



# Safe workloads in midwifery standard

Safety, encompassing all aspects of the woman and her baby, is essential in birth. Midwives are fundamental to the safety of women, throughout the childbirth continuum. The World Health Organisation states midwives who are educated and regulated to international standards can provide 87% of the essential care needs for women and their babies [1].

There is a growing body of evidence demonstrating the impact of midwifery workloads on the outcomes for women and their babies [2] [3] [4] [5] [6]. Queensland has now commenced implementation of nurse/midwife-to-patient ratios in response to evidence demonstrating improved outcomes related to staffing and work environments in nursing and midwifery [7] [8] [9] [10] [11]. Evidence within the nursing sector clearly demonstrates an increase in a nurse's workload by one patient increases the likelihood of an inpatient dying by 7% [12]. Within Queensland, midwives and nurses have repeatedly expressed concerns around unsafe workloads and patient safety [13] [14] [15].

For midwives, various contexts of practice and models of care exist. Evidence demonstrates that midwifery continuity of care (referred to as "caseload") is safe for mother and baby [2] [3] [6] [16] [17] [18]. The caseload model is based on a named midwife providing antenatal, intrapartum and postnatal care to a select group of women, with back-up for care coming from one or two back-up midwives, also known to the woman. The aim is to have a known midwife available for birth.

Currently, the most prevalent model of maternity care in Queensland is a shift work model where midwives staff maternity units across the 24 hour cycle. Acuity in maternity care is increasing with women trending toward being older, having pre-existing medical conditions and being obese [19] [20]. The increase in acuity, combined with increased screening and treatment for conditions such as gestational diabetes and infection, are creating additional workloads in the care of both woman and baby [18].

It is also important to consider workload management in the context of workforce planning and staff satisfaction. A recent survey conducted by the Queensland Nurses' Union (QNU) indicated only 10.8% of midwives thought they provided adequate care nearly all the time. Furthermore, 35% thought there were seldom or never enough midwives to provide safe quality care, and 20% were considering

leaving midwifery within the next 12 months, with excess workloads being cited as the major contributing factor for this decision [15].

With the safety of Queensland women and their babies paramount, the principles for minimum safe staffing in midwifery services outlined in this statement are drawn from best available evidence. Ongoing benchmarking and linked data collection are essential to ensure transparent and evidence-based alignment between staffing and outcomes [21].

## Safe staffing principles in midwifery

### PRINCIPLE 1:

#### Care must be safe for mother and baby

The most obvious principle is that care must be safe for both mother and baby. Evidence demonstrates the safety and efficacy of midwifery continuity of care for women. Meta analysis by Sandall et. al. (2016) includes 15 trials involving 17,674 women, which demonstrate women who had midwifery continuity of care were less likely to experience most interventions in birth [2]. Additionally, no differences were noted in negative outcomes for mother or baby [2]. Women and their babies had decreased morbidity and mortality and were therefore arguably as safe, or safer, than in other maternity models of care. Regardless of the model of care, the principle of safety for mother and baby is paramount. The high acuity of women experiencing surgical birth must be considered to provide safe staffing levels. Postnatal inpatient stay is generally very short for well women, meaning there is often high acuity for those who remain [22] [23].

### PRINCIPLE 2:

#### Care must be safe for midwives

A good work environment that will attract and retain midwives is one that is professionally safe [24] [25] [26] [27] [17]. Essential elements of the safe practice environment include having enough midwives with an appropriate skill mix to provide quality care [28]. It is essential to have the necessary supports to allow personal practice development as well as time for midwives to engage in clinical governance. Other measures that

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are critical to retaining midwives include reflective practice, clinical autonomy, control over decision making, and good multidisciplinary relationships. Good workload management, including indirect care, is the basis to building a safe work environment.

### PRINCIPLE 3:

#### Safe workloads in midwifery are professionally determined in accordance with evidence-based minimum standards

Ratios in midwifery must reflect the minimum staffing level for direct care. This translates to how many women (and babies) an individual midwife can be expected to take responsibility for within an acceptable level of safety. The following ratios are described in the literature as the appropriate minimum safe staffing levels:

<b>Caseload</b>	<b>1:30 – 1:40</b> [3] [16] [29] [30] [26] [6]
<b>Birth suite</b>	<b>1:1 in active labour</b> [3] [6] [24] [31]
<b>Inpatient unit</b>	<b>1:4 -1:6</b> [22] [24] [31]
<b>Community services</b>	<b>1:5 postnatal home visits/day</b> (EDMS)

The safe workload per Full Time Equivalent (FTE) midwife in caseload models is 30 to 40 women per annum, with 40 being the upper limit [6] [16] [17] [29] [23]. Lower caseload numbers are required where women and their babies are more likely to experience risk factors in pregnancy, in contexts of practice that require significant travel such as in rural and remote areas, and potentially for less experienced midwives such as graduates during a transition year [16] [17].

The well woman and baby, particularly where the woman is multiparous and requires little education in newborn care, require significantly less attention than women who are post surgical birth with infants that require intervention such as blood glucose monitoring, regular observations, or significant assistance with breast feeding. Increasingly, women who are low acuity leave hospital fairly rapidly [6] and inpatients are more likely to require greater levels of staffing input. Approximately one third of all women have a caesarean and 18% of vaginal births are via surgical methods (i.e. ventouse or forceps) [19] This range 1:4-1:6 (counting both mother and baby) reflects the need for flexibility in rostering dependent upon the type of birth and the acuity of both mother and baby.

Staffing maternity wards to a set roster of shifts does not allow responsiveness to peaks and troughs of activity levels. While there is an ability to plan some elements of care to occur during day time shifts (caesarean section and induction of labour), spontaneous labour and birth has unpredictable onset and patterns that create activity spikes, regular “after hours” admissions, and increased

workload [21]. Additionally, where surgical births have occurred in large numbers during the day, the result is a large workload overnight in the postnatal area [22]

Another area requiring focus is postnatal home visits within the community. There is a significant variation between models of care and services as to how postnatal visiting is conducted [32]. This is an areas often cited as lacking [33] [16] or unsatisfactory for women [22] [34]. Postnatal visiting is conducted for approximately 40 minutes to one hour, with 20% of time allocated to the visit added as travel time (i.e. a minimum of 48 minutes per visit) [35]. Having an hour available is important to ensure appropriate assessment of elements such as perinatal mental health. Indirect patient care requirements (documentation, communication of care co-ordination) make it impossible to conduct more than 5 home visits per day.

### PRINCIPLE 4:

#### Women need one-to-one care from a Registered Midwife during established labour

When considering midwifery workloads it is important to note that high acuity occurs during the period of labour and birth [21]. Women require 1:1 care from a Registered Midwife during this period [23]. Evidence also indicates that woman-centred principles of care and policies that support normal birth are essential to improve outcomes [3]. Women who experience 1:1 care during labour are more likely to have a spontaneous vaginal birth and less likely to have intrapartum analgesia or to report dissatisfaction [3]. Other significant benefits for both mother and baby include shorter labours, reduction in caesarean section and instrumental vaginal births, regional analgesia, or a baby with a low five-minute Apgar score [3]. Appropriate staffing of the birthing suite is also associated with an increased likelihood that the woman births with bodily integrity, a reduced level of maternal readmission, and reduced ‘decision to delivery’ timeframe during emergency caesarean section [36]. Where care is provided in labour by midwives who have other responsibilities, outcomes are less favorable [3] [23]. Policy should therefore enable midwives to have sole responsibility for providing the labouring woman with 1:1 care.

### PRINCIPLE 5:

#### The newborn must count in staffing calculations in postnatal wards

The newborn is considered by law separately from the mother. Coronial reports make recommendations about the appropriateness of staffing levels in cases where newborn infants have died in postnatal units as a potential result of inadequate staffing [37] [38]. The acuity of women and their babies is increasing, with rising rates of obesity and pre-existing medical conditions for women [19]. Alterations in policy direction, including

changes to gestational diabetes screening and management, are also increasing the acuity of newborns [39] [40]. Typically, the “unqualified” baby (i.e. where the Hospital and Health Service (HHS) receives no funding for the baby) has been ignored in the planning for midwifery resource management. This funding issue has created an additional “invisible” workload for midwives. The newborn must be considered a “patient” in workload calculation [21] [6] [22] [23], as it is potentially the lack of funding for newborns that is creating increases in workloads.

## PRINCIPLE 6:

### **Skill mix is an important consideration to achieve a safe practice environment**

Workload concerns are strongly influenced by the skill mix of the maternity staff available to provide care [36]. Beginning and early stage midwives, as well as students, require particular support to develop clinical skills without compromising safety of mother or baby in their care [28] [25]. The Registered Midwife requires another registered health practitioner – one who is appropriately skilled in maternity emergency care and newborn resuscitation – to assist during birth [41]. Queensland midwives often feel the skill mix is insufficient to provide a satisfactory level of care [15] and there is increasing evidence of role substitution in maternity care [6] [42].

## PRINCIPLE 7:

### **Workload management includes all elements of the practice environment**

Sufficient workload management requires midwives to have capacity to work to their full scope of practice. Clinical autonomy and empowerment in the work environment impact midwives’ abilities to provide safe care [43]. Staffing must be sufficient to allow midwives time for all elements of the safe practice environment, including indirect care requirements, professional development, education of self and others, and time to provide and receive mentoring, support and/or supervision [23]. Engagement in organisational clinical governance, policy development and quality improvement cycles must also be incorporated within the work day [12] [6]. Rostering and forward planning includes provision for leave and cover for leave.

## PRINCIPLE 8:

### **Work load management must be transparent, consistently applied, and requires accountability**

Safe workload management relies on matching the required midwifery staffing resources with the service being offered. Midwives, as well as the mothers and babies they care for, are compromised when there is a mismatch between that demand and supply. There is a need to demonstrate appropriate planning and resourcing with identified requirements for delivery of service. For Queensland public sector employees, data demonstrating

compliance with the Business Planning Framework (BPF) and legislation surrounding workload management must be available for review at Nursing and Midwifery Consultative Forums (NaMCFs) and must be openly reported.

Midwives contribute to ensuring safe workload management by reviewing and reporting concerns at three critical points. By contributing to the development of the service profile of the work unit, they reveal the actual workload to be managed, thus identifying shortfalls in staff numbers or skill mix at the time the roster is published. This will help prevent unsafe workloads ahead of time. In all sectors midwives must identify and escalate concerns around numbers or skill mix of staff or any other element of the practice environment that impedes safe delivery of midwifery.

At a system level, the organisation must be accountable for safe workloads, cost efficiency and clinical outcomes. Linked data providing a comparison of clinical outcomes, model of care or staffing model and consumer satisfaction must be available to ensure services are planned and delivered by considering evidence around safety of midwives, women and babies, along with costs.

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