expedite this. *See Figure 6 [24, p.54]*
■ **Treatment** (e.g., psychological therapies, pharmacological treatment)	■ **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; any pregnant women requiring such intervention should be prioritised by Primary Care Psychology ■ **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 ■ **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, they should also be in-reach to maternity units and clinics

Country, year [ref]	Ireland, 2017 [24]
■ **Treatment** (e.g., psychological therapies, pharmacological treatment) *(continuation)*	■ **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 should have readily available advice from Specialist Perinatal Mental Health services where necessary and be able to refer any women they are particular 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 and receives appropriate training; this nurse should develop close links with the specialist team and relevant mental health midwives ■ **Specialist Perinatal Mental Health Service:** Primary Care (particularly GPs and Public Health Nurses), 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 ■ **Mother and Baby Units:** Given the documented adverse effects on separating mothers from their babies, the provision of mother and baby units is recommended notwithstanding the challenges of geography and dispersed maternity units. It is recommended that one 6-10 bedded mother and baby unit be developed in Dublin that operates as a national tertiary centre of excellence with defined access from specialist perinatal mental health services. It must include a family side unit to facilitate contact with partners and other children. 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. Extension of this national unit to other regions of the country if there is a need demonstrated should be considered in the future. Two other options may be considered particulary because of the distance from home to the proposed national unit: ■ **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. When a mother and baby are being admitted, the arrangements required are: a single room with the baby being roomed with the mother; 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 dya 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 or the local relevant general adult psychiatry team, with readily available advice from the specialist perinatal mental health team ■ **A second Mother and Baby Unit:** if the need emerges after several years experience with the single national unit.
■ **Involvement of people with lived experience** (e.g., peer-support groups)	"Voluntary and self-help organisations" are listed as relevant services involved in an overall perinatal mental health response *(no further information available)*
■ **Specific services addressing infant (mental) health/ parent-infant relationship**	**Parent-Infant Services:** 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 *(these services are listed as one of several components of the proposed clinical pathway for perinatal mental health services)*
■ **Specific services addressing the mental health of the partner/co-parent**	n.r.
■ **Other services**	**Social Work Services:** social work services for children and families are crucial in identifying vulnerable women and babies and ensuring appropriate supports such as parent-infant services are provided
(Cross-sectoral) coordination of services	Close links should be developed by mental health midwives and the specialist service with the identified community mental health nurses 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. *See Figure 7 [24, p.55]*
Education, training, continuing professional development	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. Training requirements were defined for the members of the Specialist Perinatal Mental Health Team, particularly for the Consultant Psychiatrist, Mental Health Nurses and Mental Health Midwives. Training and continuing 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. It must include the mother, the baby and their relationship in the context of the family. Topics to be addressed in training: e.g., antenatal and postnatal care and the role of the midwife, perinatal care planning, infant mental health, mood and anxiety disorders, creating the 'safety net' – working as part of a multi-disciplinary team and across agencies, experience of baby when mother is emotionally ill, prescribing psychotropic medication in pregnancy and breastfeeding, cultural competence in perinatal mental health etc.

Country, year [ref]	Ireland, 2017 [24]
Requirements for delivery of the PIMH care model	
(Legal) framework conditions	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, including: ■ An integrated care pathway covering all levels of service provision and all severities of mental health problems/illnesses ■ The sharing of relevant mental health history between primary care including intellectual disability services, maternity and mental health services ■ Partnership working with women, their families and external agencies such as Child and Family Agency (TUSLA) ■ Seemless transition across health care settings: primary and secondary, physical and mental health care ■ Clarity on the referral route and indications for referral at each level. The National Maternity Strategy requires that Maternity Networks within Hospital Groups are established. These should be based on strong corporate and clinical governance. 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 community healthcare organisation level. 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.
Infrastructure, resources	Staffing of a Specialist Perinatal Mental Health Team: should be related to the number of births in the maternity unit rather than the size of the local population. Consultant Psychiatrist: 1 session (1/2 day) per 1.000 deliveries; where a full time consultant is required the team should comprise of Mental Health Nurses (2 Whole Time Equivalent (WTE))[18], Non Consultant Hospital Doctor (1 WTE), Psychology (1 WTE), Occupational Therapy (1 WTE), Social Work (1 WTE), Administrator (1 WTE per team) One six-bedded Mother and Baby Unit is recommended per 15,000 deliveries. Staffing for a 6-10 bedded mother and baby unit consists of: 2 mental health nurses per shift (9 WTE), 1 nursery nurse for extended day time hours (2.5 WTE), consultant (0.5 WTE), NCHD (1 WTE), Psychology (0.5 WTE), Occupational Therapy (0.5 WTE), Social Work (0.5 WTE), Ward Clerk/Administrator (1 WTE), link midwife to visit daily.
Facilitators and barriers	From a service user perspective, the document includes recommendations from AIMSI (Association for Improvements in Maternity Services in Ireland) specifically relevant for this model of care: ■ 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 supportice 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 What obstetricians need: ■ Out of hours telephone advice for acute mental health crises ■ Speedy access for acute cases ■ 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
Evaluation, monitoring	To evaluate this national model of specialist perinatal mental health care, each specialist team will be expected to record data for monthly reporting purposes. The Maternity & Newborn Clinical Management System (MN-CMS) Project is the design and implementation of an electronic health record for all women and babies in Ireland. Reporting from this system will include e.g., demographic information on women attending the service, access time to the service, relevant past and current history including mental health history, diagnosis, substance misuse if present, services provided by the specialist team, other supports arranged. In addition, measures of patient experience and satisfaction will be included.

[18] If the role is to extend to community visits, additional nursing staff would be required.

Country, year [ref]	Ireland, 2017 [24]
Additional relevant documents	A Vision for Change 2006: https://www.hse.ie/eng/services/publications/mentalhealth/mental-health---a-vision-for-change.pdf (government policy on the provision of mental health services in Ireland) National Maternity Strategy 2016-2026: https://www.gov.ie/en/publication/0ac5a8-national-maternity-strategy-creating-a-better-future-together-2016-2/?referrer=http://www.health.gov.ie/blog/publications/national-maternity-strategy-creating-a-better-future-together-2016-2026/ The development of the perinatal mental health midwife post has been a significant development and PMH midwives are available in both hub and spoke sites. A National Framework document to support PMH Midwives was launched in 2021: https://www.hse.ie/eng/services/list/4/mental-health-services/specialist-perinatal-mental-health/national-self-assessment-framework.pdf

Abbreviations: GP – general practitioner, n.r. – not reported, WTE – whole time equivalent

Canada/Ontario

Table A-4: Data extraction table, Canada/Ontario

Country, year [ref]	Canada/Ontario, 2021 [25, 30]
Title of the document	Perinatal Mental Health. Guidance for the identification and management of mental health in pregnant or postpartum individuals [25] Care Pathway for the Management of Perinatal Mental Health [30]
Type of document	Guidance Document and Care Pathway
Publisher	Provincial Council for Maternal and Child Health
Language	English
Contracting entity/funding	n.r.
Development of the model/pathway	The development of the care pathway and guidance document was informed by evidence identified in a literature review (used research databases and search terms are stated in the document). National and international clinical practice guidelines were also reviewed. The care pathway was developed in consultation with experts who helped apply evidence-based recommendations from clinical guidelines to a local Ontario context. 2 focus group sessions were held with diverse clinical stakeholders to review and share feedback on the application of the care pathway from their perspective and/or from use in their clinical practice.
■ **involvement of people with lived experience**	n.r.
Aim of the document	The objective of the care pathway is to build healthcare provider's (HCP) understanding and awareness of the delivery of mental healthcare for pregnant and postpartum individuals across Ontario, including how to: ■ Identify individuals who may require care, ■ Direct them to the care pathway most likely to be effective for them, depending on their level of need and treatment preferences, ■ Monitor via follow-up to ensure individuals are engaging with care pathway services and are directed to additional resources when appropriate.
Target users of the document	Health care providers in Ontario
Characteristics of the PIMH care model described in the document/guideline	
Target populations for the services	Pregnant or postpartum individuals
Involved professionals	HCPs such as physicians, midwives, nurses, or other regulated healthcare providers (often in a primary care setting) that may support pregnant or postpartum individuals
Organisation of the services	To assist HCPs in ensuring that pregnant and postpartum individuals receive high quality evidence-based care, the care pathway was developed as a resource to support the identification and management of individuals who require intervention for mental health during the perinatal period. A **stepped-care approach** to manage mental health problems was adopted as a useful mechanism to follow care guidelines. This stepped approach will help Ontario HCPs navigate the diverse treatment options and improve service access when addressing perinatal mental health concerns. While the pathway provides a standardized approach for perinatal mental healthcare, clinical judgment is required to ensure that care plans are tailored to meet the diverse needs and contexts of an individual. A person can enter at any step in the care pathway and move up or down it based on severity of illness and response to prior interventions. Treatments can build upon interventions available in the lower steps. Ongoing monitoring is required regardless of the treatment step being applied.

Country, year [ref]	Canada/Ontario, 2021 [25, 30]
"Components" of the care models	The care pathway for pregnancy and postpartum includes 5 steps: ■ ASK (see *detection/screening*) ■ ADVISE (see *referral/assessment*) ■ ASSESS (see *referral/assessment*) ■ ASSIST (see *care/treatment*) ■ ARRANGE (see *care/treatment*)
■ **Primary prevention**	*(Step 2 [ADVISE] includes counselling but it is unclear if that refers only to those identified through screening or to all women/families. More information see below)* **Pre-conception planning** While not covered by the care pathway, optimizing management prior to pregnancy for individuals with pre-existing mental illness or risk factors for an episode in the perinatal period is ideal. Management includes preventative strategies such as: optimizing health behaviours, including nutrition, physical activity and sleep patterns; promoting a supportive environment; reviewing current or previously used psychological and pharmacological interventions; and engaging treatment to reduce risk for relapse perinatally. Plans for pharmacological management during pregnancy and breastfeeding should be made with a shared decision-making approach to balance benefits and risks of medication use in pregnancy and lactation for the pregnant person and infant.
■ **Early identification**	**Step 1: ASK** ■ Ask about the well-being of the pregnant or postpartum person at every visit to identify a need for mental health support and treatment. HCPs should be alert to risk factors for mental illness – especially those that can be addressed with appropriate social and/or community supports and services. Major risk factors for mental illness in the perinatal period include a personal or family history of mental illness, low social support and current life stressors, including partner discord, financial problems and child illness. ■ At each visit, the HCP should attend to any signs or symptoms of mental health difficulty, including non-specific symptoms such as insomnia and fatigue, and difficulty in home, relationship or occupational functioning. The HCP can then ask the pregnant or postpartum person about their mental health, sensitively inquiring about how a person is feeling and coping, or about specific symptoms.The dialogue should include a focus on a person's mental health within their own unique context and in all their diversity, with attention to a person's age, gender identity, race, ethnicity, ability and disability, and other relevant factors. ■ No specific tools are required to sensitively ask a pregnant or postpartum person about their mental health. However, to improve identification of issues and to help Ontario HCPs identify individuals struggling with their mental health, several validated depression and anxiety screening tools are contained in the Ontario Perinatal Record (OPR)[19]: Generalized Anxiety Disorder-2 (GAD-2)[20], Patient Health Questionnaire-2 (PHQ-2)[21], Edinburgh Perinatal/Postnatal Depression Scale (EPDS)[22] ■ Screening vs. diagnosis: while these screening tools are helpful in identifying someone who is struggling with their mental health and *may* have a mental illness, they do not replace a clinical diagnostic interview ■ **Healthy Babies Healthy Children (HBHC) Program:** pregnant and postpartum individuals requiring assistance with their mental health may also come to the attention of their HCPs through the individual's support system (e.g., family, partner) or via other community agencies with which the individual has been interacting, including social services, shelters and agencies assisting with supports for domestic violence. HCPs should be aware that support for perinatal mental health issues is available through the Healthy Babies Healthy Children (HBHC) program, a free program delivered through Ontario's public health units in partnership with hospitals and other community partners. The HBHC program uses screening and assessment to identify families at risk of compromised healthy child development, who may benefit from a home-visiting program so families can receive supports and services they need, including those that enhance maternal mental health, self-care and parenting capacity while in the community. Referrals from HBHC may also be made to HCPs given that, while not specific to mental health screening, the HBHC screening tool can identify someone who may require mental health support. Screening is offered through HBHC to pregnant people and their families and to families with children from birth to their transition to school. Universal screening is offered at the postpartum stage.
■ **Triage**	**Step 2: ADVISE** ■ Advise by providing education on perinatal mental health and arrange support to mitigate factors that are affecting mental health. By starting conversations about the challenges of pregnancy and parenthood in Step 1 (ASK), HCPs can create a non-judgmental environment to discuss mental health. When possible and appropriate, family members can and should be included in education and treatment planning.

[19] The Ontario Perinatal Record (OPR) has been the standard tool for documenting perinatal care and provider visits since 1979.

[20] GAD-2 is a validated two-item tool that screens for anxiety and can be used repeatedly with perinatal people at risk of anxiety or to confirm symptomatology.

[21] PHQ-2 is a validated two-item tool to screen for depression that can be used repeatedly with perinatal people at high risk of depression or to confirm symptomatology.

[22] EPDS is an internationally recommended tool that can be used if the PHQ score indicates risk or can be administered on its own.

Country, year [ref]	Canada/Ontario, 2021 [25, 30]
■ **Triage** *(continuation)*	■ Education should include information about prevalence, symptoms and risk factors for perinatal mental illness, as well as sensitive discussion of the potential impacts of untreated illness on both parental health and child health and development. Adequate time should be dedicated to discussing access to support services and psychosocial strategies to increase practical and emotional social support, improve night-time sleep, and encourage regular meals and physical activity. ■ Identifying and addressing psychosocial risk factors, medical and substance use comorbidities: HCPs should try to address modifiable precipitating and perpetuating factors for perinatal mental health issues (e.g., stress or anxiety related to the pregnancy or birthing experience, sleep deprivation or the feeling of being overwhelmed by caring for a newborn 24/7). A medical work-up to address any easily treatable perpetuating conditions (e.g., anemia, thyroid dysfunction) is required. There may also be a need to discuss referrals to available community services, if appropriate. This might include accessing resources for individuals facing low social support, intimate partner violence and financial difficulties, and arranging treatment for active alcohol and/or substance use disorders. **Step 3: ASSESS** ■ Assess the severity of the mental health concern: some mental health issues can resolve on their own with time and support, or with addressing the other risk factors or concerns. However, other issues may be more persistent and develop into a clinical mental disorder requiring more than supportive interventions. Treatment planning is guided by the severity of the illness, which is assessed by considering the number, nature and persistence of symptoms and the degree of impact on quality of life. The general goal of the HCP assessment is to determine the level of severity as follows (for common mental health concerns such as depression, anxiety and related disorders, the recommended screening assessments tools can help guide severity assessment in combination with clinical assessment, as listed below): ■ Mild: PHQ-9 or GAD-7 score of 5-9, or EPDS score of 10 to 12. ■ Moderate: PHQ-9 or GAD-7 score of 10-14 or EPDS score of 13 to 18. ■ Severe: PHQ-9 or GAD-7 score greater than 15, EPDS score greater than 19 or question 10 has a score greater than zero. ■ Urgent: active intent to harm self or others and/or suicidal ideation endorsed on any of the aforementioned questionnaires. ■ If there is any uncertainty about whether a person is experiencing mania or psychosis, or if there are concerns about the safety of the individual and/or others, initiate plan to transfer patient for emergency psychiatric assessment.
■ **Treatment** (e.g., psychological therapies, pharmacological treatment)	**Step 4: ASSIST** ■ Assist by recommending or implementing a Treatment Step: recommendations for treatment are made within the context of a stepped-care model, an evidence-based approach that ensures interventions are matched to patient need.[23] A stepped-care management plan may include a range of treatment options and interventions and is adaptable to a patient's changing needs and preferences. A pregnant or postpartum individual can enter the pathway at any step and move between steps based on severity of illness and in response to interventions. At all steps in the management plan, the need for additional education, identification and addressing of psychosocial, medical and other risk factors must be continually assessed. A discussion of infant and childcare supports is essential in the care management plan. The HBHC program (see above) offers a home-visiting program so families can receive supports and services they need, including to enhance maternal mental health, self-care and parenting capacity while in the community. HBHC and specific Public Health Units in Ontario offer a range of additional services and supports, including peer support groups, virtual parenting groups, and other psychosocial interventions that are helpful in the support of all treatment plans. ■ Ongoing assessment and monitoring are required to ensure that treatment is effective and adjustments are made when needed. The following approach outlines Treatment Steps based on the nature and severity of the person's symptoms, and the impact the symptoms are having on their functioning and well-being. ■ Mild severity: Treatment step 1 ■ Moderate severity: Treatment step 2 ■ Severe: Treatment step 2 and/or 3; Treatment step 4 for urgent care ■ Each step is accompanied by suggested interventions that should be administered or recommended to patients. Whenever possible, personal preferences and circumstances of the individual and their family should be considered in decision about treatment. With the patient's permission, a copy of the care plan should be shared with their support person. ■ The HCP and the individual should work together on creating a care plan with clearly identified roles to manage symptoms over the perinatal period. Other specialized staff can be invited to create a care team to support the diverse and complex needs of the individual on a case-by-case basis. ■ The care plan should include the following: ■ a description of the agreed-upon treatment goals and outcomes; ■ a description of the agreed-upon system of monitoring and when follow-ups should occur; and ■ the contact information of the care team and the roles and responsibilities for which each are accountable. This may include family and close relations should the individual allow it.

[23] The Guidance refers to the document "Perinatal Mental Health Toolkit for Ontario Public Health Units" [52].

Country, year [ref]	Canada/Ontario, 2021 [25, 30]
■ **Treatment** (e.g., psychological therapies, pharmacological treatment) *(continuation)*	***Treatment Step 1: Psychosocial interventions (community support)*** ■ Symptoms: common mental health concerns such as depression or anxiety, where symptoms are mild or subclinical (may include patients for whom you are taking a watch-and-wait approach) ■ Interventions by type and recommended resources: ■ self-help (perinatal-specific): self-directed workbooks for depression, self-directed workbooks for anxiety ■ guided self-help: e.g., internet- or paper-based self-guided intervention that may include assistance from a trained coach; e.g., 'Bounce Back Ontario' postpartum-specific resources (online, self and physician referral accepted) ■ peer support and supportive counselling: e.g., mother-to-mother support, and public health nurse telephone/home visits, facilitated support groups; e.g., 'Postpartum support international', 'Healthy Babies, Healthy Children' (online/in person, by region) ***Treatment Step 2: Psychological interventions and antidepressant medication*** ■ Symptoms: common mental health concerns of mild severity that do not remit with Step 1 interventions AND common mental health concerns of moderate severity or greater ■ Interventions by type and recommended resources: ■ Cognitive Behavioural Therapy (CBT) and Interpersonal Therapy (IPT): CBT and IPT are first-line treatments for perinatal depression and anxiety, e.g., Guidance on CBT and IPT, 'Mother Matters' (online therapist-facilitated discussion board and therapy group for postpartum depression/anxiety; free in Ontario), 'BEACON digital therapy', 'AbilitiCBT' (internet-based CBT; free in Ontario; therapist available with perinatal expertise) ■ Medication (within scope of primary care provider): antidepressant can be used (and/or psychological intervention) when (1) psychological intervention alone is insufficient, (2) symptoms are severe, or (3) preferred by the person ***Treatment Step 3: Additional specialized interventions*** ■ Symptoms: mild or moderate mental health concerns that do not remit with Step 2 interventions AND severe mental health concerns (severe depression or other severe mental illnesses such as bipolar disorder or schizophrenia) ■ Interventions by type and recommended resources: ■ Medication: second- and third-line medication options (see Canadian Network for Mood and Anxiety Treatments); provider to psychiatrist e-consultation ('Ontario Telemedicine Network'); patient consultation: refer to psychiatrist at local institution or network or to specialized perinatal program ■ Other: refer to local acute care centre with specialty psychiatric services. May include: specialized psychotherapy, pharmacological follow-up, somatic treatment options: neurostimulation, electroconvulsive therapy; partial or full hospitalization ***Treatment Step 4: Urgent care and hospitalization*** ■ Symptoms: suspected mania or psychosis; discloses intention or plan for suicide, self-harm or harm to fetus/infant ■ Interventions by type and recommended resources: ■ Urgent risk assessment – safety first. A person with possible mania, psychosis, thoughts of harming self or baby should NOT be left alone or with baby until an appropriate assessment is complete. Many pregnant and postpartum individuals do have "intrusive" thoughts of harm coming to their baby with no "active" intent. Each provider will have a different level of comfort with this assessment. ■ Provider is concerned about mania, psychosis or harm to self or others: initiate plan to transfer patient for emergency psychiatric assessment ■ Provider assesses that there is no active intent or plan for harm to self or others, and that patient has appropriate support, as well as capacity to access crisis services if symptoms worsen acutely: mobilize patient's support system; ensure the individual has contact information for crisis services; maintain close follow-up, follow treatment Steps 2 and 3 as appropriate; maintain and update plan of action with patient and patient's support system, including providers in patient's circle of care. **Step 5: ARRANGE** ■ Arrange follow-ups to monitor recommended treatment plan. Make modifications or changes to treatment step as required: Regardless of the treatment step, HCPs should actively monitor symptoms to determine if the pregnant or postpartum individual repsonds well to the prescribed intervention or whether changes are required. Follow-up is essential to address barriers to tratment uptake, review risk factors and discuss progress. ■ Frquency of initial follow-up should be at minimum 2 weeks during the active treatment phase (12 weeks). More frequent contact may be required if there is a higher severity of illness or if medication is prescribed, and conversely less frequent as symptoms improve. It should be clear to the person which health professional is providing follow-up care and the expected timelines. Where applicable, HCPs can use the mental health assessment tools for anxiety and depression listed in the report and pathway to monitor symptoms and need for additional treatments, or to determine when an individual has reached remission. Remission can be defined as PHQ-9 or GAD-7 score is less than 5, or EPDS score less than 10, on at least 2 assessments that are at least 2 weeks apart. ■ Individuals with common mental illnesses who are prescribed psychotropic medication should be followed for at least 6 months after remission to assess need for ongoing treatment. Those with more severe and persistent mental health issues will require longer-term treatment and follow-up and should be referred back to their primary HCP for ongoing care.

Country, year [ref]	Canada/Ontario, 2021 [25, 30]
■ **Involvement of people with lived experience** (e.g., peer-support groups)	*see above, Treatment Step 1 (peer support and supportive counselling)*
■ **Specific services addressing infant (mental) health/ parent-infant relationship**	n.r.
■ **Specific services addressing the mental health of the partner/co-parent**	n.r.
■ **Other services**	n.r.
(Cross-sectoral) coordination of services	n.r.
Education, training, continuing professional development	n.r.
Requirements for delivery of the PIMH care model	
(Legal) framework conditions	n.r.
Infrastructure, resources	n.r.
Facilitators and barriers	n.r.
Evaluation, monitoring	n.r.
Additional relevant documents	-

Abbreviations: CBT – Cognitive Behavioural Therapy, EPDS – Edinburgh Perinatal/Postnatal Depression Scale, GAD-2 – Generalized Anxiety Disorder-2 Scale, HBHC – Healthy Babies Healthy Children Programme, HCP – healthcare provider, IPT – Interpersonal Therapy, n.r. – not reported, PHQ-2 – Patient Health Questionnaire-2

Australia

COPE Guideline

Table A-5: Data extraction table, COPE guideline

Country, year [ref]	Australia/COPE guideline, 2017 [22][24]
Title of the document	Mental Health Care in the Perinatal Period. Australian Clinical Practice Guideline
Type of document	Clinical Practice Guideline
Publisher	Centre of Perinatal Excellence (COPE)
Language	English
Contracting entity/funding	Australian Government Department of Health
Development of the model/pathway	This Australian Guideline was developed by COPE in accordance with National Health and Medical Research Council (NHMRC) guideline development processes. This involved convening an Expert Working Group (EWG) comprising members with specific expertise in mental health care, as well as representatives of maternity care (including general practice, obstetrics, midwifery and maternal and child health), consumer and carer organisations and Aboriginal and Torres Strait Islander health care. Expert subcommittees were also convened to provide specific advice on some topics and formal consultation with a wide range of experts, stakeholders and consumer representatives was undertaken. A systematic literature review, which identified and critically appraised the evidence, provided the basis for the guideline.

[24] The Guideline is currently being updated and will be finalized by June 2023 (e-mail communication COPE, 23/07/2022)

Country, year [ref]	Australia/COPE guideline, 2017 [22][24]
■ **involvement of people with lived experience**	The establishment of the EWG with dedicated consumer and carer representation was considered fundamental to the inclusion of consumer and carer perspectives in the development of this Guideline. In particular the appointment of representatives from Australia's peak perinatal consumer body (PANDA) ensured that the perspectives of many consumers were included at the EWG level. It is also noted that a number of representatives brought to the table expertise and insights from the lived experience of perinatal mental health. In addition, the perspectives of consumers and carers were sought through the consultation process, whereby organisations and EWG representatives with access to consumers promoted the consultation process.
Aim of the document	This guideline aims to summarise the current evidence for screening for depressive and anxiety symptoms and risk factors and preventing and treating a range of mental health conditions in the perinatal period. To support health professionals in providing evidence-based care, the guideline summarises current evidence on approaches to the assessment of psychosocial risk factors and screening for common mental health symptoms. It also covers the perinatal-specific aspects of prevention and treatment of mental health conditions.
Target users of the document	The guideline is intended for all health professionals caring for women and families during the perinatal period. This includes but is not limited to midwives, general practitioners (GPs), obstetricians, neonatologists, paediatricians, maternal and child health nurses, paediatric nurses, Aboriginal and Torres Strait Islander health workers, allied health professionals, mental health practitioners (psychologists, psychiatrists, mental health nurses, perinatal and infant mental health professionals), consumers and carers and those working with families in the community (e.g., social workers, child protection agencies), hospitals and legal systems.
Characteristics of the PIMH care model described in the document/guideline	
Target populations for the services	The guideline is relevant to the care of all women in the perinatal period. In addition to screening and psychosocial assessment, the guideline provides guidance on care for women with depressive and anxiety disorders, severe mental illness (schizophrenia, bipolar disorder and postpartum psychosis) and borerline personality disorder.
Involved professionals	Health professionals caring for women and families during the perinatal period: ■ midwives ■ general practitioners ■ obstetricians ■ neonatologists ■ paediatricians ■ maternal and child health nurses ■ paediatric nurses ■ Aboriginal and Torres Strait Islander health workers ■ allied health professionals ■ mental health practitioners (psychologists, psychiatrists, mental health nurses, perinatal and infant mental health professionals) ■ professionals working with families in the community (e.g., social workers, child protection agencies)
Organisation of the services	**Systems for follow-up and support:** before screening and assessment is carried out, systems need to be in place to ensure that appropriate health professionals (HPs) are available to provide follow-up care if required and to assist if there are concerns for the safety of the woman, the fetus or infant or other childre in the woman's care. Health professionals will greatly benefit from identifying other professionals from whom they can seek advice, clinical supervision or support regarding mental health care in the perinatal period. This could potentially be supported through electronic referral pathways or directories. Incorporating psychosocial assessment and screening into routine practice: recommended psychosocial assessment and depression screening (e.g., with the EPDS) can be conducted by a variety of health professionals depending on where a woman seeks antenatal and postnatal care: ■ General practice – in the general practice setting, screening and psychosocial assessment may be conducted by the general practitioner or a practice nurse ■ Midwifery and maternal and child health care – midwives in public or private practice and maternal and child health nurses are well-placed to conduct screening and psychosocial assessment in the antenatal and postnatal periods, respectively. ■ Obstetric practice – obstetricians in public or private practice are responsible for ensuring that screening with the EPDS and psychosocial assessment take place. Regardless of who conducts the assessments (e.g., the obstetrician or a practice midwife), the woman's GP and the hospital at which the woman will give birth need to be notified if there are any concerns and relevant information included in the woman's discharge summary.
"Components" of the care model	
■ **Primary prevention**	**Supporting emotional health and wellbeing:** ■ At every antenatal and postnatal visit, enquire about the woman's emotional wellbeing [practice point (PP)]. ■ Provide women in the perinatal period with advice on lifestyle issues and sleep, as well as assistance in planning how this advice can be incorporated into their daily activities during this time [PP]. **General principles in prevention and treatment:** ■ Provide all women with information about the importance of enquiring about, and attending to, any mental health problems that might arise across the perinatal period [consensus-based recommendation (CBR)].

Country, year [ref]	Australia/COPE guideline, 2017 [22][24]
■ **Early identification**	**Screening for depression (EPDS):** ■ Use the Edinburgh Postnatal Depression Scale (EPDS) to screen women for a possible depressive disorder in the perinatal period [evidence-based recommendation (EBR), strong]. ■ Arrange further assessment of perinatal women with an EPDS score of 13 or more [EBR, strong]. ■ Complete the first antenatal screening as early as practical in pregnancy and repeat screening at least once later in pregnancy [CBR]. ■ Complete the first postnatal screening 6-12 weeks after birth and repeat screening at least once in the first postnatal year [CBR]. ■ For a woman with an EPDS score between 10 and 12, monitor and repeat the EPDS 2-4 weeks later as her score may increase subsequently [CBR]. ■ Repeat the EPDS at any time in pregnancy and in the first postnatal year if clinically indicated [CBR]. ■ For a woman with a positive score on Question 10 on the EPDS undertake or arrange immediate further assessment and, if there is any disclosure of suicidal ideation, take urgent action in accordance with local protocol/policy [CBR]. ■ Use appropriately translated versions of the EPDS with culturally relevant cut-off scores. Consider language and cultural appropriateness of the tool [CBR]. **Screening for anxiety:** ■ Be aware that anxiety disorder is very common in the perinatal period and should be considered in the broader clinical assessment [CBR]. ■ As part of the clinical assessment, use anxiety items from screening tools (e.g., EPDS item 3, 4 and 5, Depression, Anxiety and Stress Scale (DASS) anxiety items and Kessler Psychological Distress Scale (K-10) items 2, 3, 5 and 6) and relevant items in structured psychosocial assessment tools (e.g., Antenatal Risk Questionnaire (ANRQ)) [CBR]. **Assessing psychosocial risk:** ■ Assess psychosocial risk factors as early as practical in pregnancy and again after the birth [PP]. ■ If using a tool to assess psychosocial risk, administer the ANRQ [EBR, strong]. ■ Undertake psychosocial assessment in conjunction with a tool that screens for current symptoms of depression/anxiety (i.e. the EPDS) [CBR]. ■ Discuss with the woman the possible impact of psychosocial risk factors (she has endorsed) on her mental health and provide information about available assistance [PP]. ■ Consider language and cultural appropriateness of any tool used to assess psychosocial risk [CBR]. **Assessing mother-infant interaction:** ■ Assess the mother-infant interaction as an integral part of postnatal care and refer to a parent-infant therapist as available and appropriate [PP]. ■ Seek guidance/support from Aboriginal and Torres Strait Islander health professionals or bicultural health workers when assessing mother-infant interaction in Aboriginal and Torres Strait Islander or migrant and refugee women, to ensure that assessment is not informed by unconscious bias [PP]. ■ Assess the risk of harm to the infant if significant difficulties are observed with the mother-infant interaction, the woman discloses that she is having thoughts of harming her infant and/or there is concern about the mother's mental health [PP]. **Assessing risk of suicide:** ■ When a woman is identified as at risk of suicide (through clinical assessment and/or the EPDS), manage immediate risk, arrange for urgent mental health assessment and consider support and treatment options [PP].
■ **Triage**	■ Ensure that there are clear guidelines around the use and interpretation of the psychosocial tool/interview in terms of threshold for referral for psychosocial care and/or ongoing monitoring [PP]. While referral and care pathways vary with setting (e.g., general practice, maternity services) and the location (e.g., metropolitan, rural and remote), it is important that women are provided with access to timely, appropriate services post-assessment and ongoing psychosocial support. The general principles for referral are the same in all settings. However, referral pathways will depend on the setting and the access to services available in the area. Whatever pathway is chosen, there is a need for documentation, coordinated care and inter-professional communication as well as clear comunication with the woman and her significant other. Consideration needs to be given to the urgency of the referral, particularly when women have severe symptoms or suicidal thinking. Women with severe mental health conditions may need to be referred directly to the local mental health team for urgent assessment or even scheduled to the local psychiatric facility. In rural and remote settings, mental health services may not be locally available and waiting times can be long. In such cases, advice may need to be sought from a GP, visiting psychiatrist, telehealth or mental health support line (e.g., those provided by non-government organisations). ■ **General practice:** where possible a GP will diagnose and develop a management plan for depressive and anxiety disorders. Women with symptoms suggestive of more serious low prevalence conditions should be referred directly to a psychiatrist. Once a psychiatric diagnosis is established, and where psychological therapy is deemed the best treatment approach, a GP may develop a mental health treatment plan to allow the woman to access the relevant Medicare items for psychological therapy.

Country, year [ref]	Australia/COPE guideline, 2017 [22][24]
■ **Triage** *(continuation)*	■ **Midwifery:** for midwives, referral pathways will differ depending on whether they are in the private or public sector, independent, involved in a group midwifery practice, working through an Aboriginal Medical Service or hospital-based. Midwives in a hospital-based setting may provide ongoing care and support to the family, seeking the advice of an in-house, psychiatric and/or allied health professional (e.g., mental health nurse, psychologist) and/or social worker as required. Midwives in other settings may refer women to a GP or private mental health service providers. ■ **Obstetrics:** for obstetricians in the public sector, referral pathways will usually be established with in-house social workers and allied mental health clinicians. Women may be referred back to their GP if there is shared care. For obstetricians in private practice, referral is likely to be to the woman's GP or directly to a psychologist or a psychiatrist, depending on the individual situation and availability. Only GPs and psychiatrists can provide a mental health care plan to access subsidised psychological care. ■ **Postnatal care:** most women will see a maternal and child health nurse in the postnatal period. In this setting, referral will likely be to a GP for further referral for counseling or psychological assessment. A maternal and child health nurse may provide ongoing care and support to the family, seeking the advice of a GP and/or allied mental health professionals as required.
■ **Treatment** (e.g., psychological therapies, pharmacological treatment)	**General principles in prevention and treatment:** ■ If a woman agrees, provide information to and involve her significant other(s) in discussions about her emotional wellbeing and care throughout the perinatal period [PP]. ■ Provide advice about the risk of relapse during pregnancy and especially in the early postpartum period to women who have a new, existing or past mental health condition and are planning a pregnancy [PP]. ■ Wherever possible, assessment, care and treatment of the mother should include the baby [PP]. **General principles in the use of pharmacological treatments:** ■ Discuss the potential risks and benefits of pharmacological treatment in each individual care with the woman and, where possible, her significant other(s) [PP]. ■ Ensure that women are aware of the risks of relapse associated with stopping medication and that, if a medication is ceased, this needs to be done gradually and with advice from a mental health professional [PP]. ■ Discuss treatment (medication and psychological) options that would enable a woman to breastfeed if she wishes and support women who choose not to breastfeed [PP]. ■ Ideally, treatment with psychoactive medications during pregnancy would involve close liaison between a treating psychiatrist or, where appropriate, the woman's GP, and her maternity care provider(s). In more complex cases, it is advisable to seek a second opinion from a perinatal psychiatrist [PP]. ■ Arrange observation of infants exposed to psychoactive medications in pregnancy for the first 3 days postpartum [CBR]. **Postnatal care and support:** ■ In planning postnatal care for women with schizophrenia, bipolar disorder, severe depression or borderline personality disorder, take a coordinated team approach to parent and infant mental health care and pre-arrange access to intensive maternal child health care [PP]. ■ When caring for mothers with severe mental illness, including borderline personality disorder, it is important to ensure that child protection risks are understood and addressed, if necessary [PP]. ■ If a mother with a severe postnatal episode requires hospital admission, avoid separation from her infant with co-admission to a specialist mother-baby unit where facilities are available and appropriate [CBR]. **Depressive and anxiety disorders:** ■ Provide structured psychoeducation to women with symptoms of depression in the perinatal period [EBR, strong]. ■ Advise women with symptoms of depression in the postnatal period of the potential benefits of a social support group [EBR, conditional]. *(see "involvement of people with lived experience")* ■ Recommend individual structured psychological interventions (cognitive behavioural therapy or interpersonal psychotherapy) to women with mild to moderate depression in the perinatal period [EBR, strong]. ■ Advise women with symptoms of depression in the perinatal period of the potental benefits of facilitated self-help [CBR]. ■ Advise women with depression or anxiety disorder in ther postnatal period of the possible benefits of directive counselling [EBR, conditional]. ■ Advise women with diagnosed post-traumatic stress disorder of the potential benefits of post-traumatic birth counselling if they are experiencing depressive symptoms [CBR]. The guideline includes several specific recommendations on the **pharmacological treatment** of mental illnesses: ■ Depressive and anxiety disorders [22, p.49f] ■ Severe mental illnesses: schizophrenia, bipolar disorder and postpartum psychosis [22, p.55f] ■ Borderline personality disorder [22, p.60] The principles underlying effective provision of mental health care in the perinatal period include (*see [22, p.20f]*): ■ establishing a therapeutic relationship (important aspects include: continuity of carer; profound understanding of the normal range of emotions during the perinatal period; adequate time to assess, listen and build rapport; encouraging women to express their feelings; support their emotional state; non-judgemental attitude, assess women's support systems),

Country, year [ref]	Australia/COPE guideline, 2017 [22][24]
■ **Treatment** (e.g., psychological therapies, pharmacological treatment) *(continuation)*	■ providing care that is recovery-oriented and trauma-informed, ■ providing culturally safe support and information, ■ ensuring continuity of care, where possible (factors to improve continuity of care include sharing of information, collaborative development of management plans, developing linkages and networks and adapting successful approaches to care), **General approaches post-assessment:** Screening and psychosocial assessment provide an indication of a woman's general mental health status and the presence of psychosocial risk factors but do not provide a diagnosis. Initital steps following these assessments include determining whether comprehensive mental health assessment is required (which may lead to a psychiatric diagnosis) and identifying supports and services tailored to the woman's needs. The following points illustrate a range of situations and the types of approaches that may be appropriate: ■ **women with moderate to severe symptoms** will require comprehensive mental health assessment – subsequent management will most likely involve pharmacological treatment, ongoing psychosocial support and possibly psychological therapy once medication(s) have become effective ■ **women with a past history of a severe mental health condition** will require comprehensive mental health assessment before conception or in the antenatal period and additional support (particularly in the early postnatal period) ■ **women with mild to moderate symptoms** may require comprehensive mental health assessment and may also benefit from some form of psychological therapy in addition to psychosocial support ■ **women experiencing mild depressive or anxiety symptoms in the early postnatal period** may benefit from practical and emotional support (e.g., advice on parenting, unsettled infants, sleep deprivation) and monitoring to determine the effectiveness of such support ■ **women without current symptoms but experiencing significant psychosocial risk** (e.g., a recent separation) may benefit from ongoing psychosocial support Women with a pre-existing mental health condition may already be under the care of a GP, psychologist and/or psychiatrist (depending on the nature and severity of their condition). However, comprehensive mental health assessment is required if the woman has, or is suspected to have, a recurrence or new onset of severe mental health condition, suicidal thoughts or evidence of harm to herself or infant, or if other children in her care may be at risk or harm.
■ **Involvement of people with lived experience** (e.g., peer-support groups)	Women with symptoms of depression in the postnatal period should be advised of the potential benefits of a social support group. Social support groups are defined as a system of giving and receiving help founded on key principles of respect, shared responsibility, and mutual agreement of what is helpful and is primarily in one direction with a clearly defined peer supporter and recipient of support. Peer volunteers who are mothers themselves and also have a history of antenatal or postnatal mental health problems are recruited and trained to deliver interventions. These interventions can include befriending and mentoring. Support groups also provide an opportunity for peer support but are usually facilitated by a healthcare professional and discussions are usually structured around a series of pre-defined topic areas (for instance, transition to motherhood, postnatal stress management, co-parenting challenges). However, the primary goal of these interventions is to enable mutual support by bringing women into contact with other women who are having similar experiences and providing opportunities for sharing problems and solutions.
■ **Specific services addressing infant (mental) health/ parent-infant relationship**	■ Assess the mother-infant interaction as an integral part of postnatal care and refer to a parent-infant therapist as available and appropriate [PP]. ■ For women who have or are recovering from postnatal depression and are experiencing mother-infant relationship difficulties, consider provision of or referral for individual mother-infant relationship interventions [CBR].
■ **Specific services addressing the mental health of the partner/co-parent**	(*no specific services mentioned*) The guideline includes a chapter on 'Perinatal mental health in men' in the background section, dealing with, e.g., psychosocial factors associated with men's perinatal mental health, depression and anxiety, screening, treatment and support mechanisms. However, there are no recommendations addressing perinatal mental health in fathers or co-parents.
■ **Other services**	n.r.
(Cross-sectoral) coordination of services	n.r.
Education, training, continuing professional development	■ All health professionals providing care in the perinatal period should receive training in woman-centred communication skills, psychocial assessment and culturally safe care [CBR]. ■ Ensure that health professionals receive training in the importance of psychosocial assessment and use of a psychosocial assessment tool [PP].
Requirements for delivery of the PIMH care model	
(Legal) framework conditions	As Australia's peak body in perinatal mental health, COPE will facilitate implementation of the Guideline through its membership, online channels and innovative approaches to dissemination, including training programs and summary documents for health professionals and consumers (which will be available from the COPE website).

Country, year [ref]	Australia/COPE guideline, 2017 [22][24]
Infrastructure, resources	Resource implications of each recommendation In summary, the recommendations are considered to have a low requirement for additional resourcing. This is because the recommendations encompass psychometric tools or treatments that are already in use in clinical care in Australia. If anything, it is possible that the systematic use of psychosocial assessment and screening for depression and anxiety in the perinatal period will result in cost-savings from a whole of system or societal perspective.
Facilitators and barriers	**Facilitators:** ■ Engagement of key stakeholders in the guideline development: peak bodies that provide aspects of perinatal health and mental health care have been involved in the development of the guideline ■ Infrastructure of the health system: the framework of maternity, postnatal and primary care provision provides a vehicle for all aspects of guideline implementation from consumer education through to screening and assessment and treatment provision. The health and community care landscape has been taken into account when considering the guideline application across maternity, postnatal, general practice, public and private healthcare settings as well as the range of services available across jurisdictions ■ The history of the National Perinatal Depression Initiative (NPDI): the Commonwealth Government's investment into the NPDI with States and Territories (2008-15) has provided some valuable history and infrastructure to implementation of the Guideline. Current investment is variable across States and Territories, e.g., while some States have state-wide policies in relation to screening, in other states this has been discontinued in the absence of funding. ■ The development of a perinatal mental health website to house all information for consumers, carers and health professions: an extensive website has been developed to provide best practice information for consumers, carers and health professionals; the website will include all factsheets and screening aids and house the online training program. ■ The development of a free, online, accredited training program for health professionals: to support implementation, a free online training program will accompany the release of the guideline. This will facilitate education for health professionals and include coverage of all guideline recommendations and good practice points. ■ Innovative technology to facilitate screening in accordance with the guideline: as one of the greatest barriers to screening is time taken to do screening within tight maternity and postnatal appointments, the guideline developer has developed a digital screening platform that allows screening to be undertaken electronically. **Barriers:** ■ Low screening in the private sector: the greatest barriers to implementation are likely to be found in the private system, as many specialist obstetricians do not prioritise perinatal mental health and focus on physical health ■ Lack of time to undertake screening and assessment: time is a barrier; hence this is addressed through the selection of brief assessment tools and the digitisation of screening to improve screening rates, times, accuracy and inclusiveness ■ Barriers among women: including stigma, significant others normalising their emotional difficulties, desiring to manage mental health problems on their own, preferring to discuss feelings with significant others, not knowing what emotions are 'normal' and perceiving that the health professionals is disinterested or lacks time ■ Lack of validated screening tools for women of non-English-speaking backgrounds: screening is often not available, accurate or appropriately administered for women of non-English speaking backgrounds due to the lack of validated screening tools in other languages, and/or the accuracies and costs associated with interpreter services. ■ Limited uptake of referral: research suggests that only half of women who screen positive follow up with a subsequent mental health assessment and 30-85% do not engage in treatment. This may be improved by consumers as well as health professionals having access to timely and appropriate referral pathways.
Evaluation, monitoring	COPE will continue to consult with service providers nationally to ensure the dissemination and application of the Clinical Guideline across the country. For those utilising digital screening, this will enable the monitoring of screening rates and outcomes across sites and settings in real time. It is noted that the ability to measure uptake of screening across and within jurisdictions will be crucial for designing and applying implementation strategies. It is anticpated that the guideline will be updated periodically to include higher-level evidence as it becomes available, ideally with a major review of the evidence within 5 years.
Additional relevant documents	

Abbreviations: ANRQ – Antenatal Risk Questionnaire, CBR – consensus-based recommendation, COPE – Centre of Perinatal Excellence, EBR – evidence-based recommendation, EPDS – Edinburgh Postnatal Depression Scale, EWG – Expert Working Group, GP – general practitioner, n.r. – not reported, PP – practice point

Model of care/Western Australia

Table A-6: Data extraction table, Western Australia

Country, year [ref]	Australia/Western Australia, 2016 [26]
Title of the document	Perinatal and Infant Mental Health Model of Care – a framework
Type of document	2 parts: Part I outlines the process of developing the Model of Care, including the context, evidence base, rationale and scope of the field of practice. Part II outlines and details strategies which will support the implementation of the recommendations.
Publisher	Western Australian Department of Health
Language	English
Contracting entity/funding	Western Australian Department of Health, State of Western Australia
Development of the model/pathway	The Perinatal and Infant Mental Health Model of Care has been developed by members of the Core Working Group and associated Sub Groups (pre-pregnancy, pregnancy, postnatal, infants) which were convened to complete specific sections across the continuum of care throughout the perinatal and infant period. Stakeholders contributed by participating in a workshop and in the broad online consultation. The Model is consistent with "Perinatal and Infant Mental Health Strategic Framework 2012" and builds upon the notion of family-centric care highlighted in the Framework. In addition, the development of the Model has been informed by a range of key international, national and state frameworks, plans and reports relating to best-practice in the delivery of perinatal and infant/child mental health services.
■ **involvement of people with lived experience**	'consumers' were part of the pregnancy sub group
Aim of the document	The Model aims to define evidence-based best practice and service delivery across the continuum of care in the perinatal and infant/child period. There is a focus on integration across government, non-government and the private sector service providers. The Model supports a multidisciplinary approach with collaborative decision-making between consumers and health professionals, including providing services in ways that are respectful of families' knowledge of their own babies and children.
Target users of the document	The Perinatal and Infant Mental Health Service Guide provides a practical guide for front-line workers, service planners and policy development.
Characteristics of the PIMH care model described in the document/guideline	
Target populations for the services	Focus of concern: mothers and mothers to be, fathers and fathers to be, infants and young children, families, vulnerable groups and communities
Involved professionals	Several potential service providers at the primary, secondary and tertiary level, divided into the different time periods (pre-pregnancy, pregnancy, postnatal, infant, early childhood mental health care), are listed in the Service Guide, e.g., ■ Universal services (primary level): GP, child health nurse, midwife, peer support worker, health promotion officer, day care worker, pre-school teacher, … ■ Early identification (primary level): GP, obstetrician, child health nurse, midwife, mental health nurse, psychologist, counsellor, paediatrician, day care worker, … ■ Targeted services (primary/secondary level): GP, midwife, obstetrician, paediatrician, community psychiatrist, child health nurse, mental health nurse, psychologist, peer support worker, social worker, … ■ Management/treatment (secondary/tertiary level): GP, infant/child psychiatrist, community psychiatrist, mental health nurse, clinical psychologist, social worker/occupational therapist with mental health expertise, peer support worker, child protection worker, family support worker, … ■ Intensive treatment (tertiary level): PIMH psychiatrist, specialist clinical psychologist, specialist infant and child psychiatrist, perinatal & infant mental health nurse, …
Organisation of the services	The model provides a practical guide for front-line workers, service planners and policy development (**Perinatal and Infant Mental Health Service Guide**). It describes the key components of service delivery, progressing chronologically over the pre-pregnancy, pregnancy/birth and postnatal care periods, and working systematically across the continuum from health promotion towards treatment and management. The Service Guide tables set out potential service providers, key skills requirements and service components across the continuum of care service provision, under the headings: ■ Universal Services: are those that 100% of families are able to access, often at the primary health care level, and meeting the needs of pregnant women, children and families at multiple contact points. Such services focus on increasing protective factors and reducing risks that impact on health and wellbeing, and provide early identification and referral for children and families who may require targeted, secondary or tertiary specialist services. ■ Early Identification (primary level) ■ Targeted Services (primary/secondary level): focus on children, families or communities who have additional needs, increased likelihood of poor health, or developmental outcomes. Such services are often provided from within the universal platform and aim both to minimise the effect of risk factors, and to build resilience. Importantly, targeted services and supports work to reduce inequalities in outcomes between different population groups. Secondary level services also form part of targeted services, and usually fall outside the scope of practice of universal service providers. Frequently referral is required from a primary health

Country, year [ref]	Australia/Western Australia, 2016 [26]
Organisation of the services *(continuation)*	■ or other service provider. ■ Management/Treatment (secondary/tertiary level) ■ Intensive Treatment (tertiary level): specialist or intensive tertiary services involve individually tailored responses to a particular woman, child or family situation that often requires high levels of expertise from a multidisciplinary team "The right care, at the right time, by the right team, and in the right place" Guiding principles: ■ promotion of emotional health and wellbeing of women, their infants/children and families ■ embracing diversity within the population and communities of WA ■ substantive equality and access to services that are timely and responsive ■ partnerships and collaboration in the provision of care and services ■ consumer-centred services that recognise the needs of infants and young children and that seek to optimise the child-caregiver attachment relationship ■ accountability within a clearly identified safety and quality framework
"Components" of the care models	
■ **Primary prevention**	**Service components of *universal services* for PREGNANCY mental health care** *(see Service Guide [26, p.76f])*[25]: ■ Routine pregnancy checks which include depression/anxiety, psychosocial risk screening e.g. EPDS, beyondblue questions ■ Health information to promote awareness of importance of maintaining emotional wellbeing and mental health ■ Promote knowledge and awareness of the impact of drug and alcohol misuse and smoking on the pregnant woman and the developing fetus ■ Discussion and information focused on couples' reactions and experiences around pregnancy, birth and parenthood to facilitate positive adaptation to life stage ■ Information promoting couple co-operation and effective communication regarding expectations, needs and changing demands ■ Pregnancy education inclusive of emotional health and social support for expectant parents (verbal information, modelling, print material, web-based information, social media) ■ Expectant dads education to promote appropriate expectations and support ■ Education and discussion about infant social and emotional development, and infants' interest in relationship, as well as the benefits they experience from caregivers' capacity to engage with them in an attuned way ■ Information on community resources and activities easily available **Service components of *universal services* for POSTNATAL mental health care** (see Service Guide p.82ff.): ■ Information on symptoms of common mental health disorders in the perinatal period ■ Opportunity to discuss the experience of pregnancy and delivery, especially in the case of complications and/or trauma ■ Information on normal adjustment experiences in the postnatal period ■ Information on how to support self and relationships in the postnatal period ■ Discussion with parents on feelings and experiences of being a parent with the understanding that a family's need for information changes over time ■ Discussion with parents about the relationship they are forming with their baby, and their feelings about it ■ Information about, and pathways to, community resources and activities ■ Aim for consistency in service providers to enhance therapeutic relationship ■ Home visit by child health nurse (CHN) (particularly if first baby or previously identified risk) to establish relationship with mother, father, initial screening for paternal, maternal and infant well-being, provide information and determine level of further support required for the family ■ Six week check for mother and infant to establish or build on relationship with father as well as mother, provide information about parents' group and other local services, and determine level of further support required for this family ■ Provision of appropriate educational material from evidence-based sources e.g. beyondblue, in a variety of modalities ■ Father, mother-baby information and social support groups (open house programs)

[25] The Perinatal and Infant Mental Health Service Guide describes the key components of service delivery, progressing chronologically over the pre-pregnancy, pregnancy/birth, postnatal care, infancy (1-2 years) and early childhood (2-4 years). The Service Guide tables set out potential service providers, key skills requirements and service components across the continuum of care service provision, under the headings: Universal Services, Early Identification (primary level), Targeted Services (Primary/secondary level), Management/Treatment (Secondary/tertiary level), and Intensive treatment (Tertiary level) [26]. For this project, we focused on the periods of pregnancy, postnatal care and infancy, and we mainly extracted interventions that are targeted to parent(s)/infant/family. However, the Service Guide also provides further service components, that are not directed to the families, but refer to other important aspects such as town planning or community level activities.

Country, year [ref]	Australia/Western Australia, 2016 [26]
■ **Primary prevention**	■ Playgroup to provide opportunities for parents with older children to find social and educational support as families grow ■ Telephone support lines to provide support and information, including options for further assessment ■ Peer organisations to provide emotional and social support for fathers, mothers with babies ■ Local council services in contact with young families (e.g. library) to provide social and educational support to families in the first year postpartum **Service components of *universal services* for INFANT mental health care (0-2 years)** (see Service Guide p.91ff): ■ Routine infant health and development checks ■ Father, mother-baby information and social support groups (open house programs) ■ Relationship-based father, mother and baby support groups ■ Father, mother and baby shared activities directed at promoting parent-infant relationship (e.g. rhyme and music, baby massage etc) ■ Playgroup to promote infant social development, Dads playgroup ■ Telephone support lines e.g. Ngala, Parenting WA ■ Information and discussion on infant self-regulation, social and emotional health, feeding, settling, sleeping (verbal information, modelling, print material, web-based information, social media) ■ Information on sensitive parenting, relationship based approaches, healthy relationships ■ Discussion with parents on feelings and experiences of being a parent ■ Information about – and pathways to – community resources and activities ■ Translated/culturally appropriate parenting information

■ **Early identification**	**Health promotion, illness prevention and early intervention:**
	■ **Recommendation 3:** Develop a comprehensive approach to perinatal and infant/child mental health promotion, illness prevention, detection, and early intervention.
	■ A comprehensive approach to health promotion and illness prevention requires broad action across a variety of settings and target groups, throughout the perinatal period; this includes identification of barriers to both screening and engagement with services.
	■ Screening is used for the purpose of identifying people, including infants and very young children, at increased risk for mental health problems, and should always lead to further assessment if needed. Screening requires the availability of professional services to follow up identified problems. Defined referral pathways are a necessary aspect of any screening protocol.
	■ ***Strategies:***
	  ■ Develop a health promotion framework explicitly addressing perinatal and infant mental health. Content needs to include the importance of relationships within and outside the family, protective factors, risk factors and warning signs; and promotion of help-seeking behaviours, to complement formal screening protocols. A further essential feature should be the promotion of information providing a realistic understanding of issues that are often present for expectant parents and families with babies and very young children that encourages supportive behaviours within the community
	  ■ Promote healthy attitudes and behaviours in all women of childbearing age with consideration of their emotional, physical and sexual wellbeing, particularly targeting vulnerable groups
	  ■ Develop a screening and assessment process/schedule, across sectors, at regular time-points during pregnancy, the postnatal period, infancy and early childhood. Promote universal screening using reliable and valid tools for early identification of perinatal mental health disorders, parental and infant/child mental health problems and assessment of family functioning
	  ■ Recognise the limitations of current screening tools for some vulnerable groups, and encourage the development of appropriate assessment processes to identify risk and promote health
	  ■ Promote recognition that for women with specific risk factors, such as pre-existing mental illness, intervention needs to begin during the period in which conception is considered, and extend to provision of services to support the wellbeing of their existing and future children
	  ■ Ensure that intervention is implemented as early as possible for babies and children identified at risk, and for their parents
	Service components of *early identification* for PREGNANCY mental health care (see Service Guide p.76ff):
	■ Depression/anxiety (EPDS) screen and psycho-social assessment at least twice during pregnancy, in the first and third trimester
	■ Screening (through personal engagement and inquiry) for ambivalence about pregnancy and relating to the unborn baby
	■ Screening for risk of harm to parent, fetus or other children including relational violence and drug and alcohol use
	■ Provide information and assistance for families to access appropriate services, community networks and links
	■ Provide education and resources about expectant parent emotional health and wellbeing
	■ Provide education and resources about child development and positive parenting approaches e.g. building healthy attachment, relationship based approach
	■ Education and support for positive adaptation to the physical and emotional changes in pregnancy
	■ Education and discussion regarding the birth process to elicit and/or address fears about childbirth

Country, year [ref]	Australia/Western Australia, 2016 [26]
■ **Early identification** *(continuation)*	■ Facilitate referral for further assessment where there are existing mental health conditions, or concerns about risk or emotional wellbeing ■ Maintain knowledge and resources regarding appropriate referral pathways ■ Family centred approach to involve partners, children and other carers in care planning **Service components of *early identification* for POSTNATAL mental health care** (see Service Guide p.82ff.): ■ Screening made available across a range of settings ■ Screening for paternal, maternal and infant well- being and family functioning ■ Screening utilising standardised screening tools supported by appropriate training for delivery ■ Screening incorporating information about pregnancy risk factors, such as conception history, symptoms during pregnancy, past mental health history, current or past trauma, and major life events ■ Screening enabling identification of postnatal risk factors, such as traumatic birth, infant feeding difficulties, neonatal health problems ■ Screening (through personal engagement and observation) for parents' feelings about the relationship with their baby, and becoming a parent, with a view to referring parents who show marked ambivalence or negativity to appropriate services ■ Specific screening for risk of harm to parent, infant or other children including relational violence and drug and alcohol misuse ■ Establishment of local pathways to enable timely referral to appropriate services for comprehensive mental health assessment for mothers identified as having marked changes in mood, thoughts, perceptions or behaviours and/or multiple social risk factors ■ Routine communication between service providers over the 12 months postpartum, with each visit recorded on a centralised information base ■ Timely alerts to CHN and GP from hospital prior to discharge of mother and newborn ■ CHN home visits to routinely screen for paternal, maternal and infant well-being, and ascertain other important factors in the home environment that may contribute to psychological morbidity, and to determine level of further support required for the family ■ GP visits to routinely screen women/men throughout the first 12 months post-partum to assess physical and mental wellbeing and support healthy lifestyle decisions ■ Regular checks of child and parent health and wellbeing and family functioning across the 12 month postpartum period as demands on parents change over time ■ Maintain knowledge and resources regarding appropriate referral pathways **Service components of *early identification* for INFANT mental health care (0-2 years)** (see Service Guide p.91ff): ■ Screening made available across a range of settings familiar to the family ■ Screening utilising standardised screening tools supported by appropriate training for delivery ■ Observation of parent- infant interaction, cues and miscues, supported by appropriate professional training ■ Bio-psychosocial assessment of infant and caregiver (parental mental health, family functioning, psycho-social risk, parent-infant relationship) ■ Systems in place for routine identification of children potentially at risk of adverse developmental outcomes due to family circumstances, which include screening for risk of harm to parent, infant or other children through relational violence or drug and alcohol misuse, and which occur at predictable points of service contact during the perinatal period and beyond ■ Referral for further assessment/diagnosis ■ Referral to counselling or appropriate therapeutic intervention services to support caregiver's personal functioning and parenting capacity ■ Maintain knowledge and resources regarding appropriate referral pathways
■ **Triage**	n.r.
■ **Treatment** (e.g., psychological therapies, pharmacological treatment)	**Treatment and management:** ■ **Recommendation 4:** Treatment and management for perinatal and infant/child mental health problems to be based on best practice principles, and include clear referral pathways, stepped care, and ongoing access to support services. ■ This recommendation spans across service settings, agencies and levels of complexity. Wherever possible, mothers and their babies need to be treated and cared for together. It is necessary that those providing care for parents, infants and very young children are aware of their mental health needs, and act in a way to promote healthy adaptation at each stage. Strong working relationships between healthcare and other service providers are essential in developing and sustaining an integrated cohesive care pathway. ■ A stepped care approach ensures that a woman or infant/child presenting with a mental health disorder across the perinatal and early childhood period receives systematic follow up which is appropriate to the individual's stage of recovery. Clear communication and collaboration between health professionals, parents and family supports is critical to best practice, and enables an experience of seamless care across primary, secondary and tertiary levels. ■ ***Strategies:*** ■ Health assessment of mothers, fathers, infant and small children to include documented attention to their current mental wellbeing

Country, year [ref]	Australia/Western Australia, 2016 [26]
■ **Treatment** (e.g., psychological therapies, pharmacological treatment) *(continuation 1)*	■ Services develop and use a comprehensive mental health assessment process that is appropriate to perinatal and infant mental health, and capable of identifying specific problems requiring intervention, with consideration of acuity, severity and complexity ■ Following a comprehensive assessment, care plans are developed in consultation with the woman and her partner/support person and shared with those involved in her care during the perinatal period, allowing for modification over time ■ Care plans and protocols involve assertive monitoring, particularly in the first few weeks after childbirth and early intervention for patients with a history of mental illness, as well as for those identified at significant risk ■ Include in the care plan: treatment for the mental health problem, how frequently during the perinatal period monitoring should occur and the roles of all healthcare professionals, including who is co-ordinating the plan ■ At every level, recognise the value of input from clinicians of various disciplines, wherever possible including those with specialist PIMH expertise ■ Ensure access and provide clear referral pathways to perinatal and infant/child consultation liaison services within hospitals providing obstetric and paediatric care ■ Support the development of services able to provide step up and step down levels of care appropriate to needs of the mother, infant and family at different times along the continuum of care, such as inpatient or residential care, day programs, and home-based treatment and support ■ Standard practice of Mother and Baby Mental Health Units should include psychiatric care and treatment for women who develop a serious mental health disorder in the perinatal period in addition to interventions and psychological therapies to improve the mother-infant relationship, and support for partners and other family members, including siblings ■ Services working in the perinatal and infant/child realm continue working together to develop clinical interventions that include dyadic/triadic therapy models which address difficulties within the parent-infant/child relationship and incorporate a specific focus on engaging fathers in the therapeutic process ■ Promote provision of intensive day-stay services that minimise the separation of baby and other small children in the family from their parent, and support the capacity of inpatient units to provide for mother and baby together ■ Adult and infant/child services create formal liaison arrangements allowing collaboration and coordination of care, which includes consultation and liaison with each other to provide support for infant/child mental health concerns identified in adult services and perinatal concerns in infant/child services ■ Comprehensive discharge planning in collaboration with the family and relevant community organisations combined with clear clinical handover processes will support transitioning of care and sustained recovery ■ Recognise and respond to the needs of parents with enduring and significant mental illness, and their children, for ongoing and targeted interventions to support optimal parenting and children's development **Service components of *management/treatment* for PREGNANCY mental health care** (see Service Guide p.76ff): ■ Promote the woman and her family's engagement in pregnancy care ■ Detailed bio-psychosocial assessment to identify particular risks for the woman and her family ■ Development of a comprehensive pregnancy and birth care plan with the woman and her partner, which includes attention to prescription and monitoring of psychotropic medication, consideration of psychotherapeutic treatments, and the need for social support for the family during pregnancy and into the postpartum period. ■ Use of validated psychometric instruments to inform treatment needs, monitor functioning and measure progress and outcomes ■ Care planning is collaborative and respectful of a woman's needs/preferences regarding treatment during pregnancy, as well as her labour and birth experience ■ Liaison, collaboration and communication with and between the woman and her supports, mental health services, maternity and other services to optimise ongoing pregnancy care and postnatal planning ■ Optimise management of alcohol & drug problems ■ Psychotherapeutic interventions, such as individual, group, couple and family counselling ■ Engagement in interventions which allow discussion of ambivalence about pregnancy and relating to the unborn baby and promote pregnancy bonding between parent and unborn infant ■ Preventative attachment-based therapeutic approaches where indicated ■ Non-judgemental support for decisions made by the family in circumstances of compromised pregnancy ■ Facilitation of access to a wide range of health and support services, including peer support groups, tailored to the woman and her family's needs ■ Continuity of care model for pregnancy services with consistency in staff caring for the woman throughout her pregnancy ■ Development and maintenance of therapeutic treatment and support services which meet the mental health needs of local pregnant women and their partners ■ Establishment of step up and step down referral pathways ■ Provision and maintenance of up to date, accurate and respectful psycho-educational and self-help resources, including online.

Country, year [ref]	Australia/Western Australia, 2016 [26]

■ **Treatment** (e.g., psychological therapies, pharmacological treatment) *(continuation 2)*	■ Provision of professional training, both didactic and experiential to support workforce development and promote collaborative interagency relationships
	■ Support and engagement with PIMH research
	Service components of *management/treatment* for POSTNATAL mental health care (see Service Guide p.82ff.):
	■ A service stance that promotes engagement in postnatal care
	■ Detailed bio-psychosocial assessment to identify particular risks for the women and her family
	■ Development of a comprehensive postnatal and mental health care plan with the woman and her partner, which includes attention to the developing parent-infant relationship, prescription and monitoring of psychotropic medication (breastfeeding mothers), consideration of psychotherapeutic treatments, and the need for social support for the family during the postpartum period.
	■ Care planning that is collaborative and respectful of a woman's needs/preferences regarding treatment during the postnatal period
	■ Family centred approach to involve partners, children and other carers in care planning
	■ Liaison, collaboration and communication with and between the woman and her supports, mental health services, child health and other services to optimise ongoing postnatal planning.
	■ Monitoring and management of alcohol & drug problems
	■ Psychotherapeutic interventions, such as individual, group, couple and family counselling that includes focus on the developing parent-infant relationship
	■ Preventative attachment-based therapeutic approaches where indicated to support the parent-infant relationship
	■ Facilitation of access to a wide range of health and support services, including peer support groups, tailored to the woman and her family's needs
	■ Development and maintenance of therapeutic treatment and support services which meet the mental health needs of local women and their partners
	■ Establishment of step up and step down referral pathways
	■ Provision and maintenance of up to date, accurate and respectful psycho-educational and self-help resources, including those available online
	■ Provision of professional training, both didactic and experiential to support workforce development and promote collaborative interagency relationships
	■ Psycho-education for patients and carers about mental health disorders in the perinatal period, adjustment to parenting and infant relationship
	■ Strong collaborative relationships between services with information sharing and shared care arrangements to reduce known barriers to access such as complex referral processes, long waiting times, repeated assessment, non-family friendly environments, stigma, and geographical isolation
	■ Referral to counselling or appropriate therapeutic interventions services for fathers/mothers identified at risk
	■ Therapists should aim to help parents limit their infants' exposure to parents' expression of painful or negative affect
	■ Regular measurement of functioning and outcomes for the individual patient and for service organisations, using validated instruments
	■ Support and engagement with PIMH research
	■ **A range of interventions and programs may include:**
	  ■ Home visiting – providing therapeutic interventions to the patient with attention to their multiple roles of parent and partner
	  ■ Therapeutic groups– run by clinician with appropriate level of mental health expertise with focus on managing mental health disorder in the context of being a parent
	  ■ Consultation and liaison to maternity services by appropriately qualified perinatal mental health practitioners to ensure timely treatment and assessment
	  ■ Tertiary neonatal special care unit-based therapeutic programs to support parents and infants
	  ■ Residential infant feeding, sleep and settling programs which encompass the psychological and emotional perspective of the parent
	  ■ Community or hospital psychiatrist/psychologist/mental health nurse follow up
	Service components of *management/treatment* for INFANT mental health care (0-2 years) (see Service Guide p.91ff):
	■ Diagnostic screening tools (for example Observational; PIRGAS, Strange Situation & Still-Face Procedures; Parent-report questionnaires: Parent-Stress Index, CBCL 1-3)
	■ Use of evidence-based parent-infant therapies that focus on promoting the attachment relationship (relationship based approaches)
	■ Psycho-education and developmental guidance for parents and caregivers delivered within the context of a therapeutic relationship
	■ Home-visiting – providing therapeutic interventions to enhance the parent-infant relationship, as well as the infant's other relationships within the family, and to promote reflective parenting
	■ Caregiver relationship counselling and support
	■ Therapists should aim to limit the infants' exposure to parents' expression of painful or negative affect

Country, year [ref]	Australia/Western Australia, 2016 [26]
■ **Treatment** (e.g., psychological therapies, pharmacological treatment) *(continuation 3)*	■ Individual or couple therapies aimed at promoting the parent-child relationship through discussion around caregivers' own feelings, background and circumstances should be conducted separately, when infants > 3 months old are not present ■ Therapeutic support services for parental functioning, infant physical and psycho-emotional wellbeing ■ Therapeutic playgroup – run by clinician with appropriate level of infant mental health expertise (focus on promoting infant psycho-emotional development, parenting capacity and the infant-caregiver attachment relationship, but also may give emphasis to particular issues relevant to participants) ■ Outreach to day-care centres to promote and support ancillary attachment relationships for children identified at risk ■ Neonatal Special Care Unit-based therapeutic programs to support infant mental health and parent-infant attachment relationship ■ Residential infant feeding, sleep and settling programs which encompass the psychological and emotional perspective and development of the infant ■ Liaison, collaboration and/or case management with child and adolescent mental health services, child development centres, child health services and other health professionals or services involved in families' care ■ Continued assessment and management of infant physical and psycho-emotional health ■ Referral to specialist services: perinatal and infant mental health service, perinatal and infant psychiatrist/psychologist/mental health nurse follow up ■ Support and engagement with infant and parental mental health research **Service components of *intensive treatment* for PREGNANCY mental health care** (see Service Guide p.76ff): ■ Specialist PIMH consultation liaison psychiatrist-led multidisciplinary service to pregnant women at identified risk of mental health disorder or who have significant pregnancy complications ■ Seamless transition between PIMH care provided for outpatients or during periods of obstetric, general, or mental health inpatient admission ■ Continuity of care with stable midwifery and other professional staff ■ Family centred approach to involve partners, children and other carers in the care plan and addressing their support needs as appropriate ■ Monitoring of mental state, mood, behaviour and coping to inform management ■ Specialist childbirth and serious mental illness (SMI) pregnancy clinics incorporating mental health, social and physical care in pregnancy ■ Effective handover of patient care between pregnancy and postnatal follow up mental health services ■ Engagement in interventions which promote discussion and intensive therapeutic intervention where there is ongoing ambivalence about pregnancy and parental difficulties in relating to the unborn baby ■ Consideration of postnatal planning for support of the parent-infant relationship, and/or infant mental health needs ■ Consultation with and between specialist psychiatrists, pharmacists, obstetricians, obstetric physicians, maternal fetal medicine specialists, and neonatologists to inform and optimise management ■ Established and effective processes for interagency communication within and between Government and non-government organisations (which may include child protection, corrective and drug and alcohol services) ■ Assertive community mental health intervention 'step up' and 'step down' programs and referral processes for women with significant mental health problems identified during pregnancy as potentially requiring Mother Baby Unit admission ■ Provision of professional training, both didactic and experiential to support workforce development and promote collaborative interagency relationships ■ Support and engagement with PIMH research **Service components of *intensive treatment* for POSTNATAL mental health care** (see Service Guide p.82ff.): ■ Specialist PIMH consultation liaison psychiatrist-led multidisciplinary service to women in the postnatal period identified at risk of mental health disorder or who have significant postnatal complications ■ Seamless transition between PIMH care provided for outpatients or during periods of obstetric, general, or mental health inpatient admission ■ Monitoring of mental state, mood, behaviour and coping to inform management ■ Effective handover of patient care between postnatal follow up mental health and child health services ■ Engagement in interventions which promote discussion and intensive therapeutic intervention where there is ongoing ambivalence about the infant and parental difficulties in relating to the baby ■ Consideration in discharge planning for support of the parent-infant relationship, and/or infant mental health needs ■ Consultation with and between specialist psychiatrists, pharmacists, obstetricians, obstetric physicians, maternal foetal medicine specialists, and neonatologists to inform and optimise management ■ Established and effective processes for interagency communication within and between Government and non-government organisations (which may include child protection, corrective and drug and alcohol services) ■ Assertive community mental health intervention 'step up' and 'step down' programs and referral processes for women with significant mental health problems identified during the postnatal period as potentially requiring Mother Baby Unit admission

Country, year [ref]	Australia/Western Australia, 2016 [26]

■ **Treatment** (e.g., psychological therapies, pharmacological treatment) *(continuation 4)*	■ Provision of professional training, both didactic and experiential to support workforce development and promote collaborative interagency relationships
	■ Inpatient admissions for caregiver may be provided, preferentially within Mother Baby Unit when there are serious concerns that mental health of parent has deteriorated to the extent that functioning is limited and/or there is risk of disturbance to attachment relationship or other family relationships, risk of self-harm or of harm unintended or otherwise to the infant or other children
	■ In the case of admission, separation of mother and infant should be avoided if possible
	■ Assertive assessment and treatment of mental health disorder including consideration of medication with specialist pharmacology or perinatal psychiatrist input
	■ Use of evidence-based therapies that focus on the treatment of mental health disorders including psychological treatment and social interventions
	■ Continued assessment and management of risk to parent, infant or others including domestic violence and drug and alcohol use
	■ Programs should include aspects that support the parent-infant relationship
	■ Observation and assessment of mother-infant interaction and referral to mother infant relationship therapies
	■ Support for mothercraft skills including feeding and settling
	■ Family centred approach to involve partners, children and other carers in the care plan and addressing their support needs as appropriate
	■ Therapists should aim to help the parent limit infants' exposure to parents' expression of painful or negative affect
	■ Regular measurement of functioning and outcomes for the individual patient and for service organisations using standardised measures
	■ Appropriate attention for all services to clinical governance practices
	■ Comprehensive discharge planning with focus on relapse prevention and counselling with regards to future pregnancies
	■ Consultation and liaison to NICU and hospital maternity and paediatric wards providing support for parental mental health
	■ Assertive community mental health service preferably with capacity for outreach with perinatal expertise
	■ Support and engagement with PIMH research
	■ **A range of interventions and programs may include:**
	  ■ Day stay unit to allow intensive treatment of mental health disorder combined with infant mental health interventions
	  ■ Therapeutic groups – run by clinician with appropriate level of mental health expertise
	  ■ Home visiting and collaborative outreach programs for high risk or hard to reach individuals and their families and other supports
	  ■ Consultation by video conferencing about individual high-risk or rural and remote cases
	Service components of *intensive treatment* for INFANT mental health care (0-2 years)
	(see Service Guide p.91ff):
	■ Specialist PIMH consultation liaison psychiatrist-led multidisciplinary service to babies and their families identified at risk of mental health disorder or who have significant neonatal complications
	■ Seamless transition between PIMH care provided for outpatients or during periods of paediatric, general, or mental health inpatient admission
	■ Inpatient admissions for caregiver and infant may be provided within mother-baby or paediatric units when serious concerns that mental health of infant is compromised in context of disturbed parent/caregiver-infant relationship, or when behavioural, physical or neurological problems evident in the child impair parental functioning
	■ Consultation and liaison to NICU and hospital maternity and paediatric wards providing expert assessment of risk and support for infant mental health and parent-infant attachment relationship
	■ Consultation and building of strong working relationships with services who work with high-risk infant populations, such as Child Protection and Family Court, ATSI and refugee services
	■ Consistent and systematised monitoring
	■ Diagnostic screening tools for parent-infant interaction (e.g. Observational: PIRGAS, Strange Situation, Still-Face Procedures; Parent-report questionnaires: Parent-Stress Index, CBCL 1-3)
	■ Play therapy for infants who have experienced trauma, or with developmental problems, and whose parents or caregivers are currently unable to provide adequate psychological and emotional support
	■ Parent-infant therapy structured and open-ended programs focusing on parental representations of self and infant, and which allow the infant's developing sense of self and agency to be known
	■ Consultation by video conferencing about individual high-risk cases
	■ Consultation and assessment of parenting capacity for referred families
	■ Consider support for foster carer and children with special needs
	■ Support and engagement with infant and parental mental health research
	■ Family centred approach to involve partners, children and other carers in the care plan and addressing their support needs as appropriate

Country, year [ref]	Australia/Western Australia, 2016 [26]
■ **Involvement of people with lived experience** (e.g., peer-support groups)	The Model recognises the need to create an environment that supports participation by consumers and carers in decision-making and managing their own health. Access to peer support workers who bring lived-experience of perinatal mental health issues is therefore an important component of the healing journey. *(specific services see other categories above)*
■ **Specific services addressing infant (mental) health/ parent-infant relationship**	**Consideration of the whole family:** ■ **Recommendation 1:** Ensure that the mental health needs of parents and their infants and young children are considered simultaneously, and collaboratively, at all levels of service delivery. ■ Mental disorder in one family member can affect the wellbeing of others in the family. Because a well-functioning family environment supports recovery, the needs of parents and infants/children in the perinatal and early childhood period are best met by integrated services that provide coordinated care and consider the needs of, and include, every family member. ■ ***Strategies:*** ■ Service policies to reflect a consumer-focused and family-centred approach that considers the mental health needs of all members of the family ■ Services devise clear care pathways, both internal and external, that supports the needs of families with whom they engage ■ Engage consumers and carers in a timely and meaningful way in the development and improvement of service delivery ■ Involve the woman, and if she agrees, her partner, family and carer, in all decisions about her care and the care of her baby ■ All levels of service demonstrate focus on supporting healthy family relationships ■ Make purposeful efforts to involve fathers or partners who experience difficulty accessing services ■ Encourage the provision of crèche facilities for women attending services specifically aimed at maternal mental health needs ■ Encourage services to include programs which can flexibly involve infants and small children alongside their parents or other caregivers *(specific services see other categories above)*
■ **Specific services addressing the mental health of the partner/co-parent**	n.r.
■ **Other services**	**Meeting the needs of vulnerable groups:** ■ **Recommendation 2:** Specifically recognise the needs of vulnerable groups in service planning and provision of perinatal and infant/child mental health services ■ When dealing with vulnerable groups, including those who experience a sense of stigma, best practice exists where mental health services meet 4 criteria: ■ Early identification and engagement of those in need through provision of primary care services and community-based outreach programmes ■ Facilitating access to services that cater to a number of different aspects of mental health care, where possible reducing the need for referrals to multiple services ■ Strengthening the collaboration between different services so that there is a well-functioning working relationship between services whose focus is on the infant/child as well as children/adolescent and adult mental health services ■ Disseminating information to both consumers and professionals about the needs of marginalised groups and the services available to them. ■ ***Strategies:*** ■ Develop service and workforce capacity to detect and respond to the increased risk of vulnerable communities, emphasising service planning and a delivery model that is flexible, equitable, timely, respectful, sensitive, empathic and recognises diversity ■ Develop accessible programs and outreach services specifically for Aboriginal communities ■ Consult and build strong working relationships with other services that work with high risk populations, such as Child Protection and Family Support Services, Drug and Alcohol Services, Department of Corrective Services, and specialised Aboriginal and Refugee services ■ Create and provide accessible information of services that are available for specific vulnerable groups ■ Develop practice guidelines for professionals across services that promote awareness and sensitivity to a family's needs during childbirth and outline skills needed to recognise and respond to vulnerabilities that can negatively impact on a family's experience of childbirth. This may include consideration of culture, religion, experiences of trauma and those with a history of abuse ■ Provide trauma-informed models of care and ensure sensitive practices inform planning for, and care during the birth process for women with a history of sexual trauma **Service components of *targeted services* for PREGNANCY mental health care** (see Service Guide p.76ff): ■ Community and hospital based midwifery pregnancy care to include early intervention for mental health concerns, monitoring and support ■ Detailed bio-psychosocial assessment to identify particular risks for the woman and her family ■ Access to specialist perinatal psychiatric consultation for women on psychotropic medications in pregnancy or with existing mental health conditions

Country, year [ref]	Australia/Western Australia, 2016 [26]
■ **Other services** *(continuation 1)*	■ Continued screening (through personal engagement and inquiry) for ambivalence about pregnancy and relating to the unborn baby ■ Continued assessment and management of risk to parent, fetus or others including smoking, drug and alcohol misuse, and relational violence ■ Psycho-education regarding pregnancy and mental health ■ Facilitation of referral to appropriate health professionals as required ■ Culturally sensitive and specific support services and groups ■ Access to perinatal loss support services e.g. SIDS and Kids ■ Family centred approach to involve partners, children and other carers in care planning ■ Care planning is collaborative and respectful of a women's needs/preferences regarding her labour and birth experience ■ Provision of professional training, both didactic and experiential to support workforce development and promote collaborative interagency relationships ■ Support and engagement with PIMH research **Service components of *targeted services* for POSTNATAL mental health care** (see Service Guide p.82ff.): ■ Psycho-education about emotional health and wellbeing throughout the postnatal period to promote help-seeking and early treatment ■ Detailed bio-psychosocial assessment to identify particular risks for the women and her family ■ Continued assessment and management of risk to parent, infant or others including relational violence and drug and alcohol use ■ Screening (through personal engagement and observation) and assessment for parents whose feelings about their relationship with their baby, and becoming a parent, reflect marked ambivalence or negativity with a view to participation in supported group or individual programs, and/or referral to specialist services ■ Family centred approach to involve partners, children and other carers in care planning ■ Ensure ongoing monitoring at regular intervals as the demands on a new parent change over time ■ Strong collaborative relationships between services with information sharing and shared care arrangements to reduce known barriers to access such as complex referral processes, long waiting times, repeated assessment, non-family friendly environments, stigma, and geographical isolation ■ Referral to counselling or appropriate therapeutic interventions services for fathers/mothers identified at risk ■ Home visiting to provide psycho-education and establish deeper understanding of family circumstances and dynamics, and identify areas requiring support ■ Group programs – run by clinician with appropriate level of mental health expertise with a focus on promoting self-care, providing skills for managing psychological distress and supporting the adjustment to parenthood ■ Culturally specific support groups ■ Residential infant feeding, sleep and settling programs which encompass the psychological and emotional perspective of the parent ■ Practical in-home support focused on supporting parenting capacity ■ Enhanced home visiting linked with specialist providers for continuity of care/safety net care ■ Tailored individual support and counselling – run by clinician with appropriate level of mental health expertise with a focus on promoting self-care, providing skills for managing psychological distress and supporting the adjustment to parenthood ■ Support and engagement with PIMH research **Service components of *targeted services* for INFANT mental health care (0-2 years)** (see Service Guide p.91ff): ■ Home visiting to provide psycho-education and developmental guidance, establish deeper understanding of family circumstances and dynamics, and identify areas for support ■ Psycho-education (relationship-based approaches) ■ Monitoring parental mental health, family functioning, psychosocial risk, parent-infant relationship with validated recognised tools ■ Supported playgroup (focus on promoting infant psycho-emotional development, parenting skills, and the infant-caregiver attachment relationship) ■ Therapeutic playgroup – run by clinician with appropriate level of mental health expertise (focus on promoting infant psycho-emotional development, parenting capacity and the infant-caregiver attachment relationship, but also may give emphasis to particular issues relevant to participants) ■ Culturally specific support groups which focus on promoting parental capacity to support infant psycho-emotional development and building strong infant-caregiver attachment relationship ■ Practical in-home support focused on supporting parenting capacity and the infant's relationships within the family ■ Enhanced home visiting linked with specialist providers for continuity of care/safety net care ■ Infant feeding, sleep and settling day programs which encompass the psychological and emotional perspective of the infant ■ Infant feeding support which allows a flexible child-centred approach to establishing modes of feeding comfortable to both infant and parent

Country, year [ref]	Australia/Western Australia, 2016 [26]
■ **Other services** *(continuation 2)*	■ Support for child physical development as appropriate, including referral to other health professionals ■ Clear local referral pathways to specialist care providers ■ Special consideration and inclusiveness provided for families involved in surrogacy, or with same sex parents ■ Special consideration for young infant in foster care ■ Support and engagement with infant and parental mental health research
(Cross-sectoral) coordination of services	**Planning, integration and coordination of services:** ■ **Recommendation 5:** Perinatal and infant/child services work together to establish referral, care and treatment pathways across agencies and the continuum of care to ensure a family's experience of services is seamless, equitable and inclusive. ■ Cross-sector collaboration within and between government and non-government agencies is required to enhance the continuity of care across current service boundaries. Special attention must be given to changes in service providers during the antenatal, labour/birth and postnatal period with a focus on comprehensive handover within and between services for mothers and for their children, to ensure ongoing engagement and support management. ■ ***Strategies:*** ▪ Establish clearly articulated agreements, including Memoranda of Understanding, between perinatal and infant/child mental health service providers to improve communication and enhance service delivery ▪ Review handover protocols across all services to improve continuity of care between pregnancy and postnatal service providers for mothers and babies ▪ Promote sustainable funding models and partnerships between funding bodies to ensure equitable service access and continuity of care consistent with good clinical practice ▪ Encourage the development of clear referral and treatment pathways across private and public community and hospital services that are relevant to the local context ▪ Broaden availability and accessibility of services appropriate to the needs of vulnerable groups for care and support and therapeutic intervention ▪ Encourage forward planning that involves the use of diverse and flexible modes of service delivery according to the needs of families ▪ Promote use of the Service Guide to all health service professionals and service planners
Education, training, continuing professional development	**Supporting the workforce:** ■ **Recommendation 6:** Consolidate perinatal and infant/child mental health service provision through the development of a dedicated and competent workforce. ■ Many people are strongly motivated to work in the field of perinatal and infant mental health, but in practice, the work is often emotionally taxing in ways that the person may not have anticipated. Workers may have considerable competence in working with adults, but less in working with babies and young children, and vice versa. Hence it is important to have opportunities for developing competence through training and supervision. ■ Good clinical care can be compromised when workers are not able to acknowledge their own needs, or find support in circumstances where they find themselves overwhelmed. Ensuring staff have effective and timely support mechanisms, such as clinical and reflective supervision, helps to reduce the burden on health professionals and ultimately improves service functioning and the patient journey. ■ Opportunities for supervision and reflection may be particularly important in not only supporting the regional workforce, but also as a means to promote workforce retention and improve continuity of care in regional areas. ■ ***Strategies:*** ▪ Support formal education and training frameworks which improve coordination of training, define core competencies, and promote uniform training requirements necessary for best practice for service planning, screening, risk assessment and referral for perinatal and infant/child mental health ▪ Support cross sector delivery of education and training packages in culturally competent practice for all workers ▪ Develop best practice guidelines for professionals' access to supervision, debriefing and reflective practice to support the entire workforce, paying particular attention to additional measures, such as use of telehealth and video-conferencing technology that might be necessary to support and retain the workforce in regional and remote areas of WA ▪ Identify strategies to ensure practitioners have the necessary skills and knowledge to conduct universal screening and the capacity to detect and respond to increased risk with flexibility and empathy

Country, year [ref]	Australia/Western Australia, 2016 [26]
Requirements for delivery of the PIMH care model	
(Legal) framework conditions	n.r.
Infrastructure, resources	n.r.
Facilitators and barriers	Enabling factors: ■ workforce: best practice perinatal and infant/child mental health service delivery is contingent upon a workforce that is well informed, well prepared and appropriately resourced. It is important to build capacity for health professionals to work in a family centred way through: a competent and resourced workforce, education and training, clinical and reflective supervision ■ research: translation of research into practice requires a sound health professional knowledge base and competency ■ information communication and technology: there is a need to develop information and communication technology to enable multidisciplinary care planning and service provision, supported by evidence-based guidelines and patient pathways. Telehealth/Tele Mental Health is an effective way of providing assessment, consultation and treatment for individuals and families living in remote areas, as well as being a means of providing professional development and upskilling ■ quality and safety: within WA Department of Health, safe and high quality care is governed by a number of standards, policies, guidelines and frameworks to ensure that people within the health system receive the best possible care ■ experiences of care: health professionals need an understanding of the patient journey to enable an empathic response to women, infants and families in their care
Evaluation, monitoring	The responsibilities of the implementation group will include evaluation: taking a lead in ensuring performance against established key performance indicators, as well as being responsible for the review and update of the Model into the future, maintaining an emphasis on quality improvement and best practice. **Supporting research and the development of a local evidence base:** ■ **Recommendation 7:** To aid the expansion of the local evidence base, encourage and support research as an integral part of clinical programs and service development. ■ ***Strategies:*** ▪ Encourage services to engage in evaluation and audit processes to demonstrate the efficacy of programs and interventions ▪ Support the development of research initiatives into the needs of families during the perinatal period, including infants and small children ▪ Support collaboration between clinicians, services and researchers ▪ Support the publication of research results that have been subjected to formal peer review processes ▪ Use local research that has been subjected to formal peer review processes and published, to inform future policy and service provision ▪ Encourage the formation and support the maintenance of linkages between data collection systems related to perinatal and infant health, including mental health, throughout WA
Additional relevant documents	

Abbreviations: GP – general practitioner, n.r. – not reported, WA – Western Australia

Information from other countries

Norway, Sweden

Table A-7: Additional information from hand search and expert consultation; selected Northern European countries (part 1)

Country	Norway	Norway	Norway
Author/publisher and title of document	The Nordic Council of Ministers, 2020. Situation Analysis Report. The First 1000 Days in the Nordic Countries [41][26]	Helsedirektoratet. [National Professional Guidelines. Pregnancy Care] [53]	Helsedirektoratet. National guideline for health promotion and preventive work in the child and youth health centres and school health service [54]
Type of document	Report	Guideline	Guideline
Language of document	English	Norwegian	English
Aim/focus of document	The main objectives of the project 'The First 1000 Days in the Nordic Countries' is to support healthy emotional development and good mental health in young children so that all children in the Nordic countries have the best possible start in life. The Situation Analysis Report presents an overview of the situation in each participating country, offers examples of good pratice and discusses areas for further development.	The document is a National Professional Guideline giving recommendations on various aspects of pregnancy care, including mental health. The chapter on mental health focuses on the identification of mental health problems.	The guideline is divided into 4 sections: General sections concerning the enterprise's operation which cover all sub-services, health centres 0-5 years, school health services 5-20 years, youth health centres (YHC).
Target population of the services	Young children during the first 1000 days of life (i.e. from conception to the age of two) and their families	Pregnant women	Children and adolescents from 0-20 years (and their parents)
Summary of relevant content related to PIMH – prevention and early identification	**Mental wellbeing and preparation for parenthood:** It is recommended that providers of prenatal care (e.g. midwives and GPs) ask women about their current and previous mental health, and offer assessment and referral when necessary, although procedures regarding this are not described in detail. **Risk factors in pregnancy:** There is no nationally coordinated screening for psychosocial risk factors in prenatal care in Norway, although prenatal guidelines stress the importance of enquiring about psychosocial difficulties and actively identifying pregnant women at risk. National guidelines recommend a structured conversation about lifestyle during the first prenatal visit, and additional follow-up if needed, with motivational interviewing as the recommended approach. Where valid and reliable screening instruments are available, these are recommended (e.g. TWEAK or AUDIT for alcohol and substance use), but when they are not available, standardized questions are usually recommended, such as when enquiring about violence. It is recommended that all pregnant women are asked about violence, past or present, without the presence of the other parent. It varies between municipalities what (or whether) screening instruments are used in prenatal care. Several municipalities use the Edinburgh Postnatal Depression Scale (EPDS) to screen for depression, either universally or indicated, but screening for depression is not a national recommendation in prenatal care. However, there has been recent debate about whether systematic screening of depression for all pregnant and postpartum women should be implemented. Almost half of all municipalities in Norway have implemented an educational training programme in pre- and postnatal care called Early In (Tidlig Inn). The aim is to ensure early, interdisciplinary intervention for all pregnant women and families with young children where there are signs of substance and alcohol abuse, mental health problems and violence.	Pregnant women should be asked whether they have now or in the past experienced low mood, depression or other mental health problems. Healthcare personnel can consult the mental health service in the municipality or make further referrals if necessary. Midwives and/or GPs should identify pregnant women at risk of anxiety, depression and mental health problems. Pregnant women who have or have had serious mental disorders should be assessed by a general practitioner who may consult the mental health service in the municipality or refer to the specialist health service. Milder and moderate mental health problems may also require cooperation or further referral. Health personnel in antenatal care should: ■ make it possible for pregnant women to talk about how they are feeling	**Parental mental health:** Parents should be asked about their own mental health and well-being Parental mental health and well-being should be addressed in consultations in the health centre programme. Parental mental health and well-being should be adressed at the home visit 7-10 days postpartum and should be a recurrent topic in all consultations to ensure that the child is being raised in a nurturing and secure environment. During home visits, the public health nurse should ask the parents open questions to enable them to discuss their own thoughts and concerns about their child and parenting. The public health nurse should raise the following topics with the parents: ■ The parents' experience of becoming parents, emotional well-being and adjustment to their new role, including information about the normal emotions, challenges, experiences and ideas involved in becoming parents

[26] The report also includes chapters for each country on other aspects which were not extracted into the tables, e.g., social difficulties, difficulties in the parent's relationship, alcohol and substance abuse, violence and trauma.

Country	Norway	Norway	Norway
Summary of relevant content related to PIMH – prevention and early identification *(continuation 1)*	Training for the programme is free, and participants (i.e. municipal staff, their leaders and general practitioners who provide services to pregnant women and young children) undergo training in the use of specific assessment tools (e.g. EPDS, AUDIT, TWEAK) and counselling methods. Routes for referrals when difficulties are identified in prenatal care vary across municipalities, problem areas and severity of problems. Expectant parents can access Mamma-Mia, a free self-help web-based programme about the psychological preparations for parenthood. It targets risk and protective factors for post-partum depression, such as prepartum and postpartum attachment, couple satisfaction, social support and subjective wellbeing. Currently, the aim is to implement the programme in all prenatal services. Another resource for expectant and new parents is the National Association for 1001 days, which is a user organization focusing on mental health in pregnancy and the early years. **Infant and child healthcare (ICH):** ICH is part of the primary care provided at health centres, which include multidisciplinary services with GPs, public health nurses, physiotherapists and midwives. Many also offer psychological services but, as stated before, the service may be limited. **Children's emotional wellbeing:** Children's development and their attachment to their parents is monitored systematically in ICH by means of regular visits. National guidelines recommend that municipalities offer ICH staff regular training and continuing education on this subject but the extent to which this is done is unknown. Age-related social and emotional milestones are monitored, and parents are given information on secure attachment, healthy social and emotional development and supportive interaction with their child. The parent-child interaction should be routinely addressed at each ICH consultation, and parents should be given counselling to encourage attachment so that their child feels understood, and the parents are able to modulate its emotions. The ICH staff should, through counselling and observation, attempt to identify interactions between parents and children that may present a risk for unsafe attachment, associative disorders and/or neglect. **Parents' emotional wellbeing:** There is a strong focus on parental mental health and well-being in ICH. According to national guidelines, this topic should be discussed at every ICH visit, and at the home visit 7-10 days postpartum. Public health nurses especially focus on detecting early symptoms of postnatal depression at the 7-10-day home visit and at the four-week and six-week check-ups. Although municipalities have chosen to organize some ICH visits as group sessions, the Norwegian Directorate of Health recommends individual or personalized support rather than group-based consultation, because intensive and accommodating support (e.g. home visits) is likely to reduce the occurrence of postnatal depression. **Family wellbeing:** At the consultation when the child is six weeks old, it is recommended that public health nurses ask parents about wellbeing, mental health and their relationship. The primary care system is seen as the first step for families to get support related to family life and child-raising, as it is a low threshold service that is free and available to all. All ICH staff are trained to provide support for family relationships. Families can get advice and counselling from public health nurses, and many health centres offer counselling from psychologists and, if needed, family therapists as well. In addition, there are various groups and parent training programmes available at health centres. Some municipalities combine their health and social services under one roof, such as a "family house", or work collaboratively in other ways. **Parenting skills:** One of the main purposes of ICH is to help parents master their new role and develop good interaction with their child. Parents receive regular information about positive and evidence-based child-raising practices through the 14 consultations in ICH and, if necessary, additional consultations and home visits are offered that focus on optimal care for infants and toddlers.	■ have routines to identify depression and anxiety. Validated tools for assessing depression can be used as part of the survey, and as part of a locally based programme	■ The mother's/father's/partner's mental health, including any prior problem or disorder ■ Postnatal depression ■ Interaction with the infant, including how the parents tackle feelings of anger and frustration when the infant is perceived as challenging; see also the recommendation Interaction ■ Parental interaction and relationship ■ Experiences from the parents' own childhood; positive aspects they want to draw on in their own parenting, and what they aim to do differently ■ Social networks and family networks ■ Alcohol and drug habits ■ The parents' state of physical health or any medical condition that might affect their parenting Health centres should pay particular attention to: ■ Signs of insecure parenting; lack of confidence in the parents ■ Parents with symptoms of depression, anxiety, trauma or other risk-prone emotional stress ■ Families adversely affected by many stress factors ■ Families with children who have physical or mental disabilities ■ Signs of alcohol or drug abuse/domestic violence **Postnatal depression** The public health nurse should maintain particular focus on detecting symptoms of postnatal depression in the mother/father/partner at consultations in the postnatal period; at the home visit 7-10 days postpartum; at the 4-week check-up and at the 6-week checkup. The Edinburgh Postnatal Depression Scale (EPDS) may be used for individualised screening for depression in mothers as an adjunct to a clinical interview. Tidlig Inn offers training concerning early intervention tools and methods. EPDS is included in this programme.

Country	Norway	Norway	Norway
Summary of relevant content related to PIMH – prevention and early identification *(continuation 2)*	**Risk factors in the early years:** Various vulnerable groups are addressed in the national ICH guidelines, such as young parents, parents with alcohol or substance use problems, those with mental health issues, victims of violence, those of low socioeconomic status, asylum seekers, and so on. In general, children born with special challenges or disabilities, as well as children whose parents are ill, injured or have significant social problems, are considered to be at risk. All vulnerable groups are offered individual follow-up in ICH in addition to the universal service. Enquiring about lifestyle habits and tobacco, alcohol and substance use is recommended at the initial ICH consultation, and enquiries about violence and mental health should be made repeatedly. In general, the screening tools used by municipalities vary. National guidelines recommend some tools, such as TWEAK or AUDIT, as well as offering practical suggestions for standardized questions. There are also several widely implemented programmes for the early identification of risks among parents and children, such as the previously mentioned Better Interdisciplinary Efforts (BTI) and the Early In (Tidlig Inn) training programme.		
Summary of relevant content related to PIMH –treatment	**Mental health difficulties:** If a pregnant woman is found to be at risk for, or already suffering from, mental health difficulties, an initial assessment is made by her GP and subsequent support is offered by the municipality's mental health services (e.g. a psychiatric nurse or psychologist). In prenatal care, GPs, midwives, psychologists or psychiatric nurses can offer pregnant women additional visits according to individual needs. If problems are mild, additional midwife visits are usually offered as a start, with the concurrent involvement of mental health professionals as needed. The other parent would not be offered special services for mental health in prenatal care, but they can bring up concerns with their GP and be referred to appropriate mental health services. As of 2020, all municipalities in Norway must provide psychological services in primary care, but their services can be limited. Some pregnant women and their families may not have access to psychologists or only to a few sessions. However, primary care psychologists often offer group therapy, such as CBT, as well as training and supervision for midwives and other prenatal staff. If problems indicate a more long-term, specialized or multi-disciplinary approach, a referral would be made to the local district psychiatric services (DPS) centre although mild to moderate issues might also call for collaboration with, or referral to, specialist services. Some child and adolescent psychiatry centres have also established infant teams who can start consultation during pregnancy. The EPDS is used at around 6-8 weeks postpartum. If mild to moderate postnatal depression or other mental health problems are detected, a first step would be for public health nurses to offer personalized support, additional consultation and guidance. In cases of severe or long-lasting depressive symptoms, women should immediately be referred to specialist care. Intensive and flexible support should be offered, preferably through home visits, where three or more home visits are recommended for vulnerable families. If needed, public health nurses should also establish interdisciplinary collaboration (e.g. with GPs, midwives or psychologists) and encourage parents to contact relevant professionals for further assessment and treatment. Psychological services are free of charge through health centres, although the service is limited to only a few sessions. In the case of more sustained or complex mental health problems, referrals are made to local DPS services. The Norwegian Directorate of Health has developed various "patient pathways" or "care packages" in the field of mental health and substance abuse, and these also apply to pregnant women.	Health personnel in antenatal care should: ■ refer pregnant women with possible partners/children to mental health services in the municipality or the specialist health service ■ be familiar with organisation, collaboration and referral routines to mental health services, including psychologists in the municipality and other agencies The guideline refers to other guidelines on the treatment of mental health problems (not specific for perinatal mental health problems)	Follow-up as necessary ■ The public health nurse should offer individual supportive counselling sessions and additional consultations and guidance for parents who for whatever reason need extra follow-up ■ The public health nurse should assess the need for interdisciplinary care in conjunction with a GP, midwife or psychologist for example ■ The mother/father/partner should be encouraged to consult a psychologist or GP or other relevant professional or service as necessary ■ Parents with a limited social network should be recommended to attend group consultations, where these are available
Additional (expert) information	-	-	-

Abbreviations: EPDS – Edinburgh Postnatal Depression Scale, GP – general practitioner, ICH – Infant and child healthcare

Table A-7: Additional information from hand search and expert consultation; selected Northern European countries (part 2)

Country	Sweden	Sweden
Author/publisher and title of document	The Nordic Council of Ministers, 2020. Situation Analysis Report. The First 1000 Days in the Nordic Countries [41]	Rikshandboken. [The National Handbook for Child Health Services] [55-57]
Type of document	Report	Guideline
Language of document	English	Swedish
Aim/focus of document	The main objectives of the project 'The First 1000 Days in the Nordic Countries' is to support healthy emotional development and good mental health in young children so that all children in the Nordic countries have the best possible start in life. The Situation Analysis Report presents an overview of the situation in each participating country, offers examples of good pratice and discusses areas for further development.	The national handbook in child health care is a national method and knowledge support for the profession. The purpose of the national handbook is to provide the conditions for equal and fair child health care of high quality throughout Sweden. The content of the National Handbook is written and reviewed by active personnel in child health care and pediatric medicine.
Target population of the services	Young children during the first 1000 days of life (i.e. from conception to the age of two) and their families	Children (and their families)
Summary of relevant content related to PIMH – prevention and early identification	**Prenatal care:** Prenatal care in Sweden is managed by primary care services at regional level and is provided in prenatal clinics run by midwives. The prenatal team consists of a midwife and a doctor and, in most cases, a psychologist who either works in the prenatal clinic or is available when needed. **Mental wellbeing and preparation for parenthood:** Encouraging good mental health during pregnancy is an important part of prenatal care, and all women should be given information at prenatal appointments about how to support their mental health and wellbeing. National guidelines include suggestions about the content of such information, including sexual health and lifestyle habits, and about how to address the topics during the visits. According to the psychosocial programme, as contained in the national guidelines, midwives should inform mothers-to-be about what will happen during the different stages of pregnancy and ask them about psychosocial issues. The emphasis is on a salutogenic model, in which healthy psychological functioning, health-promoting attitudes and healthy lifestyle habits are actively encouraged. Often, midwives are given training, guidance and supervision on this from prenatal psychologists, including training in brief counselling methods such as motivational interviewing (MI). The other parent's mental wellbeing may be addressed during routine prenatal appointments and parental support groups. **Risk factors in pregnancy:** According to national guidelines, all pregnant women should be asked about their social situation (e.g. employment, housing, etc.), immigration, family circumstances, social support, stress, mental health, exposure to intimate partner violence, and alcohol and substance use. Questions about current or previous mental illness, exposure to violence and alcohol screening (AUDIT) should take place during the first two visits. Some regions use the Edinburgh Postnatal Depression Scale (EPDS) to screen for mental health problems, but the majority use standardised questions on mental health and violence during the first prenatal visits. **Infant and child healthcare (ICH):** ICH in Sweden is part of the primary care system in each region. ICH nurses organise and run preventive work in the field of child healthcare and are the professionals seen most often by the families. ICH nurses are specialists in either primary healthcare or paediatric care; the doctors are specialists in general medicine or paediatrics who are affiliated with the ICH centre. Most ICH centres also have a psychologist. They work with children and parents in addition to supporting and supervising ICH staff in their work on psychosocial issues. **Children's emotional wellbeing:** ICH nurses provide parents with regular information about healthy social and emotional development in children and how to support it. The National Handbook of Child Health Care indicates what topics should be addressed and when. The general approach is that information on social-emotional development should be promoted through dialogue with parents during routine appointments and parental support groups. Parents are not given information about risk and protective factors for children's emotional wellbeing as such, but this knowledge is fostered implicitly through dialogue on the child's needs and rights. One widely distributed resource for new parents in ICH is the book "To Live with Children" and a	**Screening with the EPDS for depression in new mothers:** For all: ■ When the child is 6-8 weeks old, all mothers must be offered screening with EPDS. A conversation is held based on the answers in the EPDS and how the mother is otherwise feeling. ■ Assessment of the need for further action. The EPDS should never be used as the only method to detect depression, but should be included as part of a complete assessment of the mother's state of mind. It should be a support for professional assessment and a clinical interview. The EPDS should be used as a basis for the child health nurse's (BHV) conversation with the mother and indicates when assessment by a doctor or psychologist should take place. The scale does not provide a differential diagnosis, nor can it replace a clinical assessment.

Country	Sweden	Sweden
Summary of relevant content related to PIMH – prevention and early identification *(continuation)*	booklet about the UN Convention on the Rights of the Child. The regions have also developed their own online and printed materials. The national Health Guide 1177 offers a variety of web-based information and videos, including materials for print. During the baby's first year, a major focus in ICH is to support and promote a positive relationship between child and parent through individual support and dialogue. During ICH appointments, nurses look for signs of difficulties in the parent-child relationship and respond if needed. If they notice anything that concerns them, they consult with the ICH psychologists who then monitor emotional difficulties and attachment. They can offer parents support to improve the parentchild relationship or refer them to an infant care team, primary care psychiatrist or child psychiatrist if needed. **Parents' emotional wellbeing:** National guidelines emphasise the importance of supporting parental wellbeing, and the mother's mental health is continuously monitored and supported through ICH visits. ICH nurses offer parents information about how to promote and maintain their mental health and wellbeing with a new baby, but there are no nationally defined procedures on how to provide such information. **Family wellbeing:** There are 270 family centres in Sweden, where prenatal care, infant and child healthcare, open preschool and social services are united under one roof with activities that offer universal health promotion, early prevention and supportive activities for parents and children. The unique feature of family centres is that they allow regions and other local governments to coordinate their resources to enable cross-sectoral collaboration, prevention and early intervention. The services are lowthreshold and allow a drop-in format to which prospective and new parents can turn for advisory, supportive conversations with representatives from social services. The work is multidisciplinary, with collaboration from midwives, paediatric nurses, paediatricians, psychologists, preschool teachers and social workers. Other professionals such as health promotion specialists, family counsellors, community workers and librarians (e.g. for reading encouragement or language development) may work there as well. Parental support groups are offered as a routine service in the national ICH programme. The groups have been offered free of charge in prenatal and ICH services since 1979 with the purpose of empowering parents, strengthening their social networks, informing them about children's rights, children's physical and mental wellbeing, and promoting positive relations between parents and children (as well as between the parental couple). **Parenting skills:** All parents are offered guidance for parenting during the child's first year. ICH nurses observe the parent-child interaction during routine ICH appointments, encourage positive parent-child communication and provide information on the importance of the relationship between parent and children, as well as the child's need for sensitive care. In this way, nurses inform parents about healthy emotional bonding between parents and children. However, parents do not receive systematic or direct training at the universal level of care. **Risk factors in early years:** The national guidelines state that ICH nurses should explore risk and protective factors related to the infant and family context during regular health visits. According to the guidelines, risk groups that should be identified are: children exposed to alcohol, drugs and certain medicines during pregnancy; children who have parents with mental illness and/or cognitive disabilities; children who are victims of violence and neglect; children in families where there has been domestic violence; children living in foster care; children who are refugees from war zones; children in families with negative interaction patterns; and children with specific difficulties (e.g. premature birth, speech impairments, vision or hearing impairments, or chronic illness and disabilities). The National Handbook of Child Health Care gives support and suggestions on how professionals in the ICH should proceed with the identification of risk groups, but there is no specific routine for screening at national level. National guidelines recommend that ICH nurses use brief counselling methods, inspired by motivational interviewing, to explore the family's lifestyle habits and risk and protective factors. According to ICH guidelines, nurses should also ask parents about issues such as family circumstances, living conditions, financial status and social networks, and should talk about the emotional importance of the parent-child interaction, strategies to avoid infant shaking, legislation against corporal punishment and child safety. **Mental health difficulties:** All mothers are screened with the EPDS for postnatal depression during an individual health visit at 6-8 weeks postpartum. Since 2019, ICH services have also begun to implement an individual counselling session on mental health for the other parent at one of the health visits 3-5 months after the child's birth.	

Country	Sweden	Sweden
Summary of relevant content related to PIMH –treatment	**Risk factors in pregnancy:** If psychosocial problems arise during pregnancy, there are defined procedures for referral. These may vary from region to region depending on the problem and level of care, as the way care is organised differs between regions. According to Swedish healthcare legislation and the Social Services Act, a structured individual care plan (SIP) should be drawn up along with the client whenever care involves both health services and social services. The SIP specifies treatment goals, roles and responsibilities, activities and time schedules. A coordinated individual care plan is established when care is provided by different levels within the same system, such as prenatal care (primary care), specialist psychiatry (tertiary care) or specialist gynaecology (tertiary care). **Mental health difficulties:** If previous or current mental health problems are identified in prenatal care, midwives will consult with physicians and prenatal psychologists about further care. Prenatal services can offer appointments with physicians, follow-up visits for person-centred counselling and appointments with the prenatal psychologist, free of charge. Physicians can also refer the woman to a psychiatrist in primary care for therapy and medication. If the problems are more serious, and if there has been no previous contact with psychiatric care, the woman can be referred to a psychiatric clinic at a hospital. Otherwise, she is referred to the unit of care with which she has had prior contact. The other parent is not offered specific mental health services or referrals through prenatal care, but they can access mental health support through the general primary care system. **Mental health difficulties [after birth]:** If mental health difficulties are identified, a follow-up visit is booked with an ICH nurse, who consults with the ICH psychologist about further steps. If the scores on the EPDS indicate that difficulties are mild, the parents may be referred to a doctor or psychologist in the healthcare centre for decisions about continued care. If the scores are high, and the situation is urgent, an appointment is made with the doctor and the ICH centre for referral to psychiatric care. National guidelines also state that an infant mental health team should be contacted when needed. If there are signs that the relationship between parent and infant is not working well, a referral can made to any of Sweden's 34 teams at an attachment psychotherapy unit in healthcare or social services. However, access to the teams is uneven as 10 of the 21 regions do not provide this service at all.	After EPDS screening: ■ If screening results and/or the need for extra support emerges during the conversation, a follow-up supportive conversation with a nurse is offered. ■ Consultation and supervision for the nurse with a psychologist for child health care if necessary. ■ Referral to psychologist. ■ Referral to a doctor at a health centre. ■ Referral to psychiatry. ■ Contact with infant activities if necessary. ■ Contact with Social Services if necessary. In case of signs of depression: ■ If the mother is judged to have mild depression or signs of depression, offer support calls. ■ If the mother is suspected of having moderate or severe depression, she is referred to an MHV/BHV psychologist or doctor for a clinical assessment. ■ If a serious condition is suspected, contact is made directly with the general practitioner at the health center or a psychiatrist. ■ If the mother shows signs of depression, it is important that the BHV nurse also pays attention to how her partner is doing. This can happen, either in connection with the detection of signs of depression in the mother and the father being invited to a couple's meeting about possible support efforts, or at the individual parenting meeting with the father/partner. **Supportive calls to depressed, new mothers:** Supportive conversations are a method for child health nurses to help new mothers with depressive symptoms. The conversation method is not a treatment but a supportive approach, which is about focusing on the mother's needs and feelings, without giving advice. The National Board of Health and Welfare has recommended supportive talk therapy, so-called person-centred counselling, as a first intervention for mothers with depressive symptoms or mild depression. The method is used throughout the country. In English, the method is called person-centered counselling, non-directive counseling or listening visits. The talks are primarily intended for mothers, whose moodiness and depressive symptoms have started in the period after childbirth, as a result of the transition to becoming a parent and entering a new period of life. The talks are offered by the child health nurse (BHV nurse) and aim to prevent the depression from worsening and developing into clinical depression or becoming long-term.
Additional (expert) information	*Several ongoing projects on perinatal mental health, identification and treatments, by the Swedish Health Technology Assessment Agency, that will be published soon* (https://www.sbu.se/en/)	-

Abbreviations: EPDS – Edinburgh Postnatal Depression Scale, GP – general practitioner, ICH – Infant and child healthcare

Denmark, Finland

Table A-7: Additional information from hand search and expert consultation; selected Northern European countries (part 3)

Country	Denmark	Finland	Finland
Author/publisher and title of document	The Nordic Council of Ministers, 2020. Situation Analysis Report. The First 1000 Days in the Nordic Countries [41]	The Nordic Council of Ministers, 2020. Situation Analysis Report. The First 1000 Days in the Nordic Countries [41]	Neuko database [58-67]
Type of document	Report	Report	Guideline
Language of document	English	English	Finnish
Aim/focus of document	The main objectives of the project 'The First 1,000 Days in the Nordic Countries' is to support healthy emotional development and good mental health in young children so that all children in the Nordic countries have the best possible start in life. The Situation Analysis Report presents an overview of the situation in each participating country, offers examples of good pratice and discusses areas for further development.	The main objectives of the project 'The First 1000 Days in the Nordic Countries' is to support healthy emotional development and good mental health in young children so that all children in the Nordic countries have the best possible start in life. The Situation Analysis Report presents an overview of the situation in each participating country, offers examples of good pratice and discusses areas for further development.	Neuko is a database for primary care workers in Finland, which also includes some guidelines for perinatal mental health problems.
Target population of the services	Young children during the first 1000 days of life (i.e. from conception to the age of two) and their families	Young children during the first 1000 days of life (i.e. from conception to the age of two) and their families	n.r. (several guidelines for maternal and child health)
Summary of relevant content related to PIMH – prevention and early identification	**Mental wellbeing and preparation for parenthood:** Mental health and wellbeing are a routine part of prenatal care, and national guidelines include defined procedures on how to provide pregnant women with information on how to support their mental wellbeing. New clinical guidelines on prenatal care will include a stronger and more systematic focus on mental health and offer clearer instructions for healthcare providers on how to address it. The guidelines will also include a stronger focus on the other parent's mental health. Danish municipalities offer courses during pregnancy, primarily for first-time parents, to help them prepare for the parenting role. Furthermore, local councils can determine where health visitors should offer home visits in cases where there is a need for extra support, for example, because of disability, social circumstances or other challenges. **Risk factors in pregnancy:** According to national guidelines, psychosocial difficulties (e.g. mental health difficulties, history of violence or trauma, alcohol or substance use) should be addressed at the first prenatal appointment with the GP and midwife, and again later in pregnancy. Women should also be asked about their work environment, housing, financial situation and relationship with their partner, including their partner's mental health and alcohol or substance use. At present, there is no nationally co-ordinated screening for risk factors in prenatal care, although	In Finland, municipalities provide prenatal care and infant and child healthcare (ICH) via an integrated system, either as a separate or combined service. Usually, prenatal and ICH services are located in the same building as general primary care, albeit in separate clinics called neuvola. The key professional team in prenatal care consists of GPs and public health nurses, and most of the contact is with the public health nurse. Some public health nurses are also trained midwives. The aim is to offer consistency of care with the same professionals taking care of the family throughout pregnancy via a "personal nurse" model. When prenatal and ICH services are combined, the family sees the same public health nurse during the pregnancy as well as after the child is born. **Mental wellbeing and preparation for parenthood:** Parents receive information during prenatal visits about how to support their own mental health and wellbeing, and the monitoring of mental wellbeing through discussion and observation is a routine part of the service. Discussion about family wellbeing can also be encouraged through the use of questionnaires for parents expecting their first child or families with newborn children. Such questionnaires may identify particular risk or protective factors within the family, and are well-suited for use in the extensive health examinations that assess the wellbeing of the whole family. All families expecting their first child should be offered multidisciplinary family classes, including parent group activities and childbirth counselling. These classes are often organized by prenatal and ICH staff (e.g. public health nurses or midwives) but other professionals (e.g. family workers or psychologists) may also be involved.	**Recognizing and preventing depression and anxiety during pregnancy and postpartum [65]** Clinics must have clear, uniform instructions and procedures for identifying mental health problems in the perinatal period and directing clients to treatment, as well as the possibility of organizing additional visits for those in need of support. Recommended forms to use: ■ identification of psychosocial risk factors: Antenatal Risk Questionnaire, ANRQ and resource forms ■ identifying depressive symptoms: the Edinburg Postnatal Depression Scale, EPDS ■ Assessment of anxiety symptoms: Anxiety Questionnaire (GAD-7) ■ Assessment and support of early interaction: VaVu forms ■ Mood Disorders Questionnaire, MDQ At the first consultation, the family's medical history (including psychiatric illnesses in the family and close relatives) and the expectant mother's medications are investigated. At each counseling visit, matters related to the parents' well-being, sleep and

Country	Denmark	Finland	Finland
Summary of relevant content related to PIMH – prevention and early identification *(continuation 1)*	some birthing centres use systematic methods to identify these issues among women giving birth. The aforementioned national registration system currently under development will also include a standardized list of questions about psychosocial difficulties that all pregnant women will be asked to answer online before their first prenatal visit. **Mental health difficulties:** Risk factors should be assessed at the first prenatal appointment. The Edinburgh Postnatal Depression Scale (EPDS) has not been validated for use during pregnancy in Denmark but is administered in some municipalities around gestational weeks 24-28. **Infant and child healthcare:** Similar to the prenatal system, infant and child healthcare (ICH) in Denmark is managed by GPs at the regional level and by health visitors in primary care at the municipal level. **Children's emotional wellbeing:** During routine home visits, health visitors offer parents information about the child's healthy social and emotional development and how to support it. Children's social-emotional development is one of the main topics that health visitors discuss with parents during home visits and at GP examinations, where certain developmental milestones are also monitored. At the moment, there are no systematic, national measures available for monitoring children's behaviour for signs of age-appropriate social and emotional development during routine visits. **Parent's emotional wellbeing:** Health promotion and parental mental wellbeing are topics that are routinely raised by health visitors during home visits and by GPs at periodic health examinations. Many municipalities also administer the EPDS scale to screen new mothers, or both parents, for post-partum depression during home visits. Furthermore, national ICH guidelines include sections on mental health after birth. Currently, however, there is no system to assess if and how these issues are addressed in ICH, but evaluation methods are being developed to ensure a more systematic focus on this. As with prenatal care, if there are concerns about a parent's mental health or social circumstances, the GP or health visitor can refer them to psychological services, social support and other appropriate departments.	**Risk factors in pregnancy:** According to national guidelines, psychosocial risk factors should be screened and regularly monitored during prenatal visits, such as smoking, alcohol use, mental health, violence and socioeconomic status. These risk factors are assessed through various standardized questions and screening tools in addition to general discussions in prenatal care. The extensive health examination at weeks 13-18 includes an inventory of the pregnant woman's mental health and social support resources, which can be used to identify issues that either increase or decrease the family's resiliency. **Mental health difficulties:** The extensive health examination in week 13-18 includes universal screening for depression with the Edinburgh Postnatal Depression Scale (EPDS) and sometimes also screening for anxiety via the Beck Anxiety Inventory (BAI). Depression is screened again near the end of pregnancy, in gestation week 35-36, mainly via the EPDS or the Beck Depression Inventory (BDI). **Children's emotional wellbeing:** During ICH visits, parents receive regular information about healthy social and emotional development in young children and how to promote it. Children's social and emotional development, behaviour and interaction with parents is monitored at different ages and the electronic registry system specifies what issues should be addressed at each ICH visit. There is a strong focus on the importance of early attachment for children's healthy development, and ICH staff are well-trained in supporting it, for example through the VaVu approach ("Supporting Parent-Child Interaction"), which aims at supporting early parent-child interaction and addressing risk factors. The VaVu approach is applied at age 4-8 weeks, four months and six months, and includes an interview, discussions, observations and practical training to support positive parent-child interaction. The themes discussed in the interview help to identify any concerns relating to the baby and assess the need for support. The quality of the parent-infant interaction is assessed by observing, for example, the behaviour of both parent and baby, emotions expressed in the interaction and whether they share a mutual understanding. In this way, the development of an emotional attachment between mother and child is systematically monitored. **Parents' emotional wellbeing:** Parents receive emotional support and opportunities to discuss their feelings during the regular ICH visits. The mother's emotional resources to care for her baby are assessed and she is given information about factors that support or threaten parents' mental health when they have a new baby. Parents are encouraged to support their own mental wellbeing and overall health by taking care of their sleep, eating and activity routines. Defined procedures in ICH guidelines dictate how to support parental mental wellbeing and public health nurses are trained to look out for signs of emotional distress among new mothers.	coping are discussed, and the parents' possible symptoms of depression and anxiety are observed. **EPDS mood form in screening for depression during pregnancy and after childbirth [58]** Both during pregnancy and after childbirth, parents need information about depression during pregnancy and after childbirth, e.g. symptoms, causes and prevention. Aids include, for example, exercise, relationship support, talking about it and asking for help. In addition to consultation visits, the discussion can be continued in family coaching and baby groups. Early recognition of depression: ■ Discussion about mood and health ■ Observation during pregnancy and infant health check-ups ■ EPDS Form for both parents ■ The timing of the screening is during the extensive health check-up during pregnancy, the post-delivery check-up and whenever necessary. **Assessment of mental health and psychosocial well-being [61]** Periodic health checks always include a professional's assessment of psychological and psychosocial well-being and their promotion. Assessment of mental and psychosocial well-being is done through discussion and observations. In addition, information obtained from preliminary information forms, previous health information and information obtained from early childhood education or the teacher are used. In the case of children and young people, information is collected especially from parents. If there is concern about psychosocial well-being, the situation will be clarified using the screening methods agreed to be used in the organization.

Country	Denmark	Finland	Finland
Summary of relevant content related to PIMH – prevention and early identification *(continuation 2)*	**Risk factors in the early years:** Danish municipalities use different methods to identify children with, or at risk for, psychosocial difficulties. Some methods are locally developed while others are established measures that have been documented and evaluated, such as the Alarm Distress Baby Scale (ADBB), Psykisk Udvikling og Funktion (PUF) and "Opsporingsmodellen", a systematic approach for the early detection of children in vulnerable situations. There are also standardized questions and screening methods that are used in ICH to identify psychosocial difficulties among parents, including the EPDS and the Gotland Scale for postnatal depression. If problems arise that are outside the scope of the service provided by ICH or primary care, the previously mentioned interdisciplinary team will be involved. **Mental health difficulties:** Mental health and general health promotion are among the main topics discussed at the GP's office and during home visits by health visitors. In some municipalities and some GP offices, all new mothers are screened with EPDS for postnatal depression. The other parent is sometimes screened as well via the Gotland Scale.	According to recommendations, all parents should be given information about the symptoms and prevention of prenatal and postpartum depression. Questions related to mood and emotional wellbeing are a theme in family classes, which, among other things, seek to prevent mental distress. Family classes may consist of parental support groups, which are usually local, and sometimes also online resources, such as digital interventions. **Parenting skills:** Parents receive information about positive and evidence-based upbringing practices through individual support and guidance in ICH. An emphasis is placed on offering this counselling to both parents. Parents are informed about the importance of the child's self-esteem, the congenital nature of differences in temperament and understanding the child's uniqueness as a person. ICH and family services also offer other courses for parents, at both universal and indicated levels. These include "supportive interaction" (International Child Development Programme (ICDP); Kannustava vuorovaikutus79), which is an attachment-based approach designed to be used after family classes. Another example is the "Vahvuutta vanhemmuuteen" programme for parents with 3-4-month-old infants. This was originally developed as the "parent first programme" at Yale University for parents with substance abuse problems but has since been tailored to fit all parents as a follow-up to family classes in Finland. The aim is to promote positive parent-infant interaction, strengthen the parents' mentalization ability, support the parents' intimate relationship and offer peer support. A third programme is "Hoivaa ja leiki" ("Nurture and play"), which is a Finnish mentalization-based group intervention from pregnancy through the baby's first year. The aim is to support mothers' mentalization ability and emotional availability in relation to their baby (e.g. through experience-based tasks and playfulness) as well as teaching cognitive-behavioural techniques for managing symptoms of depression. NGOs also offer many different parenthood courses, such as the previously mentioned "Vahvuutta vanhemmuuteen" based on the "Parents first" programme and "Ihmeelliset vuodet" ("Incredible Years") for children aged 2-6 years old. Some courses are also available online. Courses for parents with children under the age of 2 years are diverse, with specified target groups; some are for everyone and some are for risk groups only. Most parent or family classes are free of charge but there are regional differences in quality and availability. **Risk factors in the early years:** ICH services strive to identify parents and families who need additional support (e.g. single parents, immigrant families, young parents), and practitioners receive regular training in assessing risk factors. In addition to universal screening for depression, alcohol and substance abuse (via EPDS and AUDIT), there are standardized questions about lifestyle habits, smoking, financial difficulties, relationship issues, child illness, violence, neglect and other kinds of child maltreatment.	**Additional guidelines:** ■ Use of alcohol and other substances [63] ■ Use of tobacco and nicotine products [64]Violence prevention – support, identify and intervene early [62] ■ Considering trauma experiences during the perinatal period [60] ■ Bipolar disorder and psychosis in pregnant and postpartum mothers [66] ■ Fear of childbirth [67]

Country	Denmark	Finland	Finland
Summary of relevant content related to PIMH – prevention and early identification *(continuation 3)*		Psychosocial risk factors are assessed during regular visits and in the extensive health examinations when the child is aged four months and 18 months. Both parents, as well as the child's siblings, are invited to the extensive health examinations, where attention is paid to the whole family's health and wellbeing. **Mental health difficulties:** Attention is paid to mental health in ICH because it is recognized that a parent's depression, anxiety and other mental health difficulties can have a negative impact on their interaction with the child, the formation of attachment and the child's overall development and wellbeing. The mother's mood is assessed in the first week after birth, and postpartum depression is screened via EPDS in week 5-12 after birth.	
Summary of relevant content related to PIMH – treatment	**Risk factors in pregnancy:** Prenatal services are divided into four levels to ensure the right care and referral regarding obstetric, social and mental health risk factors. The procedures for referral are described in the regional plans for pre- and postnatal care. Levels 1 and 2 are for normal pregnancies, and those who need some added support that can be provided by healthcare professionals in standard prenatal care. Level 3 is for pregnancies that need extended support, involving multidisciplinary collaboration with other professionals in the health sector and/or regional and municipal services. Prenatal care is offered at this level when there are more complex medical, social or psychological problems. Level 4 involves cooperation with specialized institutions that offer support for pregnant women with serious problems, such as substance abuse, serious mental illness and/or severe social difficulties, which predict potential difficulties in the contact between mother and child. For some expectant parents, social or psychological issues may call for additional interventions alongside routine prenatal care, both before and after birth. It is recommended that all pregnant women with special needs are offered a visit by a health visitor before birth. For more serious psychosocial problems, the obstetric ward establishes a cross-sectoral team with the municipality and other relevant parties. This interdisciplinary and intersectoral cooperation between healthcare providers and social services at municipal level is considered of the utmost importance when it comes to early efforts to ensure the child's health and wellbeing. Typically, this involves a collaboration between midwives, obstetricians, GPs, health visitors, mental health professionals (e.g. psychiatrists or psychologists),	**Risk factors in pregnancy:** If psychosocial problems are identified during pregnancy, defined procedures guide prenatal staff on how to proceed through further examination and care pathways. Strengthening cross-sectoral collaboration has also been a major focus in Finland in recent years. All institutions are required to have joint agreements with other agencies on how their services will be organized and linked together. There is also close collaboration between prenatal and ICH services, which are organized to function as one system in a smooth continuum throughout pregnancy and childhood. However, a weaker link exists between primary care, including prenatal and ICH services, and certain other sectors, such as mental health services. Services for different problems also differ significantly depending on the particular risk factors in question. For example, an extensive, high quality service is available when it comes to alcohol and substance use throughout the continuum from prevention and early intervention to secondary and tertiary care. For mental health, resources are less continuous, less accessible and less focused on prevention and early intervention than on clinical treatment. However, perinatal psychiatric outpatient clinics are currently being established in association with hospitals, and these will serve to strengthen prevention, identification, treatment and follow-up for mental health difficulties in prenatal and infant and child healthcare. **Mental health difficulties:** If mental health difficulties are identified, support may be provided at the prenatal clinic, mental health clinic or a family counselling centre, depending on the type and severity of the problem. Usually, the first step is for the expectant mother or other parent to be referred to a GP, with consultation from psychiatric specialized care if necessary. According to national guidelines, prenatal and ICH services must collaborate with a psychiatric nurse, psychologist or family worker in such situations. Psychologists and psychiatric nurses are part of general primary care and available on referral. Family workers can be accessed through collaboration with social services. Although psychotherapy is	**Treatment of depression and anxiety during pregnancy and after childbirth [59]** In the treatment of perinatal depression and anxiety, it is essential to take into account that a pregnant woman or a parent of a small baby is in a very special and sensitive phase of life change. When planning treatments, you must always consider the health of the mother, the other parent, and the unborn child. The treatment of mental health problems (including sleep disorders) falls under primary health care and/or psychiatry. From the point of view of the care chain and the family, it will be smooth if the necessary psychiatric consultation can be arranged at the family center. It is recommended that the clinic's health nurses have psychiatric expertise and that psychiatric professionals such as psychologists or psychiatric nurses work in the clinic, so that the majority of patients with mild and some moderate symptoms of depression and anxiety can be treated at the clinic. → *Several recommendations on treatment of mild, moderate and severe depression and anxiety disorders* **Peer support** Peer support can be a good addition alongside other treatment, but it cannot be the only form of treatment at any stage of the treatment. The Finnish peer support organization is Äimä ry.

Country	Denmark	Finland	Finland
Summary of relevant content related to PIMH –treatment *(continuation 1)*	social services and specialized outpatient clinics for vulnerable families ('familieambulatorierne'). Family outpatient clinics coordinate the efforts of different health and social services during pregnancy and beyond. At their core is an interdisciplinary team that collaborates to strengthen early, cohesive and holistic efforts for the pregnant woman, the child and the family. The team is at a minimum composed of a medical specialist, a midwife, a social worker and a psychologist. **Mental health difficulties:** If problems arise concerning the mental health of expectant parents, primary care can offer services from GPs, health visitors, social workers, pedagogues and other professionals depending on the problem at hand, although services may differ between municipalities. If needed, GPs or obstetricians can also send referrals to secondary care, for example, psychologists or psychiatrists. Psychological services are not part of primary care and are not free of charge unless they are arranged via referrals from a GP, which are only made under certain circumstances (e.g. serious illness, violence, trauma, death of a family member or significant clinical problems). If a pregnant woman or new mother experiences mild depression or anxiety, it will thus not warrant a referral, and in such cases she would need to seek private psychological services, for which a fee is charged. Vulnerable families may be referred to a specialized team at a hospital maternity unit for milder problems or, if necessary, the aforementioned family outpatient clinics. As has been mentioned, home visits from health visitors can also be offered during pregnancy when women are experiencing mental health difficulties and, when needed, social services are informed and involved. Social services may also refer women to psychologists within the municipality, in which case the service is free of charge. There is no specific referral route for the other parent's mental health, but they receive the same service as the general public. They can be referred to a psychologist or psychiatrist by GPs or obstetricians if warranted, according to the aforementioned conditions. Family outpatient clinics can also handle the other parent's mental health, and home visits can be used to support their mental health and wellbeing. **Family wellbeing:** Municipalities can offer counselling and help with common issues in parenting or family life, such as marital problems, upbringing and communication in the family. As stated before, municipalities are also legally	the recommended treatment for depression and anxiety during pregnancy, psychological treatment is not always available and sometimes only through private practice for a fee. If mental health issues are minor, the focus is on providing added psychosocial support in prenatal care (e.g. additional visits with a public health nurse) and home support if necessary, such as help with housework and so on. Mild to moderate mental health problems can be treated in primary care, for example through targeted psychoeducation groups led by psychiatric nurses. For moderate problems, a psychiatric nurse or psychologist from secondary care would be engaged in the care team. In such cases, treatment would take place at a hospital outpatient clinic since no specialized mental health services are provided in primary care. Severe mental illness would be treated in specialized units in tertiary care. In Finland, there is also a strong tradition of NGOs providing various services related to health and social support, including mental health resources. Thus, NGOs may offer counselling, group or individual treatment, as well as peer support groups. **Risk factors in the early years:** Public health nurses at the ICH can offer additional home visits according to any identified need for special support or if the family has missed examinations. Such circumstances may include the mother's fatigue, difficult child temperament or disability, perinatal and postnatal depression, insecurity among single or very young parents, and immigrant status. The Kiikku working method is another example of an approach that is suitable for vulnerable families. It is preventive in nature and involves home visits until the child reaches one year of age, in order to support the parent-child interaction and development of an attachment relationship, in a multidisciplinary manner. As previously stated, ICH services must have predefined routes and collaborative agreements with other services, across systems and sectors, according to implementation plans. Thus, there are mutual collaboration agreements between prenatal care and ICH, primary health centres, specialized medical care (hospitals) and mental health units regarding screening methods, case managers/contact persons, division of responsibilities, care pathways and additional staff training. The emphasis is on identifying any need for special support and offering individual support as soon as possible. However, the provision, quality and coordination of services can vary depending on region and type of service. **Mental health difficulties:** If symptoms of depression are mild or moderate they can be treated at the ICH clinic, where the focus is on preventing the further development of depression through psychosocial support and, if necessary, home support. In the case of moderate depression, GPs and other specialized professionals at the health centre, such as a psychiatric nurse and sometimes a psychologist, are invited to join the care team. Severe depression is treated in specialized medical care. Perinatal mental health outpatient clinics specially designed for	The third sector offers several services and materials that support the well-being of families with babies, for example First and shelter homes, Väestöliitto, Mieli ry, Mannerheimi child protection association and Suomen Perinatal mental health ry.

Country	Denmark	Finland	Finland
Summary of relevant content related to PIMH –treatment *(continuation 2)*	obliged to provide free, family-oriented and anonymous counselling and interventions for family difficulties. Family centres are not widespread in Denmark but a model called "Familiens Hus" (family house), which draws on the Nordic family centre model, has been implemented in two municipalities. Family houses offer courses in prenatal care, preparation for the parenting role, guidance and training in establishing a healthy emotional attachment with the baby, employment and educational counselling, and so on. It is a free, lowthreshold service that is accessible to all parents. Midwives, health visitors, social workers and employment counsellors work in the family house, and there is easy access to them. The staff also guide and support parents if they need counselling from other services, such as social services, and collaborate with ICH and other relevant entities. **Risk factors in the early years:** Vulnerable parents and children (regardless of whether they are in a predefined risk group or not) get extra support according to their individual needs. This can be extra home visits from health visitors for milder problems, or, for more significant difficulties, specialized care such as the previously mentioned family outpatient clinics or other relevant services. **Mental health difficulties:** If problems are identified, health visitors can offer extra home visits for milder cases, or parents can seek psychological assistance in private practice. If problems are clinically significant, municipalities can offer family counselling or psychological services (PPR) in secondary care through referrals from health visitors or GPs. There are also treatment options available for free on the internet. If the problems are more severe, parents can be referred to a psychiatrist in secondary care, or hospitalized if needed. The follow-up and continuity of mental health services in Denmark usually function well, apart from the fact that psychological services for milder or subclinical problems are generally not offered in primary care.	pregnant women or mothers with young infants are also in development. As previously stated, if a parent is receiving treatment, the children's situation is also assessed (e.g. via the "Let's Talk about Children" ("Lapset puheeksi") approach) and necessary support is arranged for the family. In such cases, ongoing collaboration with the ICH is established.	
Additional (expert) information	-	-	*A project is currently planned with the aim to collect a database of different PMH interventions and their research evidence*

Abbreviations: EPDS - Edinburgh Postnatal Depression Scale, GP – general practitioner, ICH – Infant and child healthcare, n.r. – not reported

Switzerland, Germany, Netherlands, Belgium, France

Table A-8: Additional information from hand search and expert consultation; selected Western European countries

Country	Switzerland	Germany	Netherlands	Belgium	France
Author/publisher and title of document	- (no document identified)	Simen, 2022. [Nürnberg UPlusE – Peripartum screening for parental depression. From pilot project to nationwide provision] [42]	Leppers, 2021. Perinatal mental health around the world: priorities for research and service development in the Netherlands [44]	Van Damme, 2020. A mental health care protocol for the screening, detection and treatment of perinatal anxiety and depressive disorders in Flanders [68]	Sutter-Dallay, 2020. Perinatal mental health around the world: priorities for research and service development in France [69]
Type of document	-	Presentation of a pilot project	Article	Article	Article
Language of document	-	German	English	English	English
Aim/focus of document	-	To present the pilot project "UplusE"	The article is part of a series of papers in BJPsych International on perinatal mental health around the world and describes the situation in the Netherlands.	The perinatal protocol guides staff through a psychosocial assessment, stepped screening, a clinical assessment and treatment steps and is currently being implemented throughout Flanders with support of the Flemish Ministry of Welfare, Public Health and Family.	The article is part of a series of papers in BJPsych International on perinatal mental health around the world and describes the situation in France.
Target population of the services	-	Families in the prenatal and postnatal period	n.r.	Women in the perinatal period	n.r.
Summary of relevant content related to PIMH – prevention and early identification	-	The existing routine examinations according to the maternity and child guideline are to be extended by the factor "psych" at the end of pregnancy and by the factor "parents" at U3-U6 ("E" for Eltern). Standardised screening for depression, disturbances in the parent-child relationship and psychosocial stress enables gynaecologists and paediatricians to record at-risk families at an early stage with little expenditure of time and money.	A substantial part of perinatal care is delivered by midwives, who are trained to be aware of perinatal mental health. Several national preventive programmes and biopsychosocial interventions are listed in the article, e.g.: ■ *"Promising Start"* (aimed at improving the mental and physical health of infants, focusing on the first 1,000 days; the programme includes prenatal, perinatal and postpartum care and support for vulnerable parents) *"Mind2care"* (standardised online questionnaire provided and validated by the National Knowledge Centre for Psychiatry and Pregnancy [LPKZ]; containing questions about mental health, psychosocial problems and substance use; can be used by midwives as a screening instrument to provide personalised recommendations for the provision/improvement	**Psychosocial assessment:** In order to identify women at risk, a psychosocial assessment is conducted by midwives, who are granted some extra 30 min during the standard hospital visit at 16 weeks pregnancy. When two or more risk factors or one high risk factor such as substance abuse, partner violence or a positive family psychiatric history for bipolar disorder are present, the pregnant women are offered support for these problems. **Stepped screening protocol for depression and anxiety disorders:** The stepped screening protocol starts with brief, validated, self-report questionnaires for depression ('Whooley questions') and anxiety ('GAD-2'). A positive score on one Whooley question or on both items of the GAD-2 result in the administration of the Edinburgh (Postnatal) Depression	In 1970, France set up its first 'perinatal plan' to deal with relatively high rates of perinatal mortality. Another plan was drawn up in 1995 with the same objectives, and in 2005 a further plan recognised the need to integrate maternal mental health into perinatal care and established management networks that were charged with organising perinatal care at the regional level throughout France. This last perinatal plan recommended an 'early prenatal interview'. This aimed to offer all pregnant women, as early as possible during their pregnancy, an interview specifically focused on the implications of their condition, highlighting the factors that could protect or weaken their adaptation, particularly in terms of mental health.

Country	Switzerland	Germany	Netherlands	Belgium	France
Summary of relevant content related to PIMH – prevention and early identification *(continuation)*			of medical and psychosocial care during pregnancy and the postpartum period; includes quesstions from the EPDS which is validated in pregnant women in the Netherlands and also used as a separate screening instrument for depressive symptoms) ■ *"MamaKits"* (online intervention aimed at reducing anxiety and depressive symptoms in pregnant women) ■ *"WellMom"* (app developed to improve welfare and prevent depressive feelings during and after pregnancy)	Scale (E(P)DS). The stepped screening is conducted by a midwife during the first ultrasound visit at 20-21 weeks of pregnancy. The screening is repeated during the standard postnatal gynaecological visit at 6 weeks (to avoid any interference with the baby blues) by the midwives and during the routine medical check-up of the baby at 6 months by the nurses of 'Child and Family'. Midwives trained in the assessment and screening are ideally placed for openly discussing mental health issues, giving some basic psychoeducation and motivating women with difficulties for seeking treatment.	
Summary of relevant content related to PIMH – treatment	-	Standardised care paths are to be used to refer those affected to psychiatrists/psychosomatics/ psychotherapists or to early help/ pregnancy or child guidance centres at an early stage. The use of the already established apps "My gynaecologist" and "My paediatrician" for screening, help for parent-child interaction and appointment scheduling and communication in the network enables low-threshold and complex care for families in a stable and cross-sectoral care network.	Throughout the country, various hospitals and out-patient clinics offer perinatal mental healthcare. In the past decade, considerable advancement has been achieved in "POP care" (psychiatry, obstetrics and paediatrics). The POP team often includes psychologists, psychiatrists, gynaecologists, midwives, paediatricians and social workers, who all strive to achieve excellent biopsychosocial healthcare through multidisciplinary collaboration. Referrals to POP teams come from the various collaborating disciplines, as well as from primary healthcare (GPs) and mental healthcare institutions. Within POP care various treatment options can be offered, including (but not limited to) pre-conception counselling, psychological treatment (e.g., cognitive behavioural therapy, eye-movement desensitisation and reprocessing) and/or pharmacological treatment. Regarding postpartum care, mothers with severe psychiatric illness and their infants can be admitted to specialised medical-psychiatric departments in hospitals, e.g., in-patient mother and baby units. These facilities provide	**Clinical assessment and treatment:** A score of 13 or more on the E(P)DS or of 15 or more on the GAD-7 points to an increased risk of anxiety and depressive disorders. These women will be referred for further clinical assessment to the psychiatrist or psychologist working at the maternity services or to their own GP depending on their preferences. A low score (< 10 on the E(P)DS or<9 on the GAD-7) does not lead to any additional intervention whereas an intermediate score (10-12 on the E(P)DS or 10-14 on the GAD-7) leads to a repeat screening at the next visit. A positive score on item 10 of the E(P)DS, triggers the midwives to explore suicidal risk and refer the women to specialist care. After diagnosing a mental illness during clinical assessment, treatment is offered at the maternity service unit in close collaboration with the midwives, obstetrician, GP and social services. Referral to inpatient or day-clinic services, mother-baby unit or crisis resolution team are additional treatment options.	Because of the orphan status of perinatal psychiatry in France, reflected in the continuing bipartite developmental lineages of child and adult psychiatry, perinatal psychiatry in France is not officially linked to either of these two subdisciplines. This in-between situation generates administrative confusion. There is no legal framework defining the field of competence of perinatal psychiatry, and that has impeded the organisation of care in this discipline. Thus, even now, it is up to individual hospitals to decide whether or not to provide access to mental health services in the context of perinatal care. Furthermore, how that care is provided will be influenced by the characteristics of the local team, depending on whether it has an adult or child psychiatry affiliation. This situation means that national coverage and access to perinatal psychiatric care in France remains very disparate. Keeping all this information in mind, perinatal mental health services, where they do exist, are variable in structure, ranging from classical joined-up care in MBUs to hospital-based daytreatment units and out-patient psychiatric clinics. They are run by multidisciplinary teams. Depending on the locality, women and their babies can be cared for from the time of their pregnancy until 1 year after the birth, and up to 3 years in some

Country	Switzerland	Germany	Netherlands	Belgium	France
Summary of relevant content related to PIMH – treatment *(continuation)*			psychiatric care for the mother and evaluate mother-baby interaction. More recently, infant mental health specialists – who are trained to evaluate and enhance mother-child interactions and infant mental health development – are increasingly participating in POP care.		out-patient clinics. All these structures tend to be integrated in a system of global perinatal care. This includes services in primary care settings (collaborating with P.M.I. teams, for example), as well as more specialised 'medico-psychosocial' teams,whichare available to most maternity services. There are also a few perinatal psychiatry liaison teams, whose main objective is to anticipate complex psychiatric situations. The French Marcé Society maintains a list of in-patient MBUs and day hospitals providing perinatal mental health services. The type of care available to women with mental health disorders during pregnancy and in the perinatal period should be based on the severity of their illness and the biopsychosocial environmental context. Women with a pre-existing mental illness should be offered preconception counselling to discuss relapse risks and the potential effects of untreated illness on maternal–fetal health, as well as the risks and benefits of psychotropic medication during pregnancy and while breastfeeding. In cases of severe psychiatric illness during pregnancy or after childbirth, the mother and her infant should both be admitted to an in-patient MBU, where the mother can receive psychiatric care while the child's safety and developmental needs and the mother–infant relationship are simultaneously supported.
Additional (expert) information	Swiss psychiatric and gynaecological societies have not yet developed guidelines for PMD care. We could not find guidelines from cantons, hospitals or professional associations via search engines or literature databases. Specialized inpatient care in obstetric hospitals is rare in Switzerland and obstetricians	*In Germany, there is no specific guideline for perinatal mental health disorders, however, several other disorder-specific guidelines like the S3 national guidelines for unipolar depression, bipolar disoders, schizophrenia etc. have a chapter on the perinatal period. There are several regional projects in Germany to screen for depression and anxiety as well as psychosocial risk factors in pregnant and postpartum women, however, there is no nationwide routine program implemented so far.*	-	*The article is currently the only document in English, it is related to another document focusing on screening and detection of perinatal mental health problems which is only available in Dutch* (https://www.zorg-en-gezondheid.be/sites/default/files/2022-04/Richtlijn-perinatale-gezondheid.pdf)	France has a long tradition of concern for maternal and perinatal mental health. However, the national organisation of psychiatric care does not yet provide structured guidelines on the organisation of perinatal psychiatric care [69]. *The perinatal psychiatry sub-group of the National Commission of Psychiatry has elaborated last year a very detailed document of proposals for these pathways and the organization of perinatal psychiatry care in France.*

Country	Switzerland	Germany	Netherlands	Belgium	France
Additional (expert) information *(continuation)*	and midwives, who provide most of the care for perinatal women in Switzerland, rarely feel sufficiently trained to deal with women at risk or with symptoms of PMD [70].				*The new text indicates that psychiatry activities will be carried out according to 4 categories* ■ adult psychiatry ■ child and adolescent psychiatry ■ perinatal psychiatry ■ care without consent *In perinatal psychiatry, the team must specifically include at least one child and adolescent psychiatrist, with training in perinatal psychiatry such as a university degree or proven experience; at least one psychiatrist; one or more nurses, including at least one state-qualified childcare nurse; one or more psychologists; one or more social workers; and as needed, one or more pediatricians, psychomotor therapists, midwives, and childcare assistants.* *In parallel with this organization of care, the French High Authority for Health (HAS) is in the process of drafting its recommendations on perinatal psychiatry.*

Abbreviation: n.r. – not reported

Table A-9: Additional information from hand search and expert consultation; selected Southern and Eastern European countries

Country	Spain	Italy	Italy	Czech Republic
Author/publisher and title of document	Working Group of the Clinical Practice Guidelines for Care in Pregnancy and Puerperium, 2014 (updating necessary). Clinical Practice Guideline for Care in Pregnancy and Puerperium [71]	Brenna, 2022. Perinatal Mental Health: Innovative Programmes in Lombardy Region [72]	Grussu, 2020. Perinatal mental health around the world: priorities for research and service development in Italy [73]	Ministry of Health of the Czech Republic, 2020. National Mental Health Action Plan 2020-2030 [74]
Type of document	Guideline	Book Chapter	Article	Strategy
Language of document	English	English	English	English
Aim/focus of document	The guideline has been developed with the aim of providing both information avout the best clinical practice for referral care of all pregnant women, and extensive information on care during pregnancy and uncomplicated singleton pregnancy in healthy women.	The article describes PIMH services and research in Italy and specifically in Lombardy Region.	The article is part of a series of papers in BJPsych International on perinatal mental health around the world and describes the situation in Italy.	The National Mental Health Action Plan until 2030 (NMHAP) is an implementation document for 3 strategic documents: the Psychiatric Care Reform Strategy 2013-2023, the Strategic Framework Czech Republic 2030 and the Strategic Framework for Healthcare Development in the Czech Republic until 2030 "Health 2030".
Target population of the services	Women during pregnancy and puerperium	n.r.	n.r.	n.r.
Summary of relevant content related to PIMH – prevention and early identification	**Psychological changes of pregnancy. Psychosocial stress and affective disorders:** We suggest carrying out a screening of the psychosocial status of the pregnant woman when there is suspicion of a maternal factor that may affect the course of pregnancy or postpartum [weak recommendation]. Health professionals should be alert to the signs and symptoms of domestic violence during pregnancy, asking women about possible abuse in an environment where they feel safe, at least at the first prenatal visit, on a quarterly basis and in the postpartum visit. **Mental health in the puerperium. Tools for detecting mental disorders during the puerperium:** We suggest, after childbirth, asking to women the following question during the visits to identify the possibility of puerperial depression: "During the last month, have you often worried because you felt down, depressed or hopeless?" "During the last month, have you been worried because you often felt that you had little interest in activities and that these did not provide you any pleasure?" [weak recommendation].	The mental health departments of some of the major Lombardy hospitals in the city of Milan and its hinterland implemented outpatient clinics dedicated to women's mental health after childbirth, in the framework of the "innovative programmes" funded by Lombardy region. Innovative programmes have been renewed over the years; the outpatient clinics continue their activities and expand their scope of intervention: immigrant women, anxiety disorders, support in case of foetal death or admission in neonatal intensive care, PTSD, bonding disorders, psychopathology in fathers and family and couples support. Conferences are carried out periodically, allowing to raise the awareness of midwives, paediatricians, gynaecologists, GPs, etc. on the subject of perinatal disorders and to intercept women at risk. At the same time, specialists from different contexts can share tools, treatment methods, prevention practices and models of identifying women. It is possible to define two referral profiles: a hospital-based one, typical of the city projects, where the hospital wards are the source of referral and a territorial-based one where this role is fulfilled by the services located outside hospitals, such as vaccination centres, family advice bureaus, psychiatric outpatient clinics and paediatricians.	The value of recognising depressive or anxiety symptoms early, during pregnancy, has been emphasised by recent research and should be linked to multiprofessional psychosocial interventions. Since 2017, the Italian Ministry of Health has directed that psychological assessments are to be included in the care provided by Family Care Centres to women during pregnancy and after birth, for prevention and early recognition of perinatal mental disorders. This directive established for the first time a clinical awareness that the care provided to pregnant and postpartum women in the Italian NHS should encompass attention to their mental health. A corollary of this directive is that there should be prompt availability of specialised consulting and care for women with identified perinatal mental health needs.	One objective (and the corresponding measures) relates to perinatal mental health: **Specific Objective 2.2:** Establish a functioning system of primary prevention and early mental health intervention covering the whole life cycle from birth to old age. **Measure 2.2.1:** Create and pilot test a system for the early identification/ detection of children at psychosocial risk, paying special attention to children at the earliest age. Propose a model of early detection of women during pregnancy and after childbirth with a psychosocial burden or mental illness. Develop recommended procedures for multidisciplinary cooperation in the screening and subsequent support of the involvement of a child at psychosocial risk and his/her family in an appropriate form of intervention in the health, social and school segments.

Country	Spain	Italy	Italy	Czech Republic
Summary of relevant content related to PIMH – prevention and early identification *(continuation)*	We suggest not continuing with the diagnosis of postpartum depression if she says "no" to the previous questions. The EPDS should be used to confirm the diagnosis of postpartum depression in women who have answered "yes" to the previous questions [strong recommendation]. A score of over 12 points in the EPDS should be taken as a reference point for the diagnosis of postpartum depression. We suggest the use of the EPDS scale in the first 6 weeks after childbirth to ensure that the risk of depression in women is correctly discriminated [weak recommendation]. **Support groups during the puerperium:** Puerperium support groups should be created in primary care, offering psychological support during the period and enhancing the acquisition of knowledge and skills that have already been worked on in preparation for childbirth groups during the pregnancy.	The assessment is carried out by means of a clinical interview, the collection of socio-demographic data (age, marital status, education, employment status and nationality), the migratory history if the woman is a foreigner (date and reasons for immigration, any stressful events during the migratory route), obstetrics and gynaecology data regarding the current and any previous pregnancies and the main risk factors, traditionally associated with the onset of perinatal psychological disorders (previous psychopathological history, familiarity with psychiatric disorders, presence of stressful factors in the previous 6 months of life, etc.). Also some self-report assessment tools are used: ■ Edinburgh Postnatal Depression Scale, EPDS ■ Beck Depression Inventory-II (BDI-II) ■ State-Trait Anxiety Inventory (STAI-Y) ■ Postpartum Bonding Questionnaire (PBQ) ■ Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM) ■ Social Provisions Scale-10 item (SPS-10), an abbreviated form of the SPS-24 item If women present a score greater or equal to the cut-off following one or more of the above-mentioned tools, or a positive response to the items related to suicide risk, an evaluation by a psychiatrist is activated.		**Measure 2.2.2:** Introduce specialized programmes aimed at developing parenting skills – especially for families with psychosocial burden (parents with mental disabilities, mental illness, addictions, adolescent parents, etc.). Pilot verification of the Triple P programme and subsequent implementation into the scope of services in the area of support for families with children.
Summary of relevant content related to PIMH – treatment	-	Women were offered different psychosocial interventions, according to the level of risk identified: ■ High-risk group: Women with depressive and/or anxiety symptoms and/or suicide risk. They received interpersonal psychotherapy and pharmacological treatment as a second-line treatment. ■ Low-risk group: Women without significant symptoms but with a family or a past history of psychiatric disorders and other risk factors. 7/8 sessions of psychosocial counselling were delivered to these women. ■ No risk group: During the return of the screening results, a preventive intervention was proposed to help them to recognise symptoms of distress and disorders.	There are no NHS perinatal outpatient or in-patient mental health services in Italy, and only a few university psychiatric clinics have established specific care pathways for perinatal women with mental disorders. In general, mental healthcare is delivered by a network of mental health departments. Community mental health centres (CMHCs) provide adult psychiatry services in outpatient settings, including consulting and coordinated care with primary care services.	
Additional (expert) information	*The above described guideline is the national guideline (also available in Spanish). Additionally, each autonomous community in Spain has their own clinical guidelines (Basque Country, Catalonia, Galicia).*	-	-	-

Abbreviations: EPDS – Edinburgh Postnatal Depression Scale, GP – general practitioner, n.r. – not reported, PTSD – post-traumatic stress disorder

Quality assessment of the included guidelines and documents

Table A-10: Quality assessment of the included guidelines and other documents

Quality Assessment Check	COPE, 2017 [22]	NICE, 2014 [21]	UK, 2018 [23]	Ireland, 2017 [24]	Canada/Ontario, 2021 [25]	Australia/WA, 2016 [26]
Domain 1: Scope and Purpose						
1. The overall objective(s) of the guideline [document] is (are) specifically described.	7	7	7	6	7	6
2. The health question(s) covered by the guideline is (are) specifically described.	7	7	n.a.	n.a.	n.a.	n.a.
3. The population (patients, public, etc.) to whom the guideline [document] is meant to apply is specifically described.	7	7	7	5	4	6
Domain 2: Stakeholder Involvement						
4. The guideline [document] development group includes individuals from all the relevant professional groups.	7	7	7	7	2	7
5. The views and preferences of the target population (patients, public, etc.) have been sought.	5	7	7	7	1	3
6. The target users of the guideline [document] are clearly defined.	7	7	7	5	4	5
Domain 3: Rigour of Development						
7. Systematic methods were used to search for evidence.	7	7	5	1	7	1
8. The criteria for selecting the evidence are clearly described.	7	7	n.a.	n.a.	n.a.	n.a.
9. The strengths and limitations of the body of evidence are clearly described.	7	7	n.a.	n.a.	n.a.	n.a.
10. The methods for formulating the recommendations are clearly described.	7	7	n.a.	n.a.	n.a.	n.a.
11. The health benefits, side effects, and risks have been considered in formulating the recommendations.	7	7	n.a.	n.a.	n.a.	n.a.
12. There is an explicit link between the recommendations and the supporting evidence.	7	7	1	1	5	3
13. The guideline has been externally reviewed by experts prior to its publication.	5	7	n.a.	n.a.	n.a.	n.a.
14. A procedure for updating the guideline is provided.	6	7	n.a.	n.a.	n.a.	n.a.
Domain 4: Clarity of Presentation						
15. The recommendations are specific and unambiguous.	7	6	n.a.	n.a.	n.a.	n.a.
16. The different options for management of the condition or health issue are clearly presented.	7	7	n.a.	n.a.	n.a.	n.a.
17. Key recommendations are easily identifiable.	7	6	6	5	5	7
Domain 5: Applicability						
18. The guideline [document] describes facilitators and barriers to its application.	7	1	1	4	3	6
19. The guideline provides advice and/or tools on how the recommendations can be put into practice.	7	7	n.a.	n.a.	n.a.	n.a.
20. The potential resource implications of applying the recommendations have been considered.	5	3	6	6	4	2
21. The guideline [document] presents monitoring and/or auditing criteria.	3	7	7	5	1	4

Quality Assessment Check	COPE, 2017 [22]	NICE, 2014 [21]	UK, 2018 [23]	Ireland, 2017 [24]	Canada/Ontario, 2021 [25]	Australia/WA, 2016 [26]
Domain 6: Editorial Independence						
22. The views of the funding body have not influenced the content of the guideline.	7	7	n.a.	n.a.	n.a.	n.a.
23. Competing interests of guideline development group members have been recorded and addressed.	7	7	n.a.	n.a.	n.a.	n.a.
Overall quality of this guideline/document (1 – lowest possible quality, 7 – highest possible quality)	**150 of 161 (93%)**	**149 of 161 (93%)**	**61 of 77 (79%)**	**52 of 77 (68%)**	**43 of 77 (56%)**	**50 of 77 (65%)**

Abbreviations: COPE – Centre for Perinatal Excellence, NICE – National Institute for Health and Care Excellence, UK – United Kingdom, WA – Western Australia

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