

## Review article

## Exploring Australian knowledge and practice for maternal postnatal transition of care between hospital and primary care: A scoping review

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## ABSTRACT

**Problem:** Despite the significance of the perinatal period, postnatal care remains insufficient for optimising long-term health.

**Background:** The perinatal period is a vulnerable time in a woman's life-course health trajectory. Supporting transitions from hospital to primary care is essential to promote health and guide evidence-based follow-up care.

**Aim:** The aims are to (i) explore existing knowledge and practice in Australia regarding maternal postnatal transitions of care between hospital and primary care and (ii) understand the enablers and barriers to implementing optimal postnatal discharge and handover of care from the maternity to primary health setting.

**Methods:** A scoping review was conducted according to PRISMA-ScR guidelines. Medline, Embase, CINAHL, Scopus and The Cochrane Library were searched using MeSH terms, subject headings and keywords. Full-text articles in English were included from 1st January 2010–8th June 2024.

**Results:** Eighteen studies were included, 14 focused on care in specific states and four Australia-wide. Maternal postnatal transition of care between hospital and primary care varied. Critical components of care that were valued by women and healthcare providers and promoted effective care transitions were grouped into four concepts: "Woman-centred discharge planning and process", "Integrated care", "Follow-up care" and "Continuity of care". Discharge communication across Australian health services is diverse. Women and healthcare providers require clear discharge communication that highlights complications, guides follow-up and promotes continuity.

**Conclusion:** Australian postnatal transition between hospital and primary care is inconsistent and ineffective. Lack of robust handover between services hinders evidence-based follow-up care after postnatal discharge from hospital, particularly following pregnancy complications.

## Statement of significance

## Problem:

Despite the acknowledged significance of the perinatal period, postnatal care remains insufficient for optimising long-term maternal health.

## What is already known?

Effective postnatal transition of care from hospital to primary care

is essential and demands comprehensive mechanisms to support long-term health.

## What does this paper add?

The current approach to maternal postnatal transition of care between hospital and primary care in Australia is varied and ineffective. This review highlights the critical components of care valued by women and healthcare providers in Australia to ensure an effective maternal postnatal transition of care between hospital and primary care promoting life-long health.

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## Introduction

The perinatal period is widely acknowledged to be a vulnerable time, stimulating global action to safeguard women and their families throughout pregnancy, birth, postnatal and early childhood [1–3]. Vulnerabilities include hormonal changes, specific peripartum conditions, and the psychosocial pressures of transitioning to parenthood [4]. Multi-disciplinary services are tasked with supporting women after pregnancy and birth in Australia [5]. However, there is a lack of guidance in Australia to define the appropriate follow-up for women or the effective transition and collaboration between services in the postnatal period to optimise long-term health outcomes [6].

The National Safety and Quality Health Service Standards [7] acknowledge the transition of care from hospital to community-based primary health care as a time of high-risk demanding comprehensive mechanisms to support optimal health outcomes and continuity of care [8,9]. Throughout the largely fragmented maternity care system in Australia, multiple clinical handovers are demonstrated to increase the risk of errors and oversight, compromising care [9,10]. The absence of quality discharge planning and communication is costly, resulting in hospital readmission and increased morbidity and mortality [7,9,11].

Pregnancy complications provide an opportunity, currently under-utilised, to reduce the burden of chronic disease in later life, including by facilitating women's health promotive engagement with primary health care services, and supporting primary care models enabling this [12,13]. For example, women and healthcare providers report a lack of knowledge regarding long-term health risks associated with pregnancy complications such as Hypertensive Disorders of Pregnancy and demand better guidance and support regarding evidence-based follow-up [14, 15]. In 2019, the 'Woman-centred care: Strategic directions for Australian maternity services' (the Strategy) [16] outlined key objectives for promoting sustainable, high-quality maternity services throughout Australia. In the postnatal period specifically, the Strategy recommended enhancing access to postnatal care for up to 12 months postpartum to support maternal health and well-being. Implementation of clinical pathways for women at risk of chronic disease following pregnancy complications, including improved transitions from hospital to community postpartum were also recommended to optimise short and long-term health outcomes [16]. However, although desirability of integrated health care is widely accepted throughout health policy, effective and sustainable implementation is challenging [17–19].

Regarding prior international reviews, a qualitative review in the UK exploring information transfer in the postnatal period highlighted inconsistencies throughout practice recommending 'effective and prompt communication' between healthcare teams to promote continuous care and optimal health outcomes for women and their families [20]. However, this review did not address the multifaceted process of transitioning from hospital to primary care, was limited to qualitative studies and included the UK and high income countries more broadly. To the best of our knowledge there is paucity of contemporary evidence synthesis to specifically describe the postnatal transition of care between hospital and primary care in Australia. Therefore, within the context of informing development of an evidence-based approach to support postnatal transition of care promoting long-term maternal health and wellbeing, this scoping review aims to (i) explore existing knowledge and practice in Australia regarding maternal postnatal transition of care between hospital and primary care and (ii) understand the enablers and barriers to implementing optimal postnatal discharge and handover of care from the maternity to primary health setting.

## Methods

### Approach

A scoping review was conducted according to PRISMA-ScR guidelines [21]. This method was selected to allow for an expansive review of varied literature whilst remaining systematic. A scoping review facilitates a broad synthesis of results across varied methods focusing on key concepts relating to the topic [22,23].

### Search strategy

Medline, Embase, CINAHL, SCOPUS and The Cochrane Library were searched using MeSH terms, subject headings and keywords. Full-text articles in English language were included from 1st January 2010–8th June 2024.

A search strategy using two key concepts was developed by the authors in consultation with a health librarian addressing (i) the discharge process and transition to home from hospital and (ii) the postnatal period. MeSH terms, subject headings and keywords were adapted according to the search functionality of each database and included: Delivery of Health Care, Integrated/; integrated healthcare system/; Patient Discharge/; transition\* of care.mp.; Hospital to Home Transition/; hospital to home.mp.; Maternal Health Services/; Postnatal Care/; Postpartum Period/; maternity discharge.mp.; maternity care.mp. postnatal care.mp. postnatal discharge.mp. (details in [Supplementary material](#)).

### Eligibility

Studies eligible for inclusion were original research conducted in Australia which addressed the postnatal transition of care from hospital to primary/community care and/or postnatal hospital discharge and/or follow-up care process. Research published in the English language and available in full-text from a peer-reviewed journal between 1st January 2010 – 8th June 2024 was selected to present a contemporary review of evidence and practice. Whilst no formal quality appraisal was undertaken for this review, this intentionally promoted a broad overview of the landscape relating to postnatal transition of care from hospital to primary care. Two authors independently assessed studies for inclusion.

### Data extraction and synthesis

Using Covidence™, one author (JG) conducted initial screening of studies resulting from the search strategy (after removal of duplicates) by title and abstracts. Two independent reviewers (JG & NA) then conducted full-text review of potentially eligible studies prior to data extraction from studies fulfilling all inclusion and no exclusion criteria. Discrepancies were resolved without the need for further consultation from the wider research team.

Data extraction of included studies was completed by two authors (JG & NA) and collated using an Excel™ (Version 16.85) template. Both authors identified the key concepts through their independent content analysis of the raw data per the data extraction template ([Fig. 2](#)). Content analysis is an appropriate methodology for this context facilitating the categorisation of emergent themes from a varied and multifaceted data set across mixed-method research design [24].

One author (JG) reviewed the aggregated data. Four key concepts were developed to report on the Australian knowledge and practice of the maternal postnatal transition of care between hospital and primary care and describe the enablers and barriers to optimal transition. These concepts were finalised without conflict through discussion by two authors (JG & NA).

## Results

The initial search identified 476 studies (details in Fig. 1). After removal of duplicates, 353 studies were further screened and 83 studies were selected for full-text review. Of these, 65 were excluded, mostly as they were not specific to transitions of care from hospital to primary care ( $n = 31$ ) or not performed in Australia ( $n = 14$ ). Eighteen studies were selected for inclusion and data extraction.

### Study characteristics

The characteristics of the 18 included studies are summarised in Table 1 [25–42]. This included seven qualitative methods [26,32,33,35,37,38,41], three quantitative methods [30,31,40], and eight mixed-methods studies [25,27–29,34,36,39,42]. Seven included care in Queensland [30,31,34,36–38,40], two South Australia [32,33], one Western Australia [35], one Victoria [39], one New South Wales [41], one in the Northern Territory [29], and four were Australia wide [25–28].

### Synthesis of results

The postnatal discharge process and transition from hospital to primary care within the included studies were found to vary throughout Australia and across service providers [26,29,34]. Regarding discharge processes, hospitals generally offered home-based postnatal services within 24 hours of birth for up to two weeks, however some services provided care for up to six weeks [25,34,42]. Following discharge from publicly funded maternity services, child and family health (CFH) services offered universal health visits for women and their families throughout early childhood up until starting school [4,25]. In addition, General Practitioners (GP) are often tasked with maternal and neonatal follow-up to promote long-term health and wellbeing in collaboration with other multidisciplinary services. Collectively these services were described as well positioned to provide critical primary health care including social and emotional support, health promotion, family planning, immunisation and risk prevention strategic services more broadly [25].

The included studies highlighted approaches to care that were valued by women and healthcare providers to ensure safe and effective

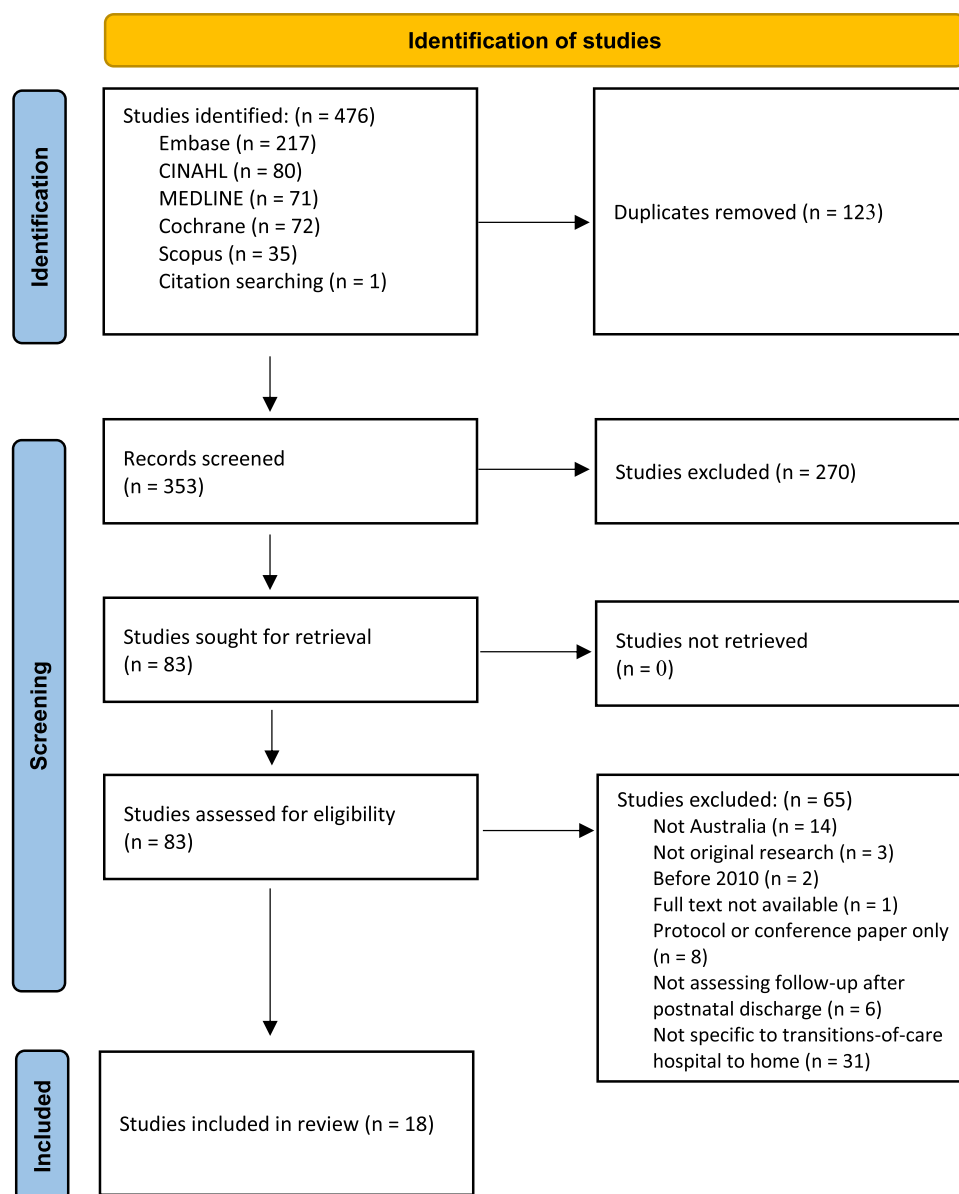


Fig. 1. PRISMA Flowchart of screening and selection process.

**Table 1**  
Characteristics of included studies.

MIXED METHODS RESULTS (n = 8)					
Article, Year, Area	Concept	Study	Aims	Method/Sample	Key Findings
[29], 2012, Remote Northern Territory	Woman-centred Discharge Planning and Process / Integrated care / Follow-up care	Retrospective cohort study: Descriptive analysis	Examining the transition of care in the postnatal period from a regional hospital to a remote health service and describe the quality and safety implications for remote dwelling Aboriginal mothers and infants.	<b>Observational data collection:</b> Antenatal: Regional/remote health care: n = 19 Postnatal: Regional hospitals: n = 22 Remote health care: n = 6 <b>60 semi-structured interviews (staff):</b> Remote health staff: n = 30 Regional hospitals: n = 18 Other staff: n = 12 Online survey of public maternity providers (closed and open-ended questions) July 2011 (n = 67, response rate 87 %)	<b>Themes:</b> poor information transfer, communication, joint discharge planning, lack of governance/ leadership, knowledge/ understanding of roles and work in remote settings. Discharge process and service model needs restructuring to safeguard health and wellbeing of mothers and families
[39], 2016, Victoria	Follow-up care	Cross sectional survey. Quantitative analysis descriptive statistics. Qualitative data thematically summarised.	Exploring the structure and organisation of public hospital home-based postnatal care in Victoria.	Online survey of public maternity providers (closed and open-ended questions) July 2011 (n = 67, response rate 87 %)	Majority of women receive at least 1 PN home visit. Optimum visits (number and timing) needs defining. Need to understand which model best ensures timely detection and prevention of PN complications (physical/psychological).
[34], 2014, Queensland	Woman-centred Discharge Planning and Process	Review of practice: Survey and content analysis.	Review current discharge practices in Queensland, to identify mechanisms to minimise fragmentation in the care of women and families as they transition from hospital-based postnatal care to community-based health and other services.	n = 55. Quantitative data analysed using descriptive statistics. Qualitative responses thematically analysed. Content analysis used 'The British Columbian Guidelines'.	<b>Recommendations:</b> Discharge summaries (format/content) need consistency, comprehensive and maternity specific. Discharge summaries should be generated and disseminated electronically at the time of discharge. Women should review their discharge summaries and consent to its dissemination
[36], 2019, Queensland	Woman-centred Discharge Planning and Process / Integrated care / Follow-up care	Exploratory three-phase mixed methods approach (adopting intergroup communication theory)	Exploring the communication perspectives, practices and preferences of women, hospital clinicians and general practitioners, to determine strategies that may promote completion of recommended postnatal GDM follow-up, in Queensland Australia.	Phase 1: Interviews with new mothers (n = 13), hospital providers (n = 13), GPs (n = 16) Phase 2: Retrospective audit of PN discharge summaries postnatal (n = 86) Phase 3: Online survey (GPs and hospital providers)	<b>3 themes:</b> seeking information, written hospital discharge summary, clarity of follow-up requirements, pragmatic strategies to promote follow-up. <b>Recommendations:</b> discussion about care across continuum (AN-PN and beyond). Diagnostic specific discharge summaries to guide follow-up.
[25], 2014, Australia	Woman-centred Discharge Planning and Process / Follow-up care / Continuity of Care	Mixed methods (survey)	Exploring and describing the transfer of care between maternity services and Child and Family Health (CFH) services from the perspective of Australian midwives and CFH nurses. (Part of 3-phase study)	National survey of midwives (n = 655), CFH nurses (n = 1098). Analysed using descriptive statistics and content analysis of qualitative content.	<b>Recommendations:</b> need reliable electronic TOC and information, interprofessional collaboration and dedicated co-ordinating roles between services. <b>Problems:</b> Poor TOC for all families, particularly those at risk. Poor interprofessional communication, limited transfer of information, workforce shortages, early maternity discharge, organisational barriers limiting communication and visibility between public and private providers. Continuity adopted but applied differently across professions.
[27], 2014, Australia	Woman-centred Discharge Planning and Process / Continuity of Care	Three phase mixed-methods study (part of CHoRUS study)	Exploring the concept of continuity across the maternity and CFH service continuum from the perspectives of midwifery, CFH nursing, general practitioner (GP), practice registered nurses (RN) and professional leaders.	Mixed-methods data collection. Discussion groups, focus groups and e-conversations. n = 132 (45 RMs, 60 CFH RNs, 15 GPs and 12 practice RNs).	Professions wanted improved co-ordination of care within own service vs across services.
[28], 2015, Australia	Integrated care	Mixed-methods	Examine collaboration in the provision of universal health services for children and families in Australia from the perspective of midwives and child health and family health nurses. (Part of 3-phase study)	Reports phases 1 and 2 of study assessing feasibility of a national approach to CFH in Australia Phase 1: Consultations (RMs n = 45, CFH RNs n = 60) Phase 2: Surveys (RMs n = 655, CFH RNs n = 1098) Women (n = 1066) within quaternary maternity setting (January - April 2021). Mixed methods survey with free-text option. 216 surveys (20 % response rate).	<b>Enablers:</b> Interprofessional collaboration (CFH, RNs, RMs), aligned goals. CFH-RNs better collaboration with allied health professionals vs maternity in complex cases. <b>Barriers:</b> poor communication, information sharing process.
[42], 2024, Queensland	Woman-centred Discharge Planning and Process / Follow-up Care	Cross sectional study	Prospectively explore maternal and neonatal postnatal outcomes within the context of length of stay, model of care and personal expectations and experiences	Women (n = 1066) within quaternary maternity setting (January - April 2021). Mixed methods survey with free-text option. 216 surveys (20 % response rate).	<b>Enablers to positive experiences:</b> Continuity of care (CoC), home visiting, access/connection to community services. Woman-centred, discharge preparation and flexibility particularly following complicated

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Table 1 (continued)

MIXED METHODS RESULTS (n = 8)					
Article, Year, Area	Concept	Study	Aims	Method/Sample	Key Findings
			within the first 3–5 weeks following birth.		complications. <b>Recommendations:</b> Beyond hospital length of stay, needs improved PN care both in hospital and home.
QUALITATIVE RESULTS (n = 7)					
Article, Year, Area	Concept	Study	Aims	Method/Sample	Key Findings
[32], 2016, South Australia	Woman-centred Discharge Planning and Process / Follow-up care	Qualitative lived experience study.	Exploring the experiences of women following discharge from a mother-baby unit and their use of services and supports in the community.	Semi-structured interviews with women (n = 8) June 2012–March 2013. Interpretive phenomenological analysis exploring experiences of life following discharge from the unit and use of community services and supports.	<b>Themes:</b> return home after discharge is significant life-event; struggle with readiness to leave, challenges of motherhood and responsibilities at home. <b>Protective for successful home transition/uptake of services:</b> discharge planning/process participation, clearly written discharge support plan; flexibility, accessibility, appropriateness, cost, timing of follow-up.
[41], 2021, NSW	Integrated care / Follow-up care / Continuity of Care	Qualitative study	Exploring service providers' perception of the key components of a model of care extending from perinatal to community based care and support for up to 17 years post birth. Describe the model of care and explore the factors affecting implementation regarding barriers and enablers to effective service delivery; gaps in the service; and suggestions for improvement.	Semi-structured interviews with staff in substance use in pregnancy and parenting service (SUPPS) (n = 32) (May–July 2018). Grounded theory used to explore key components of an effective model of care for SUPPS.	<b>Guiding principles for effective SUPPS model:</b> long-term multidisciplinary integrated care, harm reduction, person-centredness. <b>Optimal practice for effective SUPPS model:</b> promoting women's engagement with services, flexible service design/delivery, trauma-informed care, CoC through TOC.
[33], 2020, South Australia	Woman-centred Discharge Planning and Process / Follow-up care	Qualitative study	Explore women's experiences with a new pathway promoting early transition home following a subsequent caesarean section.	Interviews with women (n = 11). Thematic analysis.	New pathway acceptable. Women satisfied with home recovery. <b>Essential requirements:</b> antenatal education/information, family-centred discharge planning and support, midwifery care after discharge.
[35], 2023, Western Australia	Woman-centred Discharge Planning and Process / Integrated care / Follow-up care / Continuity of Care	Qualitative study	Exploring health care providers experiences and perceptions of best and current practice in discharge planning, postnatal care and health education for Aboriginal women and their babies.	Semi-structured interviews with healthcare providers (n = 58) 2016–2019 (n = 58) conducted by 3 senior Aboriginal researchers.	<b>Best practice guidelines:</b> discharge planning, CoC, health education. <b>Structural Factors</b> (political, socioeconomic, environmental): <b>Facilitators:</b> appropriate staffing, CoC. <b>Barriers:</b> early discharge, inadequate collaboration, poor communication mechanisms. <b>Organisational Factors</b> (policies and procedures): <b>Enablers:</b> woman-centred CoC, flexible service, effective communication/collaboration between hospital and community services, timely documentation, birth notifications. <b>Barriers:</b> poor organisational structure hindering integrated care, time pressures, inadequate staff training in culturally appropriate care.
[37], 2019, Queensland	Woman-centred Discharge Planning and Process / Integrated care / Follow-up care / Continuity of Care	Qualitative study	Explore the communication processes between hospital clinicians (midwives, medical, allied staff) and general practitioners who provide postnatal gestational diabetes mellitus care.	Purposive sampling and convergent interviews with HCP providing maternity care at a tertiary hospital (n = 13) and ANSC GPs (n = 16)	<b>6 themes:</b> GDM (women), discharge summaries, GDM AN care, PN checks, follow guidelines and specialist clinics. Conflicting priorities between hospital-based HCPs and GPs. GPs wanted diagnostic specific discharge summaries defining evidence-based assessment and follow-up. Hospital-based HCPs were focused on AN and intrapartum care needs of GDM care. <b>Recommendations:</b> midwives are ideally placed to assist in improving communication and PN GDM follow-up
[26], 2014, Australia	Woman-centred Discharge Planning and Process /	Qualitative study	To describe a range of innovations developed to improve transition of	Three phase study. 33 healthcare professionals participants (RMs, CFH RNs, allied health staff and	7 new models of care implemented across the states. <b>Strategies to promote improved TOC between</b>

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Table 1 (continued)

	Integrated care / Continuity of Care		care between maternity and CFH services.	managers) from 7 facilities across four states in Australia. Thematic analysis was undertaken using Braun and Clarke's 6-step process.	<b>services:</b> information sharing efficiencies, implementation of liaison role to promote improved co-ordinated care, restructuring to accommodate continuity of care, and co-locating multidisciplinary services.
Article, Year, Area	Concept	Study	Aims	Method/Sample	Key Findings
[38], 2015, Queensland	Woman-centred Discharge Planning and Process / Follow-up care	Mixed methods	To explore an analyse women's comments regarding postnatal care in their 'free text' responses to an open-ended question in the 'Having a Baby in Queensland Survey' in 2010.	Free-text data was analysed from the 'Having a Baby in Queensland Survey'. 60 % (n = 4310) respondents provided comments, 26 % (n = 1100) relating to postnatal care.	Women who birth in private facilities were more likely to report concerns about their level of post-discharge care compared to women from public facilities in Queensland. <b>3 primary themes:</b> quality and duration of in-hospital care, lack of adequate care following discharge from hospital, and lack of adequate support with breastfeeding. Inadequate or inconsistent professional breastfeeding support remains a major issue for early parenting women regardless of birthing sector.
<b>QUANTITATIVE RESULTS (n = 3)</b>					
Article, Year, Area	Concept	Study	Aims	Method/Sample	Key Findings
[31], 2015, Queensland	Woman-centred Discharge Planning and Process / Follow-up care	Retrospective cohort study: Cross-sectional survey	Exploring the differences in postpartum care after discharge from hospital and its impact upon maternity satisfaction and confidence.	Women who had a live birth (01/02/2010–31/05/2010) and completed self-reported 'Having a Baby in Queensland Survey 2010' (4 months postpartum). n = 6433 (54.4 % multiparous 59.2 % primiparous), (58.3 % public vs 69 % private hospital)] Regression analysis determined associations between sector of birth and postpartum care, and whether postpartum care experiences explained sector differences in well-being (satisfaction, parenting confidence and feeling depressed).	Women in public sector (vs private) more likely to: 1. have shorter hospital stay, 2. receive contact details of 24/7 support after discharge, 3. be contacted/ receive home visit (6x), 4. visit GP within 10 days (5x), 5. satisfied with care. <b>Conclusion:</b> All women should have access (phone call or in person) to a doctor/midwife/ nurse, midwife or nurse within 10 days after discharge. 24/7 contact details should be provided to access support.
[30], 2016, Queensland	Woman-centred Discharge Planning and Process / Integrated care	Cross sectional questionnaire	Exploring GPs experience of communications with hospital and other postnatal care providers in relation to continuity of care.	Adapted 52-item questionnaire assessed: timeliness, usability of hospital discharge summaries, communication with postnatal providers, information about quantity/content of PN/neonatal consultations. GP participants: 163 questionnaires (17.7% response rate)	33.8 % GPs nearly always receive discharge summary prior to first PN appointment. 24.4 % GPs never/rarely receive timely discharge summary. Discharge summaries very/somewhat useful (43.8 %/51.6 %). 26 % GPs unaware of universal domiciliary RM service in area. 25 % GPs never received contact with community PN service. Informational continuity from hospital to PN provider lacking and may impact upon the quality of ongoing care for women and their families.
[40], 2014, Queensland	Woman-centred Discharge Planning and Process / Follow-up care: / Continuity of Care	Retrospective survey study	To assess the impact of providing Universal Postnatal Contact Service (UPNCS) funding to public birthing facilities in Queensland, Australia on women's postnatal care experiences, and associations between amount and type (telephone or home visits) of contact on parenting confidence, and perceived sufficiency and quality of postnatal care.	Retrospective data collection of postnatal women completing 'Having a Baby in Queensland Survey' in 2010. 20,907 surveys distributed. Completed surveys (n = 3724).	Funding for UPNCS unlikely to improve population maternal parenting confidence, perceived sufficiency or quality of postpartum care. Where only minimal contact can be provided, telephone may be more effective than home visits. Additional service initiatives may improve women's parenting confidence.

Key: AN = antenatal; ANSC = antenatal shared care; child and family health (CFH); CoC = continuity of care; GDM = gestational diabetes mellitus; HCP = healthcare provider; SUPPS = substance use in pregnancy and parenting service; TOC = transition of care; PN = postnatal.

Definitions: Quaternary maternity hospitals offer specialised advanced levels of maternal and neonatal intensive care services including co-located paediatric/neonatal surgical facilities

transition of care between hospital and primary care whilst also illuminating existing barriers and enablers to optimal transition. These were grouped together using four key concepts noted in the included studies: "Woman-centred discharge planning and process", "Integrated care", "Follow-up care" and "Continuity of care" (Fig. 2).

#### Woman-centred discharge planning and process

Women in the included studies wanted to be involved in the discharge planning process through a collaborative approach with clear and consistent communication (verbal and written) regarding education, support and recommendations for ongoing care. Involving women



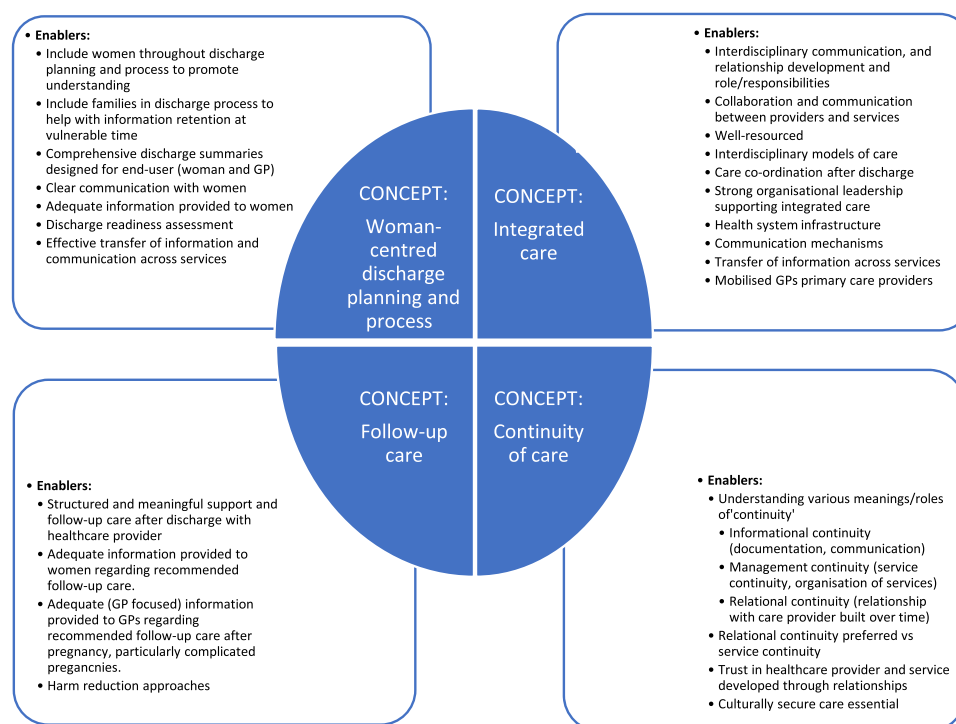


Fig. 2. Major concepts of included studies.

and their families throughout the discharge process was highlighted as critical to enhance safety and promote uptake of recommended postnatal follow-up, particularly for those with physical or psychosocial risk factors [29,32,33,35,36,38,42].

In a cross-sectional study conducted in a quaternary maternity service exploring women's experiences of postnatal care up to three to five weeks following birth, women described the discharge process as "disorganised, difficult, fragmented and inadequate [42]". Women described being "rushed out of hospital" with a desire for better education and connection to home and community-based services [42].

Fifteen of the 18 included studies highlighted failings throughout the discharge process including a lack of woman-centred care planning, inadequate documentation (maternity discharge summaries), limited transfer of information between services, and ineffective communication with women and between services [25–38,42].

Maternity discharge summaries were acknowledged to be a vital tool in promoting effective and consistent communication across the postnatal period [28,30,35]. However, inconsistencies in the quality of their execution across hospitals were reported [30,34]. Following an analysis of the discharge process and practice across 95 % of birthing hospitals in Queensland (n = 55) reform was recommended to promote optimal health outcomes for women and their babies following maternity discharge [34]. Discharge summaries varied in their structure, execution and distribution, particularly between the private and public hospital sector [34]. Women had little involvement and engagement with the discharge process, limiting understanding of ongoing care [34]. Maternity discharge summaries were reported to be poorly structured and containing inadequate information to guide appropriate long-term care, particularly in the case of perinatal complexities [34].

In a cross sectional study by Brodribb, et al. [30], approximately 24 % of Australian general practitioners (GP) reported never receiving postnatal discharge summaries in a timely manner. At times it was not until the woman attended the GP for their six-week postnatal check with a printed copy, with only 50 % of those GPs finding the information (when eventually received) useful. Whilst templates were often used, documentation was reported to be largely hospital-centric and overburdened with irrelevant hospital admission data. GPs reported little

consideration for the end-user and lack of relevant information to guide ongoing care, particularly for women at risk of physical or psychosocial complications [34,36,37]. Critical information relating to both mothers and babies was often lacking such as cultural background as well as health and wellbeing in the postnatal period. Focus was largely for birth care, with little information to guide and inform ongoing care needs. In studies related to postnatal follow-up after Gestational Diabetes Mellitus (GDM) [36,37], GPs reported an absence information related to GDM including the specific long-term follow-up required. Collectively these failings led to suboptimal care and missed opportunities for early intervention [34,36,37].

### Integrated care

Interprofessional collaboration and care integration across services were highlighted as essential for ensuring a safe postnatal transition from hospital to community based services in seven of the included studies [28–30,35–37,41]. Coupland, et al. [41] described an integrated multidisciplinary approach to care provision across tertiary, secondary and primary care services being essential for achieving sustained health engagement in the case of high-risk substance users. Meaningful interdisciplinary collaboration and effective communication was also highlighted as vital for promoting culturally safe care Aboriginal and Torres Strait Islander women and babies [29,35].

Enablers to effective integrated care were highlighted to be strong organisational leadership and infrastructure investment, commitment to workforce development and sustainment, and an integrated (potentially co-located) multidisciplinary team [26,28,35,41].

Individual, professional and organisational relationships built over time were seen to promote effective interprofessional collaboration, which supported effective transition of care between services [28]. Furthermore, collaborative care across professions reduced duplication of services through improved understanding of professional identities and boundaries [28]. However, GPs and community-based practitioners reported a lack of acknowledgement from hospital-based clinicians of their professional needs and abilities beyond the immediate perinatal period. This lack of interprofessional understanding is hindering care,

particularly for women with complex needs [29,30,35–37]. Health infrastructure failings were also highlighted, with universal communication mechanisms between hospital and community-based services lacking [29,36,37].

#### Follow-up care

Acknowledging the principles of primary health care, community-based services were seen as well placed to deliver evidence-based preventive health care after hospital discharge [26]. However, early intervention is often hindered by poor organisational infrastructure (universal communication mechanisms) a lack of education and evidence-based postnatal care guidelines for health care providers [29, 32,36,37,41,42].

Thirteen of the included studies [25,29,31–33,35–42] highlighted suboptimal postnatal follow-up care after hospital discharge describing missed opportunities for timely assessment and intervention, particularly for vulnerable women and families.

The timing and approach to follow-up care in the postnatal period across Australia varied, according to the models of care available, public and private sectors as well as geographic location [25,31,38,39]. Whilst postnatal midwifery home-visiting services were largely implemented throughout the public maternity sector, a cross-sectional study exploring postnatal care across 67 Victorian public hospitals found a lack of evidence-based guidance in terms of the optimal timing and number of home visits [39]. In one quaternary hospital in Queensland, home-visiting services were restricted to women residing in close proximity to the hospital and hindered by staff shortages. Women were also more likely to receive home visiting services following a vaginal birth or through midwifery-led continuity of care models, compared to those following complicated births often associated with extended hospital stays [42].

Findings from a descriptive qualitative analysis of women's experiences of postnatal care in Queensland, reported that women are largely less satisfied with their postnatal care compared to other aspects of maternity care [38]. This was particularly evident in the private maternity sector. Compared to public maternity care, women receiving private maternity care were less likely to receive information regarding support or follow-up care in the community after discharge from hospital [25,31,38].

#### Continuity of care

Demand for facilitating continuity throughout the postnatal discharge and transition from hospital to community was highlighted as an enabler to effective transition of care throughout nine of the included studies [25–27,29,33,35,37,40,41]. Relational continuity (continuity of carer) was particularly valued by women receiving care throughout the maternal, CFH continuum, and was found to promote sustained engagement across services [29,41]. Where continuity of carer was not available this negatively impacted upon service engagement [25]. However, one midwife reported 'if they have a positive experience with us, then we can help sell the next service' [27].

Continuity of care is widely acknowledged as the gold-standard throughout healthcare however its definition and application in practice is complex and varies across disciplines and services throughout Australia (relational continuity, informational continuity and management/service continuity) [27].

The Child Health Researching Universal Service (CHoRUS) mixed-methods study [27], explored the concept (meaning and application) of continuity across the continuum of maternity, CFH services. Sixty CFH service providers, 45 midwives, nine GPs and 12 practice nurses agreed that continuity is ideal for families, however its meaning and adoption in practice differed across professions [27]. Whilst CFH service providers valued relational continuity (continuity of carer) with families, this was at odds with the overarching organisational approach of

continuity with the 'service' rather than individual care providers (management continuity) [27]. GPs reported an aligned philosophy for providing continuity of carer (relational continuity), however this was seldom achieved. GPs accepted that families will receive continuity from the practice (or 'service'). The increasing demands on GPs, busy family life and the need for convenience were cited as causes for this evolution in acceptance of service continuity over continuity of carer [27].

The provision of continuity was highlighted as critically important for vulnerable families [26,29,35,41]. For women following complex pregnancies, GPs reported feeling as though women were 'kidnapped' by the hospitals disrupting continuity of carer [37]. Also relevant to relationships between hospitals and community services, continuity was evidenced to promote understanding of the complex multidisciplinary structure of services [29,35,41]. For Aboriginal mothers, barriers to achieving continuity of care were attributed to an absence of strong leadership and high staff turnover detrimentally impacting upon trust and understanding between health services and the community [29,35].

#### Discussion

This scoping review describes the existing Australian maternal postnatal transition of care between hospital and primary care and discusses the enablers and barriers to implementing an effective postnatal discharge and handover of care to promote life-long health through evidence-based follow-up after maternity care.

Findings from the review reveals optimal hospital discharge, transition to primary care and long-term follow-up care after pregnancy and birth in Australia is lacking [26]. Existing postnatal hospital discharge, transition to primary care, and long-term follow-up in Australia is varied and ineffective with limited woman-centred discharge planning [34]. This includes incomplete and poorly constructed discharge communication (verbal, written and electronic) [30] and a lack of continuity to support appropriate follow-up care [39]. The fragmented health system structure in Australia is a highlighted barrier to effective hospital-to-home postnatal transition, particularly for populations at risk of complications psychologically, physically and culturally [4,29, 32,41,43].

Recent research exploring women and healthcare providers' preferences regarding knowledge and follow-up after Hypertensive Disorders of Pregnancy [14,15] align with the findings of this review, highlighting the need for improved education of healthcare providers, consistency in communication regarding appropriate follow-up and transparency throughout the process [14,15]. This is also reflected for postnatal management after GDM, with demand for tailored approaches to long-term follow-up with the aim of reducing the risk of progression to Type 2 Diabetes Mellitus [44,45]. Whilst not maternity focused, findings from a scoping review exploring 'Australian GP views on qualities that make effective discharge communication' [9] align with the findings of this review. Similar to findings from this scoping review, Gusmeroli, et al. [9] supported the need for clear, concise and diagnostic specific discharge received in a timely manner to promote appropriate ongoing care after hospital admission.

Continuity of care is widely acknowledged as the optimal approach to healthcare delivery, however the definition of 'continuity' and its application throughout clinical practice differs across professional disciplines and is therefore worthy of consideration, particularly throughout the maternal and child health continuum [4,27,30]. Informational, relational and management continuity throughout healthcare are relevant and important to consider throughout this discourse with an heightened focus on improved coordination of care throughout health service design [46]. Informational continuity (how information is transferred between clinicians or services) is acknowledged as vital for informing care planning in the short and long-term and management continuity relates to how care is organised and co-ordinated within or between services [25,27,30]. Continuity of midwifery care and in particular continuity of carer (relational continuity), is unequivocally



the gold-standard in maternity fostering a continuous relationship between a woman and her midwife throughout pregnancy, labour, birth and the postnatal period [47]. Following maternity discharge continuity remains essential. Through effective informational and management continuity, care can be successfully transitioned to primary healthcare practitioners (GPs and CFH services) to support life-long health after maternity care [28–30].

Engaging women throughout the transition of care improved health outcomes and reduced demand on acute care with reduced hospital admissions after discharge [42,48]. Women and their families want to and need to be more involved throughout the discharge planning process to ensure a safe and optimal transition home [35,42]. Promoting enhanced experiences for women and families through long-term relationships and follow-up can facilitate effective co-ordination of care and promotes sustained health service engagement resulting in better health outcomes [27].

For all women, particularly for those at risk, whether psychologically, physically or culturally, clearly defined and effective transition of care between hospital and primary healthcare in the postnatal period is paramount to safeguard long-term holistic health and wellbeing [29,32,35–37,42]. The existing lack of robust handover of care between services was noted as a major barrier to promoting appropriate evidence-based follow-up care after postnatal discharge from hospital [26,29,32,36,37]. Future research needed to develop a universal and evidence-based approach to postnatal transition of care in Australia, particularly for women following pregnancy complications.

## Strengths and limitations

This scoping review adopted a comprehensive and collaboratively designed search strategy aligned with PRISMA guidelines for scoping reviews. To the author's knowledge, this review is the first to present a contemporary analysis of the existing practices Australia-wide throughout the transition of care from hospital to primary care in the postnatal period.

The included literature is limited to the Australian context and the English language presenting a limitation for generalisability. However, results may provide insight to international maternity care systems with a similar structure. No formal quality appraisal was undertaken for this review which may impact the reliability of the results. However, two authors independently assessed studies for inclusion with only peer reviewed journal articles included to support a professional rigorous approach.

Findings from this review provide an opportunity to influence practice change supporting the development of an evidence-based approach to postnatal transition of care which promotes long-term maternal health and wellbeing through the uptake of evidence-based follow-up care.

## Conclusions

This scoping review highlights that the existing Australian maternal postnatal transition between hospital and primary care is inconsistent and ineffective. The lack of a robust handover of care between services hinders evidence-based follow-up care after postnatal discharge from hospital, particularly for women following pregnancy complications. Strategies which improve the transition between hospital and primary care services include a collaborative and woman-centred approach to discharge planning and diagnostic specific discharge summaries providing clear guidance for appropriate follow-up after pregnancy. Furthermore, meaningful integrated care requires effective continuity and discharge communication mechanisms which meet the needs of primary care practitioners. Universal processes, supported by broader health infrastructure redesign, are urgently needed to address this barrier to optimal postnatal and preventative long-term healthcare.

## Ethics approval and consent to participate

Not applicable.

## Author agreement

*The authors confirm that*

1. there are no conflicts of interest declared
2. this scoping review is original work undertaken by the authors as outlined by the CRediT statement
3. this scoping review has not received prior publication and is not under consideration for publication elsewhere
4. all authors have reviewed and approved the manuscript being submitted
5. the authors abide by the copyright terms and conditions of Elsevier and the Australian College of Midwives

## Consent for publication

Not applicable.

## Author agreement

The authors declare that this is an original manuscript that has not been published before nor is it currently being considered for publication elsewhere.

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## CRediT authorship contribution statement

JG – Conceptualisation, Methodology, Formal analysis, Investigation, Writing – Review & Editing; NA – Investigation, Review & Editing; BHR – Supervision, Review & Editing; KB – Supervision, Review & Editing; HR – Supervision, Review & Editing; AH – Supervision, Review & Editing, Project administration, Funding acquisition.

## Declaration of Competing Interest

None declared.

## Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.wombi.2024.101852.

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