Government of **Western Australia**
Department of **Health**

Nursing and Midwifery Workforce Planning Framework

Acknowledgement

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Contents

Introduction 2
Purpose 2
How to Use this Document 2
Developing a Service Profile 3
Part 1: Service Context 3
Part 2: Resource Allocation 3
Part 1: Developing a Service Context 4
Overview of the Service Context 4
1. Identify the Service Aim 5
2. Service Objectives 5
3. Service Description 6
4. Internal Environmental Analysis 7
5. External Environmental Analysis 15
Summary 17
Part 2: Resource Allocation 18
Ratios Resource Allocation Overview 18
Step 1: Determine the Ratio Applicable to the Ward/Unit 19
Step 2: Calculate the Total Annual Productive Hours 19
Step 3: Convert Productive Hours into FTE 24
Step 4: Calculate Non-Productive Hours 25
Step 5: Convert Non-Productive Hours into FTE 26
Step 6: Add Productive and Non-Productive FTE Together and Convert into Financial Resources 26
Step 7: Allocate Hours to Meet Service Requirements 27
Conclusion 28

Introduction

Purpose

The purpose of this document is to support Health Service Providers (HSPs) undertake appropriate business planning to ensure the delivery of safe, high quality and sustainable healthcare services for the communities they serve. The Workforce Planning Framework (WPF) supports HSPs to complete a service profile template for wards/units in the implementation of nurse to midwife patient ratios (ratios).

Ratios

Whilst all wards/units in scope for ratios implementation are assigned a mandatory classification and minimum ratio under MP 0187/24 *Nurse/Midwife to Patient Ratios Policy* (policy) these requirements do not represent the whole scope of nursing/midwifery staffing need at a ward/unit level.
The WPF recognises that:

- The policy is only applicable to Registered Nurses, Midwives and Enrolled Nurses who spend most of their shift providing direct patient care when determining the ratio.
- The ratio under the policy is a minimum and does not prevent HSPs from staffing above this if clinically required.
- HSPs must consider the minimum ratio in addition to the requirement for non-direct nurses/midwives and adjacent roles such as Assistants in Nursing.
- The policy does not prescribe a skill mix, which is left to the discretion of clinical judgment at a local level.

The WPF is designed to work in tandem with ratios to provide an overview of all staffing needs for the ward/unit. This supports appropriate funding as required.

How to Use this Document

This document guides the development of a Service Profile. A Service Profile allows current and planned service activity and demand to be clearly established to determine the most appropriate nursing and midwifery resources required.

The Service Profile process must be undertaken on initial transition to ratios and annually. A review of the Service Profile will also be required if changes occur relating to key factors such as patient/consumer acuity, patient/consumer activity, service delivery, or nursing/midwifery resource supply.

This document provides recommended steps and processes to develop a Service Profile. Noting the unique needs of clinical services and wards, HSPs may include additions or changes to suit their specific context.

A WPF Service Profile Template has been designed to support HSPs to complete a Service Profile. This document must be read in conjunction with the template. The WPF Service Profile Template can be used to plan and justify nursing and midwifery resources and must be maintained on record by the HSP as per local policy. The WPF Service Profile Template - Executive Summary (executive summary) is the minimum mandatory information required to complete a service profile for a particular ward/unit. This must be submitted to the Chief Nursing and Midwifery Office on ward transition to ratios and annually, with prior endorsement from the Area/Executive Director of Nursing/Midwifery.

Developing a Service Profile

The development of a Service Profile comprises two main parts: service context and resource allocation.

Part 1: Service Context

The development of a service context is the systematic process for analysing services to determine the supply of nursing and midwifery resources required to meet service demand for the next financial year, and/or where changes to service delivery occur throughout the financial year.

A service context must include the following 5 steps:

1. Service Aim
2. Service Objectives
3. Service Description
4. Internal Environmental Analysis
5. External Environmental Analysis.

Part 2: Resource Allocation

Resource Allocation outlines the process of planning the service's nursing and midwifery resources to meet planned service demand. It is determined based on the information contained in the service context.

This stage requires the calculation of the nursing and midwifery hours needed to provide safe consumer care and converts those hours into the appropriate full-time equivalents (FTE).

FTE are then converted into costings in partnership with the business/finance team. Quantitative methods, in tandem with professional judgement, knowledge and experience, are used to prioritise the allocation of nursing and midwifery resources.

Resource allocation includes 7 steps:

1. Determine the ratio applicable to the Ward/Unit as per the Policy
2. Calculate the Total Annual Productive Hours
3. Convert Productive Hours into FTE
4. Calculate Non-Productive Hours
5. Convert Non-Productive Hours into FTE
6. Add Productive and Non-Productive FTE Together and Convert into Financial Resources
7. Allocate Hours to Meet Service Requirements.

Part 1: Developing a Service Context

The table below provides an overview of each step of the service context. More detail on how to complete each section is found on the relevant pages.

Overview of the Service Context

Service Context Step	Description	What to Include	More Information
1.Service Aim	A statement that clearly defines what the service aims to deliver.	A clear and concise summary of the aim and purpose of the service (1-3 sentences).	**PAGE 5**
2.Service Objectives	Statements that clearly identify the key outputs/measures that a service is aiming to achieve.	Concise and clear objectives that are specific, measurable, achievable, realistic and timely.	**PAGE 5**
3.Service Description	A broad description of a service. Provides the context for identifying the demand when building a Service Profile.	The location of service delivery The type of service The model/s of care Access to health services	**PAGE 5**
4.Internal Environmental Analysis	A summary of factors that a service can potentially influence. The data generated by conducting an internal analysis is essential to accurately describe demand. The internal analysis also supports identifying strengths and opportunities for improvement that could be supported by resourcing.	Service Structure Governance Information Technology Performance Consumer Staff Organisational Comparative Analysis and Benchmarking Forecasting	**PAGE 7**
5.External Environmental Analysis	An outline of conditions and forces that are usually beyond the control of the service. By analysing the external environmental factors, a service can maximise opportunities and mitigate risks/threats.	Policy/Legal Economic Social Technological Environmental Research/Evidence- based Practice	**PAGE 15**

1. Identify the Service Aim

Identifying the service aim is critical in understanding the purpose of the service and how that purpose aligns with the broader health system and/or organisational strategic policy and reform agendas. Ideally, the service aim should provide the reader with a clear, concise, and unambiguous understanding of what the service does. As such, the most important question to answer when identifying and describing the service aim is *what is the purpose of the service?*

Further considerations for describing the service aim may include the following:

- Does the aim align with the overarching hospital and hospital service definition as outlined in the WA Health Clinical Services Framework 2025 - 2035?
- How does this purpose align with broader Commonwealth and/or WA Health Policy Frameworks mandatory policy, governance, strategies, and priorities?
- How is the purpose of this service different to other services within the hospital group/HSP?
- It the aim/purpose realistic and achievable?

2. Service Objectives

Objectives describe what, specifically, the service wants to achieve, and how by achieving these, the service will meet its intended aim/purpose. Using the SMART model can assist in developing objectives.

Clear objectives can assist in measuring performance (see section 4.2).

The SMART Model

Specific	• What does the service need/intend to achieve? • What actions are required to achieve the objective and who is responsible? • Is this objective clear to all readers, or can it be interpreted in another way?
Measurable	• How can/will the objective be measured? • What information sources can/will you collect and use as evidence? Will this evidence describe if the intended aim/purpose has been achieved? • Have the service objectives been met over the last financial year/reporting period?
Achievable	• Is the objective feasible/realistic? • Is this the objective reasonable and the best course of action to achieve the service aim(s)? • Do you have the right skills and resources to achieve this objective? • Do others agree that this objective is important?
Relevant	• When evaluated, will the results of this objective matter? If so, to whom? • How is achieving this objective meaningful in meeting local/organisational targets? • To whom is the objective most relevant - consumers, staff, the service, or the broader organisation?
Timely	• When should action/activity commence to meet this objective? When should action/activity conclude? • Is timing important, i.e., is this objective important to do now, or do other objectives need to be met first within the service or broader organisation? • When and how often should evaluation be undertaken and reported? • Is this a short-, medium-, or long-term objective?

3. Service Description

A service description outlines where services are delivered, what type of services are provided, how they are provided, and how consumers access these services.

This section may assist in justifying the need for resources by highlighting drivers for resourcing such as the service location (remote or located in a busy tertiary hospital), a ward/unit that provides a unique service, or serves an acute/complex consumer base.

Individual considerations in a service description are outlined below

Inclusions in a Service Description

Service Aspects	Description	Questions to consider
Service location	The geographical location where service delivery occurs.	Where is the service located (metropolitan, regional, rural, remote)?
		Is the location likely to change in the future? If so, when, where?
		Is the service located in a hospital or acute setting, or is it community based?
Service type	A high-level description of service details.	What population group does the organisation serve?
		What is the hospital service definition as per the *WA Health Clinical Services Framework 2025 - 2035*
		What is the service capability (level of service) for the unit/service as per the *WA Health Clinical Services Framework 2025 - 2035*
		What is the type of service delivery (e.g., inpatient, emergency services, community outreach, etc)?
		What are the operating hours for the service?
Model(s) of care	How health services are delivered.	What is the current staffing profile for the service, what non-direct roles do you have?
		What multidisciplinary teams are involved in service delivery?
Access to health care services	How the service is accessed by consumers.	What are the referral and admission pathways?
		Does the accessibility and capability of other health services impact on the nursing/midwifery resources within the service? If so, how and why?
		Does the accessibility and capability of other health services impact on service provision (e.g., access to community mental health services for ongoing management)?
		Are there gaps or duplication of services?
		Is this service part of a broader organisational or state-wide service? If so, where is the central service located? Where is the closest referral service?

4. Internal Environmental Analysis

Given each ward/unit within an organisation is unique, it is important to consider how internal and external environmental factors impact upon service provision. As there are numerous factors that affect the role and function of a service, it is important to identify and analyse each of these in turn to determine their impact, or potential impact, on service delivery and resourcing needs.

An internal environmental analysis can be considered in two parts: an internal environmental assessment, and a performance analysis.

The internal environmental analysis, especially the performance analysis, is important, as it highlights the key factors driving the need for resourcing. This can include:

- Resourcing that directly impacts the number of nurses and midwives required to provide direct patient care. When implementing ratios, this may also include the shift- coordinator on relevant shifts.
- Resourcing additional staff beyond the minimum ratio, such as:
    - Nurses and midwives who do not provide direct care but playing essential roles in contributing to safe care. These may include but are not limited to: Nurse Unit Managers, Midwife Managers, Staff Development Nurses, Clinical Nurse Specialists, Clinical Midwife Specialists, Clinical Nurse Consultants, Clinical Midwife Managers and Area Managers.
    - Nurses and midwives filling supernumerary roles such as “specials” that also directly impact safe care.

The information gathered in this section of the service context is essential in planning and building a considered workforce profile and roster in the subsequent section of the WPF (resource allocation). It further provides context and justification for the allocation of nursing and midwifery resources.

Internal Environmental Assessment

Internal environmental factors are those that a ward/unit has the potential to influence. Together, these factors describe how a ward/unit is physically structured, how it is governed and how technology is used to support care delivery and collect data.

Inclusions in an Internal Environmental Assessment

Internal Factors	Description	Questions to Consider
Service Structure	The physical environment in which the service exists.	How many beds are there for this service? Is this likely/anticipated to change?
		Are all beds categorised/funded the same way (e.g., all rehabilitation beds), or is there a mixture of beds within the service/ward (e.g., a proportion of both acute surgical and rehabilitation beds)?
		Is the location of the service co-dependant on another service/ ward?
		How many clinic rooms are available? Are these needed all day every day, or are there periods of higher/lower activity?
		What non-clinical areas are available for staff (e.g., meeting rooms, offices, etc)? Is this likely to change?

Organisational Governance	The governance structure in which the service operates and is accountable to.	What is the structure of authority and accountability for this organisation?
		What is the operational structure?
		What are the governance and reporting processes for the organisation?
		What are the governance and reporting processes for the service/ ward?
		Who are the accountable officers, with overarching responsibility for service delivery within the service/ward?
Information Technology	Technology systems available to the service, and how data is collected, used, and processed to support care delivery.	What information technology systems are available in the delivery of health services for this service/ward?
		Who are the primary users of this technology (e.g., consumers, nurses/midwives, the multidisciplinary team, management, etc.)?
		To what extent (or how) are these technology systems used? Is this likely/anticipated to change? Are the systems/usage integrated into daily practice, or only used ad-hoc? Is the technology being used as per its intended function/purpose?
		How proficient are staff in using these systems? Is further training required?
		Are these systems effective? Why/why not? What have been the effects of these systems in service delivery? To whom are the effects/outcomes most relevant (e.g., the organisation, the service, nurses/midwives and/or consumers)?
		How is data collected? By whom? Is the data reliable, meaningful, useful? To whom is it reported?
		Is the service reliant upon access to information technology systems to operate/deliver services?

Performance Analysis

The second aspect of an internal environmental analysis is assessment of the performance of a ward/unit. Performance can be considered under three categories: consumer, staff and organisational.

- **Consumer**

  This aspect of performance describes the amount, trends and type of activity delivered to consumers within the service. Consumer performance can be considered under 3 main categories outlined below.

Aspects of Consumer Performance

Category	Description	Considerations
Activity	The amount, trends, and type of activity delivered to consumers within the service.	What was the actual patient/consumer activity for the service over the last 12 months? Did this activity impact on staffing? If so, how?
		Has activity differed from previous years (i.e., are there recognisable trends)?
		Is activity/occupancy consistent throughout the year, or are there peaks/troughs in activity? If so, can these variances be explained and/or predicted?
		What was the average occupancy? Was this expected?
		Is activity/occupancy likely to change? What resources (physical, human, financial) are required to safely manage this activity?
Acuity	The complexity and intensity of care required to provide safe care. When considering acuity, a review of past patient/consumer complexity in conjunction with the number and type of nursing resources required should be undertaken.	What is the average acuity of patients/consumers using this service? Does this acuity impact on staffing? If so, how?
		Has this acuity differed from previous years (i.e., are there recognisable trends)?
		Is acuity likely to change? What resources (physical, human, financial) are required to safely manage this acuity?
		Does the actual or planned acuity require exceptional patient safety or management considerations?
		What safety and quality measures are currently in place for consumers?
		What is the consumer feedback (compliments and complaints) about this service? How is feedback measured, monitored, and reported? Has this differed from previous years (i.e., are there recognisable trends)?
***S*afety and Quality**	The performance of the service measured against the agreed safety and quality framework and/or key performance metrics related to the provision of healthcare to	How is consumer experience and outcomes (i.e., PREMs and PROMs) measured, monitored, and reported for this service? Have these differed from previous years (i.e., are there recognisable trends)? How do these compare to other services/wards within the organisation, or against state-wide averages?

	consumers.	What are the consumer outcomes in relation to the National Safety and Quality Health Service Standards, and other mandated standards relevant to this service?
		Has there been in increase or decrease in the number and/or severity of adverse incidents in this service over the past 12 months. If so, can this be explained (e.g., higher/lower than anticipated activity/acuity)?

When measuring consumer performance the below measures can be used.

Examples of Consumer Performance Measures

Examples of Consumer Performance Measures	
Average Nursing/Midwifery Hours per Patient Day (current)	Emergency Department Numbers per triage category
Number of separations	Presentations/admissions/ discharges by time of day
Weighted Activity Units	Number of patients/consumers who Left After Treatment Commenced or Did Not Wait
Total occupied bed days/ Averaged occupied bed days	Number of operating theatre sessions/complexity
Accrued bed days	Operating minutes
Day of week and shift occupancy trends (demand variance)	Number of day surgery cases
Patient turnover	Home visits occasions of service
Average length of stay	Number of births
Number of 'specials'	Number of births: vaginal/caesarean
Re-admission rates	Number of walk-in clinics
Number of retrievals	Adverse events (e.g.) number and severity of adverse incidents
Back-transfers	Completed discharge summaries
Number of outliers	Consumer satisfaction, Patient Reported Experience Measures (PREMs), Patient Reported Outcomes Measures (PROMs)
Discharge Against Medical Advice rates	Variance in care plan
Occasions of service	Patient/consumer follow ups
New vs review outpatient appointments	Validation of the criteria description of patient complexity/clinical mix.
Emergency Department presentations vs admissions	Admissions via emergency department/community etc.

- **Staff Performance**
  The table below describes the staff categories providing the service, including staff profile (structure and demographic), professional development and safety and quality and what considerations are to be determined.

Aspects of Staff Performance

Category	*Description*	*Considerations*
Staff Profile	A description of the primary roles, functions, and responsibilities of staff within the service, including those involved in providing direct and/or indirect care.	What is the nursing/midwifery workforce demographics? (Consider age profile, length of service, permanent/casual rates, secondment/acting/leave rates, graduate intake rates, etc). How will these impact upon nursing/midwifery resource requirements in the next financial year?
		What is the ratio of novice, experienced and expert practitioners? What is the ratio of clinical nurses/midwives or registered nurses/midwives to enrolled nurses? How does/will this impact on service delivery and required nursing/midwifery resources?
		Are there other roles, or healthcare practitioners that impact on nursing/midwifery service provision? How will these impact upon nursing/midwifery resource requirements in the next financial year?
		What are the functions of the core nursing/midwifery staff in the service? Is it a nursing/midwifery led service?
Professional Development	The recognised professional development, training, and education needs for nurses/midwives within the service	What processes and resources are in place within the organisation/service to support mandatory training and professional development?
		Is there specific training required for staff within this service (e.g., ACORN requirements, ICU/ED/Mental Health College requirements)? What processes and resources are in place to support this?
		Is there likely to be a change in service demand or delivery over the next financial year? If so, is additional staff training/education required?
		What nursing/midwifery resources are required to fulfill supervision, teaching and professional support roles for undergraduate students, newly qualified nurses/midwives and novice practitioners? Is this likely to change? If so, what nursing/midwifery resources will be required to fulfil these roles over the next financial year?

		Is the use of professional development leave encouraged and facilitated and what is the uptake for nurses/midwives in the service? Is this in line with the current Industrial Agreement(s)?
		What is the succession management plan for positions in the service? When is this likely to have the most impact?
		What nursing/midwifery resources are required to promote and facilitate nurses/midwives to contribute to service development and organisational outcomes?
Safety and Quality of Healthcare Delivery	The performance outcomes achieved by the service in relation to expected staff safety and quality measures, with consideration of required organisational, professional, and national safety and quality standards.	Are the nursing/midwifery resource requirements for this service outlined in the WA Health Clinical Services Framework 2025 – 2035? If so, are they being met/exceeded?
		Are the nursing/midwifery resource requirements for this service outlined by professional bodies (e.g., college or specialty standards)?
		What safety and quality measures are currently in place for staff? Are these being met?
		What is the Nurse or Midwifery/Maternity Sensitive Indicator rates for the service (e.g. falls, pressure injuries)? Has there been a variance in these measures over the past 12 months? If so, can these variances be justified?
		What processes and resources are in place to support nurses/midwives undertake quality, improvement, or research initiatives in the service? How does/will this impact on nursing/midwifery resource requirements?
		What activities or additional portfolios do nurses/midwives undertake to support the delivery of safe and high-quality healthcare (e.g., leading initiatives relevant to the National Safety and Quality Health Service Standards)? How does/will this impact on nursing/midwifery resource requirements?

When measuring staff performance the below measures can be used.

Examples of Staff Performance Measures

Examples of Staff-Based Performance Measures	
Absenteeism	Professional development hours utilised
Sick leave rates	Redeployment

Staff turnover	Service staff satisfaction survey results
External/agency staff utilisation	Worker's compensation claims
Unscheduled leave	Numbers and themes of workload concerns
Number of student placement days/hours	Nurse Sensitive Indicator rates or Midwifery/Maternity Sensitive Indicator rates
Quality portfolio activities/hours	Hand hygiene rates
Workforce age profile	Audit compliance rates
Maternity leave rates	Workforce Diversity and Inclusion Strategy targets
Staff length of service	Leave overbalance (annual leave, Accrued Day Off [ADO]/Rostered Day Off [RDO])
Recruitment and attrition rates	Overtime
Compliance with mandatory and requisite training	Recalls
New staff to existing staff ratio	WA Health full time equivalent (FTE) vs approved/budgeted FTE vs recruitable FTE

- **Organisational Performance**
  This aspect of performance describes how the service is performing when compared to the wider organisation. It considers aspects including staff engagement and satisfaction, performance against service agreements, safety and quality outcomes and financial performance.

Aspects of Organisational Performance

Category	Description	Considerations
Culture	The interaction of staff within in an organisation and their level of engagement and participation in organisational processes.	What are the results of patient/consumer satisfaction surveys at the service level?
		Is there evidence of structural empowerment and shared governance for nurses and midwives?
		What are the results of staff satisfaction and engagement surveys and how is this data used to shape reform?
		What recruitment and retention strategies exist to support the growth and sustainability of the nursing/ midwifery workforce?
		Are nurses/midwives supported to work to their full scope of practice, expertise, knowledge, and skill? If not, would enabling this impact on the nursing/midwifery resources required to deliver the service?

		Are nursing and midwifery services recognised and resourced to deliver safe, high-quality healthcare services?
Service Agreement and KPIs	Service Agreements between the WA Department of Health (System Manger) and the HSP articulate resource allocation decisions and provide a framework for the evaluation of services. Through the execution of the Service Agreements, the HSP agree to meet the service obligations and performance requirements, whilst the WA Department of Health agrees to provide funding and other support services required.	How does this service/ward assist the organisation in fulfilling its obligations against the relevant WA HSP Service Agreement?
		How does this service/ward perform against the relevant KPIs outlined in the WA HSP Service Agreement?
Safety and Quality	The performance outcomes achieved by the service in relation to the expected safety and quality standards of the organisation.	What are the outcomes for the service and organisation in relation to the National Safety and Quality Health Service Standards?
		What is the impact (or potential impact) of these outcomes on nursing/midwifery resource requirements?
Financial Outcomes	The financial outcomes achieved by the service over the past 12 months (or financial year).	What financial measures or targets are currently in place for the service? How did the service perform against these measures? Is this performance level acceptable?
		Was there a budget variance (positive or negative) for any aspect of service delivery? If so, were the variances in financial outcomes in relation to the organisation, staff or consumers?
		Was there a budget variance for the use of nursing/midwifery resources within the service (i.e., labour costs)? For example, was there a difference in actual expenditure against the forecast expenditure over the same time period?

When measuring organisational performance the below measures can be used.

Examples of Organisational Performance Measures

Examples of Organisational Performance Measures
Labour budget variance (positive and negative variances)

Ward/unit/service performance against HSP Service Agreement KPIs (e.g., Emergency Department Length of Stay, Elective Surgery Seen in Time, Hospital Acquired Complications, Rate of seclusion events, Telehealth utilisation rates etc.)
Compliance with minimum nurse/midwife ratios and skill mix profile
Compliance with policies and legislation
Workforce management

- **Comparative Analysis and Benchmarking**

Once a service's performance has been established, internal and external comparisons are necessary to effectively evaluate the performance of a service. Comparative analysis can be undertaken for a defined period (e.g. comparisons with previous month, quarter, or year).

Longer term trends should also be used if available.

  - **Internal comparison** compares the current performance of a service with its performance during a previous period to evaluate outcomes/trends.
  - **External comparison** compares the performance of a service with other similar services. When comparing services, consideration should be given to differing internal and external environmental factors as these differences influence a service's resource supply and service demand.

Completing a comparative analysis supports the establishment of benchmarks. Benchmarking is the process of comparing internal performance with external comparators to identify gaps and areas of best practice. Using benchmarks helps to identify practices where performance could be improved or where new initiatives could be introduced to improve performance.

- **Forecasting**

Forecasting is a method of determining what may happen in the future based on analysis of trends from the past, in addition to professional judgement. Accurate forecasting will assist with the determination and allocation of resources.

The internal environmental analysis will inform forecasting, revealing if the hours used in the past require adjustment, and if the anticipated activity demand will be different in the coming financial year.

5. External Environmental Analysis

External contextual factors are those which cannot be influenced by the service. However, as they shape the environment in which the service operates to varying degrees, and are subject to change, they are important to recognise and thoroughly analyse. This will ensure the service is prepared to mitigate any identified risks to service delivery, whilst proactively maximising potential opportunities.

External environmental factors may assist in supporting the need for resourcing by highlighting drivers for demand such as local, state or national policies, consumer demographics and new and emerging technologies.

Prompts for HSPs to consider in the development of the external environmental analysis are outlined below.

Inclusions in an External Environmental Analysis

External factors	Description	Questions to consider
Policy and Legislation	Policy and legislation that impacts service delivery and resource requirements. This can include Commonwealth/State government, Policy Frameworks mandatory policies, Ahpra, professional standards, industrial groups and local HSP policy.	What are the legislative, regulatory and health policy requirements for operating the service? Do these impact upon service delivery and/or nursing/midwifery resource requirements? If so, how?
		What are the professional standards and industrial requirements for operating the service? Do these impact upon service delivery and/or nursing/midwifery resource requirements? If so, how? For example, is there a policy or industrial requirement for shift coordination and management?
Economic/Financial	How the service is funded, and how cost pressures impact the service.	How does the service receive funding (e.g., Activity Based Funding, block funding, etc)? How does this funding impact the nursing/midwifery resources required to operate the service?
		Does the service participate in a public/private partnership? If so, does this impact the nursing/midwifery resources required to operate the service?
		Does the cost of consumables, which may be affected by fluctuations in the economy, affect the budget allocation/expenditure of the service?
Social	The demographics of the consumers that access the service, including cultural and community expectations.	What are the local population demographics, and how does this impact on service demand and delivery?
		What are the cultural needs of the local population and how does this impact on service demand and delivery?
		What is the community's expectation of the health service?
Technology	Technological factors that can impact service delivery.	Does the service rely on external technology for service operation and healthcare delivery (e.g., to operate telehealth services)?
		How does/will technology impact nursing/midwifery resources?

		Are there any local/regional weather conditions that impact regularly, or predictably, on health service demand/ delivery? If so, how do these impact upon nursing and midwifery resource requirements?
Environment	Ecological and climate aspects that impact the service.	Are there seasonal variances which affect disease prevalence in the community (e.g., winter influenza rates)? If so, how do these impact upon service demand and nursing/midwifery resource requirements?
		What are the waste disposal and recycling practices, and do they impact on nursing/midwifery resource requirements?
Research/Evidence-based Practice	Research and research findings that may be being undertaken in or impact a service.	Is there any evolving research that may impact upon service demand,

Summary

The service context process establishes:

- A concise and comprehensive overview of what the ward/unit aims to deliver and how services are delivered.
- A primary source of information regarding the drivers of demand on a ward/unit.
- Historical service-based analysis of nursing and midwifery resources used in previous periods.
- Analysis of consumer activity/acuity trends and other environmental factors that have impacted nursing and midwifery services.
- Forecasting of future consumer activity/acuity trends and other environmental factors that will impact nursing and midwifery services.
- Comparative analysis and benchmarking the service with similar nursing and midwifery services and/or applying the relevant evidence.

Part 2: Resource Allocation

Resource allocation is the process of planning and managing nursing and midwifery services to match available resources with service needs, as outlined in the service context. Appropriate allocation helps manage resources effectively, ensures safe workloads, and delivers quality healthcare. It's important to recognise that professional judgment is considered a valid way to determine safe staffing levels for nurses and midwives.

After completing the service context to determine the service needs, the next step is to calculate the number of nursing and midwifery hours required to meet the demand and needs identified. This involves determining the number of nurses and midwives needed to fulfill the service demand. The annual labour budget represents the financial side of the Service Profile, including both productive and non-productive nursing and midwifery hours. These hours are then converted into the required FTE and associated costs. It is crucial that the annual labour budget is developed in collaboration with the business/finance team.

Ratios Resource Allocation Overview

Resource Allocation Step	Description	What to Include	More Information
1.Determine the Ratio Applicable to the Ward/Unit	Identification of relevant ratio for the ward/unit as per the Nurse/Midwife to Patient Ratios: Wards/Units in Scope for Implementation	The relevant ratio of the ward/unit for example: Morning: 1:4 + 1 Hands-Free Shift Co- Ordinator Afternoon: 1:4 + 1 Hands-Free Shift Co- Ordinator Night: 1:7.	**PAGE 19**
2 Calculate the Total Annual Productive Hours	Calculation of both direct and indirect nursing/midwifery hours that contribute to patient care.	Productive hours are typically represented in a roster construct, based on bed capacity, average occupancy, and historical data on demand/acuity. Consideration must be given to both the direct productive hours counted within the ratio and the indirect productive hours outside of the ratio. The roster construct is then converted into annual hours using a formula.	**PAGE 19**
3.Convert Productive Hours into FTE	The identified annual productive hours are converted into FTE.	To convert the annual productive nursing/midwifery hours into FTE, the total number of annual hours required for a ward/unit is divided by the annual hours equivalent to one FTE.	**PAGE 24**

4.Calculate Non-Productive Hours	Calculation of non-productive hours are where a nurse/midwife is paid for entitlements or conditions of the position, e.g. personal leave, annual leave, parental leave. These do not involve direct or indirect care hours.	Calculation should account for the requirements outlined in the relevant industrial instruments, as well as the service's operational environment, in collaboration with the line manager, senior nursing/midwifery leadership, and the finance/business team. The calculation needs to include leave replacement hours and costs associated with non-productive entitlements. Hours must be converted into a daily percentage.	**PAGE 25**
5.Convert Non-Productive Hours into FTE	The identified annual non-productive hours are converted into FTE.	An example calculation is provided on page 39, but this may vary at a local level.	**PAGE 26**
6.Add Productive and Non- Productive FTE Together and Convert into Financial Resources	Summation of the productive and non-productive nursing and midwifery FTE identified in earlier steps and converting them into financial terms	Summation of the productive and non-productive nursing and midwifery FTE identified in earlier steps and converting them into financial terms in collaboration with relevant stakeholders.	**PAGE 26**
7.Allocate Hours to Meet Service Requirements	Developing a roster encompassing all FTE.		**PAGE 27**

Step 1: Determine the Ratio Applicable to the Ward/Unit

The first step requires determining the minimum ratio applicable to the ward//unit. This information can be found within section 3.2 of MP 0187/24 *Nurse/Midwife to Patient Ratios Policy*. The *Wards/Units in Scope for Implementation* outlines the mandatory classification and minimum ratios for all wards/units in scope for ratios implementation

Step 2: Calculate the Total Annual Productive Hours

Direct and Indirect Hours

Productive nursing and/or midwifery hours contribute to consumer care and include both direct and indirect hours.

- **Direct hours** are hours nurses/midwives perform directly related to clinical care. Roles attributed to these hours include:
    - Registered Nurses, Midwives, and Enrolled Nurses

- **Indirect hours** are hours spent in activities that support clinical care. Roles usually attributed to indirect hours include:
    - Hands-Free Shift Co-Ordinator required on morning and afternoon shifts under the Nurse/Midwife to Patient Ratios Policy.
    - Nurse Unit Managers, Midwife Managers, Staff Development Nurses, Clinical Nurse Specialists, Clinical Midwife Specialists, Clinical Nurse Consultants, Clinical Midwife Managers, Area Managers.

Minimum ratios do not include indirect hours. Indirect hours are determined and negotiated locally, using the service context and profile as justification. It is paramount that the allocation of these hours and associated resources are prioritised, as they contribute to safe care.

Examples of direct and indirect productive activities

Direct	Indirect
• Clinical handover. • Communicating with patients/consumers/carers and health professionals about planned care or escalating issues. • Medication administration/supply. • Patient/consumer care documentation. • Patient/consumer/carer education. • Patient escorts, transfers and retrievals, including time spent supervising the patient/consumer in other departments (e.g. radiology/recovery). • Telephone consultations and follow-up with consumers/carers. • Nursing/midwifery care provided to patients/consumers who are not inpatients - patients/consumers may be observed or assessed but not treated or admitted. • Antenatal classes or clinics. • Discharge planning. • Organising patient transfers/procedures/tests. • All nursing hours provided by the ward to attend medical emergencies in other wards. • Nursing hours used to monitor/record observations for patients/consumers on remote telemetry. • Clinical procedures, including recovery. • Leading/participating in multidisciplinary team rounds. • Providing care via telehealth appointments.	• Travel time relating to consumer care. • Staff mentorship. • Human resource management activities. • Restocking clinical areas with essential supplies. • Education and training. • Attendance at staff meetings. • Hours required to support undergraduate programs/students. • Assessing clinical skills (assessor). • Research and practice development/improvement activities. • Nursing/midwifery hours on special projects. • Staff orientation to the work area. • Organising, reviewing, and updating clinical policies and procedures. • Rostering activities. • Developing and monitoring budgets. • Writing reports and submissions. • Investigating complaints.

Calculating Productive Hours

When calculating the total annual productive nursing/midwifery hours, it is essential to consider:

- The environmental analysis established in the service context.
- The agreed average occupancy.
- The ratio applicable to the ward/unit.

This ensures that the appropriate staffing levels are determined for the service's operating environment. Typically, the calculation of these annual productive hours is done through the creation of a roster construct.

Determining Agreed Average Occupancy

Define the Key Metrics

- **Occupancy Rate:** This is typically defined as the percentage of available capacity that is being used over a given period.
- **Bed or Unit Capacity:** The total number of beds or units available for use during the period under consideration.

Collect Data

- Daily Occupancy: Gather data on the number of beds or units occupied each day over a given period (e.g., monthly, quarterly, or annually).
- Total Available Capacity: This is the total number of beds or units available each day, multiplied by the number of days in the period.

Calculate Average Occupancy Rate

Step 1: Calculate the total number of occupied bed days for the period. This is the sum of the daily occupied beds for each day in the period.

Formula: ***Total Occupied Bed Days*** = *sum of (Occupied Beds on each day of period)*

Step 2: Calculate the total number of available bed days for the period.

Formula: ***Total Available Bed Days*** = *Total Beds × Number of Days in Period*

Step 3: Calculate the average occupancy rate for the period.

Formula: ***Average Occupancy Rate*** = *(Total Occupied Bed Days ÷ Total Available Bed Days) × 100*

This gives you the percentage of beds that are occupied during the given period.

Interpret the Results

- **Compare with Benchmarks:** Evaluate the average occupancy rate against industry benchmarks or historical data to assess whether the HSP is operating at optimal capacity.
- **Consider Variability:** Consider fluctuations in occupancy due to seasonal variation, demand shifts, or special projects, as these can affect future capacity planning.

By calculating this metric regularly, a HSP can better plan for capacity needs, staffing levels, and potential service adjustments in future business strategies.

Example Calculation

Assume a ward has 30 beds available, and the analysis is for the month of January (31 days). Over this period, the daily occupancy data shows the following:

Total occupied beds for the month = 775 occupied bed days

Total available bed days = 30 beds × 31 days = 930 available bed days

Average Occupancy Rate = *(775 ÷ 930) × 100 = 83.3%*

This means the ward was occupied at an average rate of 83.3% for the month.

Seasonal Variation and Surge Periods

In cases where there are fluctuations in activity demand during different seasons or events throughout the year, as outlined in the service context (such as winter or major events), it is anticipated that additional roster structures will be created for these periods and incorporated into the Service Profile. For instance, a standard roster construct may be developed alongside a winter roster construct to accommodate increased activity, occupancy, or bed numbers. This approach allows a service to assess and plan for the necessary supply of nursing/midwifery resources during times of varying demand.

Weekly Variation

There may be situations where service activity demand fluctuates on a weekly or daily basis. In such cases, it is crucial to design a roster construct that reflects these variations when calculating the total productive hours needed to deliver the planned service. For example, if the operating theatres operate on a four-week cycle, it is essential to plot the roster construct over the entire four-week period to accommodate the variability in activity levels.

Special Rostering Requirements

For wards that frequently require 1:1 specialling of patients, this may need to be built into the roster construct to allow for a buffer that will accommodate for increased staffing demands.

Considerations

- **Historical data**: How often are specials used?
- **Patient profiles:** Which diagnoses most commonly require specialling?
- **Time periods:** Are there peaks (evenings, weekends)?

Build into Roster Construct

- Estimate average daily hours spent on specialling (based on historical data).
- Convert time into FTE to be built into roster construct.

Indirect Hours

To calculate indirect hours, the data on hours spent on indirect activities need to be collected and averaged to then be converted to FTE. Whilst average hours will be locally determined, with consideration given to the context of practice and model of care, professional judgment is considered a valid way to determine safe staffing levels for nurses and midwives.

Example of a Weekly Roster Construct

Example of a Medical/Surgical inpatient ward where the total bed capacity is 30, with an average occupancy rate of 97% (average of 29 beds occupied).

This example assumes a Clinical Nurse Manager (CNM), Clinical Nurse Specialist (CNS), Staff Development Nurse (SDN) and Area Manager are required to enable the provision of safe patient care.

	MON	TUES	WED	THURS	FRI	SAT	SUN	TOTAL
Ratio	4/4/7	4/4/7	4/4/7	4/4/7	4/4/7	4/4/7	4/4/7	
HFSC AM	8	8	8	8	8	8	8	56
AM	64	64	64	64	64	64	64	448
HFSC PM	8	8	8	8	8	8	8	56
PM	64	64	64	64	64	64	64	448
Night	50	50	50	50	50	50	50	350
Total Direct Productive Hours	194	194	194	194	194	194	194	**1358**
Total Indirect Productive Hours	32	32	32	32	32	16	16	**192**
Total Annual Productive (direct) FTE Hours	**70,616 hours**							
Total Annual Productive (indirect) FTE Hours	**9984 hours**							
Total Annual Productive FTE Hours	**80,600 hours**							

Example explanatory notes:

- *Number of staff rostered per shift is based on ratio and average occupancy. ratio for a Medical/Surgical ward is morning: 1:4 +HFSC, afternoon: 1:4 + HFSC and night: 1:7, therefore 8 nurses + HFSC required for AM/PM shift and 5 nurses required for ND shift with average occupancy of 29 beds.*
- *Nurses/midwives providing direct patient care work 8 hour day shifts and 10 hour night shifts (e.g. 64 hours = 8 staff, 50 hours = 5 staff).*
- *CNM, CNS, SDN and Area Manager are required to provide indirect care over 8 hour day shifts, Monday to Friday*
- *CNM and SDN are required to provide indirect care over 8 hour day shifts, Saturday-Sunday*

Annual Productive Hours Formula

To calculate the annual nursing/midwifery productive hours from a weekly roster construct, the following formula is used*:*

Annual nursing and midwifery productive hours

=

Weekly nursing and midwifery productive hours x 52

If there is a seasonal plan, such as where for three roster periods during winter, the productive hours increase to accommodate the increased demand, the annual hours are determined by:

Weekly nursing and midwifery productive hours x number of weeks for standard roster construct

+

Weekly nursing and midwifery productive hours x number of weeks for winter roster construct

=

Annual nursing and midwifery direct productive hours

Example

In the case of the example roster construct above, the annual nursing direct productive hours are calculated as follows:

1358 (Weekly nursing direct productive hours) x 52

= 70,616 hours

192 (Weekly nursing indirect productive hours) x 52

= 9,984 hours

Total annual productive hours = 80,600 hours

Step 3: Convert Productive Hours into FTE

To convert the annual productive nursing/midwifery hours into FTE, the total number of annual hours required for a ward/unit is divided by the annual hours equivalent to one FTE.

Annual Base FTE Formula

How many hours are equivalent to one FTE?

FTE

=

38 hours (weekly hours of one FTE) x 52 weeks (one year)

=

1976 hours

Example

Based on the example roster construct, annual FTE would be as follows:

80,600 annual productive nursing hours ÷ 1976

=

40.79 FTE

Step 4: Calculate Non-Productive Hours

Non-productive nursing/midwifery hours are where a nurse/midwife is paid for entitlements or conditions of the position, e.g. personal leave, annual leave, parental leave. These do not involve direct or indirect care hours.

Examples of Non-Productive Activities

Examples of Non-Productive Activities	
Annual leave	Mandatory/requisite training.
Bereavement leave	Long service leave.
Professional development leave (inclusive of travel time if applicable).	Personal leave
Parental leave.	Secondment backfill.

Non-productive hours can be calculated after determining the total productive FTE requirements in Step 3. Non-productive nursing/midwifery hours encompass all leave and mandatory training needs. The calculation should account for the requirements outlined in the relevant industrial instruments, as well as the service's operational environment, in collaboration with the line manager, senior nursing/midwifery leadership, and the finance/business team.

The calculation needs to include leave replacement hours and costs associated with non-productive entitlements. Hours must be converted into a daily percentage. Calculations should be undertaken in collaboration with the line manager, relevant senior nursing/midwifery staff and business managers.

Multipliers for specific non-productive hours: Annual leave, Accrued Days Off (ADO), Time Off in Lieu (TOIL), Accrued Days Off, Sick leave and Professional Development Leave (PDL)

The following provides an example of determining locally agreed multipliers to backfill of annual leave, TOIL, sick leave, and PDL:

1. Determine locally agreed multipliers based on the leave taken and backfill provided over the previous 3 years in consultation with the local HSP finance team. The rationale used to determine the multipliers should be appropriately documented.
2. Calculate the locally derived average of leave taken, based on the previous 3 consecutive years of leave data, and calculated after the completion of the previous financial year.
3. Calculate the locally derived average of backfill provided to cover periods of leave, based on the previous 3 consecutive years of leave data, and calculated after the completion of the previous financial year.
4. When determining the level of backfill, if the activity in which an employee is normally engaged (e.g. provision of clinical care) continues during the period of leave, replacement of that employee to the same level must occur during the leave period.
5. Where the local leave multiplier is higher than the maximum Award entitlement, consult the HSP finance team and HSP Steering Committee.

Examples of Award entitlements

Non-productive	Days/weeks	Annual Hours	Percentage
Personal Leave	15 days	114 hours	5.77%
Annual Leave (standard)	4 weeks	152 hours	7.7%

Annual Leave (additional leave entitlement for continuous shift workers)	1 week	38 hours	1.92%
TOIL (public holidays)	11 days	83.6 hours	4.23%
ADO	12 days	91.2 hours	4.61%
PDL	3 days	22.8 hours	1.15%

Step 5: Convert Non-Productive Hours into FTE

The following example provides guidance on calculating non-productive nursing and midwifery hours in terms of FTE. How this approach is applied to a specific service will vary depending on local recruitment strategies and business rules. It is recommended that these strategies be discussed with nursing, midwifery, and business teams before implementation. This step focuses solely on the calculation. The application of non-productive FTE is addressed in Step 6.

Example

Example based on a 35.74 base FTE (productive) with headcount of 40.

Example of calculation: FTE to accommodate for percentage of AL for quota of Level 2.4: (9.62 ÷ 100) x 3 = 0.29 Locally agreed Mandatory training for new starters = 3 days, Existing staff = 2 days.

Level	FTE	AL (5weeks - 9.62%)	TOIL (4.23%)	ADO (4.61%)	PL (5.77%)	PDL (1.15%)	Mandatory Training		Total FTE
							New Staff x4	Existing Staff x36	
2.4	3	0.29	0.13	0.14	0.17	0.04			3.77
1.8	6.37	0.61	0.27	0.29	0.37	0.07			7.98
1.7	5.37	0.52	0.23	0.25	0.31	0.06			6.74
1.6	10	0.96	0.42	0.46	0.58	0.12			12.54
1.5	8	0.77	0.34	0.37	0.46	0.1			10.04
1.3	3	0.29	0.13	0.14	0.17	0.04			3.77
Total	35.74								
							0.05	0.29	0.34
Total		**3.44**	**1.52**	**1.65**	**2.06**	**0.43**	**0.05**	**0.29**	**9.44 FTE**

Step 6: Add Productive and Non-Productive FTE Together and Convert into Financial Resources

This step enables the negotiation and discussion of both productive and non-productive FTE requirements from a financial standpoint, with the goal of aligning supply with demand. The next step in developing the nursing/midwifery annual labour budget is calculating FTE costs. In simple terms, this involves summing the productive and non-productive nursing and midwifery FTE identified in earlier steps and converting them into financial terms. It's crucial for the nursing/midwifery line manager to collaborate with the finance/business team to ensure that financial resources are allocated appropriately.

Financial (Cost Centre) Allocation

To improve an organisation's ability to align workforce supply with service demand, there may be situations where portions of the non-productive budget are transferred to another cost centre. For instance, the budget for sick leave might be allocated to the staff relief pool cost centre to facilitate backfilling sick leave shifts as needed. It is crucial that this allocation is clearly documented in the Service Profile. The nursing/midwifery line manager must collaborate with the finance/business team to ensure the financial resources are allocated in accordance with the approved Service Profile.

Step 7: Allocate Hours to Meet Service Requirements

Once the productive and non-productive nursing/midwifery FTE required to deliver the service has been determined, the final step is to then allocate FTE in a roster for the service.

The roster should be based off the roster construct developed from the initial steps, and should consider:

- Time of day
- Day of week
- Skill mix
- Seasonal variation
- Availability of multidisciplinary team
- Compulsory service adjustments (e.g. public holidays)
- Other locally significant reasons (e.g. tourism, major community events).

Conclusion

This document provides a structured and practical approach to workforce planning that supports HSPs to meet current and future service demands. By applying the Workforce Planning Framework and completing the service profile template, ward service profiles are documented in a consistent and evidence-based manner. This approach strengthens business planning, promotes the efficient use of resources and supports the delivery of safe, high-quality and sustainable healthcare services that respond to the needs of the communities served.

Document History

Version	Version Date	Author	Description
1.0	22 October 2025	S. Morrison Principal Project Officer Clinical Workforce and Leadership	Original Version
2.0	16 February 2026	M. Eaton Senior Nursing Advisor Chief Nursing and Midwifery Office	Minor amendments to align with the updated Nurse/Midwife to Patient Ratios policy.
3.0	19 October 2026	S. Sheehan Senior Nursing and Midwifery Officer Chief Nursing and Midwifery Office	• Minor formatting adjustments. • Additional information provided within the introduction and throughout. • Part 2 Resource Allocation – Step 1 updated as duplicate information.

This document can be made available in alternative formats on request for a person with disability.

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