Government of Western Australia
Department of Health

NHpPD Workload Model Guiding principles

2026 revised edition

Document History

Version	Version Date	Author	Description
1.0	3 September 2018	Anitha Thiraviarajah/Leesa Kerr	Re-developed report of 2007 Nursing Workload Monitoring System User Manual
2.0	2 October 2018	Leesa Kerr	Sending to MH stakeholders for review for MH section
3.0	16 October 2018	Dannielle Orifici	Review of MH section
4.0	17 October 2018	Robina Redknap	Review of MH section
5.0	01 July 2019	Natalie Male	Caveats for specialties Industrial agreement update Unqualified newborn statement HDU beds ≥6 beds
6.0	16 August 2019	Leesa Kerr	Updated example of NHpPD formula
7.0	29 August 2019	Tracy Martin Graeme Boardley	Updated Maternity Services section
8.0	03 December 2025	Susan Slack Mel Eaton	General updates to improve readability and reflect current information. Revision of reporting key performance indicators. Inclusion of a notification timeframe requiring HSPs to inform the CNMO of ward creation or reconfiguration. Inclusion of information regarding nurse/midwife to patient ratios

Contents

1. Aim

To provide nurses and midwives with information to support their understanding of the Nursing Hours per Patient Day (NHpPD) workload model used within Western Australia (WA).

2. Overview

NHpPD is a systematic nursing workload monitoring and measuring system used to determine the number of nurses required for care/service provision within a specific ward/unit. The model is used to guide staffing levels, establish resource allocation to meet patient care demands and as a framework for creating nursing/midwifery rosters.

WA Health is committed to maintaining a contemporary workload management methodology, in October 2024, transition to a Nurse / Midwife to Patient Ratio model (WA Ratio Model) commenced. The WA Ratio Model will be implemented across all Health Service Providers (HSPs) as per the *WA Health System Australian Nursing Federation – Registered Nurses, Midwives, Enrolled (Mental Health) and Enrolled (mothercraft) Nurses – Industrial agreement 2024.*

It is recognised that during the transition to the WA Ratio Model, HSPs will be using both the WA Ratio Model and NHpPD across their various sites/services. As such, nursing and midwifery workloads will be managed in accordance with either the WA Ratios Model or NHpPD in accordance with the principles established in the *Schedule A -Nurses (WA Government Health Service) Exceptional Matters Order 2001*, until HSPs have fully transitioned to the new model.

3. Compliance and reporting

All WA HSPs must comply with the principles and processes outlined within the WA Health Exceptional Matters Order 2001 in relation to workload management.

The Department of Health will monitor compliance with NHpPD. Compliance monitoring requirements for Health Service Providers (HSP) include:

- Review and verify 6-monthly NHpPD data as requested.
- Provide a brief explanation where a ward/unit is 0 – 10% below their target NHpPD.
- Provide a detailed report, including actions taken to resolve the deficit, where a ward/unit is 10% or more below their target NHpPD.

The Chief Nursing and Midwifery Office (CNMO) will prepare a comprehensive NHpPD report on a six-monthly basis. Each report will be finalised and presented to the Nursing and Midwifery Workloads Consultative Process (NMWCP) Committee for endorsement no later than nine months following the conclusion of the respective reporting period. Following endorsement by the NWCP committee, the report will be made publicly available on the CNMO website.

4. Roles and Responsibilities

Roles and responsibilities in applying the NHpPD model are outlined in Table 1 below.

Table 1: Roles and responsibilities for NHpPD

Role	Responsibilities
Health Support Services (HSS)	• Provide NHpPD monitoring and reporting tool support to the CNMO • Provide rostering (RoSTAR) and patient administration system (PAS) data linkage for NHpPD reporting • Provide support to the CNMO and maintain NHpPD monitoring and reporting capability in the transition to the new Human Resources Management Information System (HRMIS) program HRplus.
Chief Nursing and Midwifery Office (CNMO)	• Maintain the NHpPD Guiding Principles document • Coordinate and deliver six-monthly NHpPD report to the WA Health Nursing and Midwifery Workloads Consultative Process Committee as detailed in the Industrial Agreement. • Facilitate review of requests for category classification and reclassification on behalf of the WA Health State Workload Review Committee • HSP support
Health Service Providers (HSP)	• Monitor and manage NHpPD for their sites. • Collaborate with the CNMO in development of the 6 monthly NHpPD report. • Must notify the CNMO of any newly established wards or any reconfiguration of existing wards within 6 months of the change being implemented.

WA Health State Workload Review Committee	• Review and assess business cases submitted by HSPs where a new ward/unit has been established • Review and assess business cases submitted by HSPs for NHpPD reclassification of current ward/unit • Actively participate in consultation to review and update ward category and NHpPD (Table 3) as required.
WA Health Nursing and Midwifery Workload Consultative Process Committee	• Communicate and consult with HSPs regarding nursing and midwifery workload issues. • Review and endorse 6-monthly NHpPD reports

5. Definitions

An overview of definitions associated with the NHpPD workload model is provided in Table 2 below.

Table 2: Definitions

Boarder	An individual who is receiving food and/or accommodation but for whom the HSP does not accept responsibility for treatment and/or care (e.g., person assisting with care).
Clinical Services Framework (CSF)	A clinical service planning document designed to inform and guide individual health services, hospital, and non-hospital service providers to determine requirements in workforce and infrastructure and integrating new technology for their individual clinical service/s plans. The framework describes medium to long-term horizons. The WA Health Clinical Services Framework 2025 - 2035 is the most current document.
Direct Hours	Nursing and midwifery hours delivering direct patient care. Direct care may involve any aspect of the health care of a patient, including treatments, counselling, self-care, patient education, and medication administration.

Doze	Paid shift but employee not at work due to 9.5 Hour Break industrial agreement clause. Doze is classified as non-direct hours.
Full time equivalent (FTE)	A measurement that represents the number of full-time hours worked by employees in an area and/or organisation. In WA Health 1.0 FTE is contracted for an average of 76hrs per fortnight.
Mandatory Training	Compulsory training determined essential by an organisation for the safe and efficient delivery of services. This type of training is designed to reduce organisational risks and comply with local or national policies. (Definition UK Royal College of Nursing). Mandatory Training is classified as non-direct hours.
Non-direct Hours	Nursing and midwifery hours that may support patient care, but do not provide direct care or treatment for the patient. For example, not involved with the care of, and/or not allocated to a patient case load. This includes specific roles such as Clinical Nurse Manager, Nurse Unit Manager, Midwifery Unit Manager, Associate Nurse Manager, Clinical Nurse Specialist, Clinical Midwife Specialist, Area Manager, Staff Development
Non-productive Hours	Hours that nurses / midwives are not available to provide direct patient care. This includes paid / unpaid leave such as personal leave, annual leave, long service leave, study leave, public holiday, workers compensation.
Orientation	Staff attending healthcare facility or site orientation program, who are not involved in direct patient care on the day. This could include local induction to the organisation and/or new clinical area of practice. Orientation is classified as non-direct hours.
Other clinical area	Staff who are working in other non NHpPD clinical area (for example, outpatient clinic) only when resource balancing is not possible/practical. Other clinical area is classified as non-direct hours.

Patient Administration System (PAS)	A health information and patient data management system that records a patients journey through HSPs.
Patient Day	Total time a patient is allocated to the workload of a nurse / midwife between the time of admission and discharge within the clinical area, measured in minutes. The time when patient receives treatment or care at a temporary location (for example – haemodialysis, theatre, radiology) is included towards the original clinical area when the patient returns to the same clinical area.
Patient Hours	Duration of time a patient receives care by a nurse / midwife.
Productive Hours	Hours nurses / midwives are available to provide direct patient care. This includes ordinary hours and overtime.
Supernumerary	Scheduled and supervised practice in the clinical setting where staff are employed but not counted in the staff roster profile at that time. Supernumerary is classified as non-direct hours.
Unqualified Newborn	A newborn patient day, which is assigned to each patient day within a newborn episode of care, is unqualified if infant does not meet any of the following criteria: • Is the second or subsequent live born infant of a multiple birth, whose mother is currently an admitted patient, • Is admitted to an intensive care facility in a hospital, being a facility approved by the Commonwealth Minister for the purpose of the provision of special care, • Is admitted to or remains in hospital without its mother. The days when a newborn baby does not meet the above criteria are unqualified (if they are 9 days old or less) and should not be counted as patient days under the Australian Health Care Agreements and are not eligible for health insurance benefit purposes.

6. Guidelines

- Nursing and midwifery hours are sourced from the staff rostering system (currently RoSTAR).
- Patient hours are sourced from the Patient Administration System (PAS).
- Total nursing and midwifery hours will include direct productive hours provided by permanent, temporary, casual, agency and pool nurses.
- Non-direct hours such as Doze, mandatory training, orientation, other clinical area, and supernumerary are excluded.
- All non-productive nursing / midwifery hours are excluded.
- Nurses and midwives in non-direct roles are excluded from NHpPD calculations.
- The Shift Coordinator is part of NHpPD and therefore is not excluded in any category.
- Nursing and midwifery hours and patient hours are captured on a monthly basis and are inclusive of the first to last day of each month.
- Nursing and midwifery hours are calculated on the shift duration provided to a ward/unit by the nurse or midwife (excluding unpaid meal break) starting from the shift start time, regardless of whether the shift overflows to the next day or next roster.
- All patient hours are counted except for:
    - Boarders and unqualified newborns
    - Patients on leave.

Table 3: NHpPD Guiding Principles

Ward Category	NHpPD	Criteria for measuring diversity and complexity of tasks
A	**7.5**	• High Complexity • High Dependency Unit @ or < 6 beds within a ward • Tertiary step-down ICU • High Intervention Level • Specialist Unit/Ward Tertiary Level 1:2 staffing • Tertiary Paediatrics • Mental Health (MH) Secure Beds ▪ Seclusion used as per Mental Health Act 2014 (WA) ▪ High risk of self-harm and aggression ▪ Intermittent 1:1 /2 Nursing ▪ Patients frequently on 15 minutely observations
B	**6.0**	• High Complexity • No High Dependency Unit • Tertiary Step Down CCU/ICU • Moderate/High Intervention Level • ED observation ward • Special Unit/Ward including Mental Health Unit • High Patient Turnover (1) > 50% • Secondary Paediatrics • Tertiary Maternity • MH – High risk of self-harm and aggression ▪ Patients frequently on 30minute observations ▪ Occasional 1:1 nursing ▪ Mixture of open and closed beds ▪ Seclusion used as per Mental Health Act 2014 (WA)
C	**5.75**	• High Complexity Acute • Care Unit/Ward • Moderate Patient Turnover > 35%, OR • Emergency Patient Admissions > 50% • MH – Moderate risk of self-harm and aggression ▪ Psychogeriatric Mental Health Unit ▪ Mental Health unit incorporating ECT Facility
D	**5.0**	• Moderate Complexity • Acute Rehabilitation Secondary Level • Acute Unit/Ward • Emergency Patients Admissions > 40% OR • Moderate Patient Turnover > 35% • Secondary Maternity • MH – Medium to low risk of self-harm and aggression ▪ Mental Health Forensic Patients in open beds
E	**4.5**	• Moderate Complexity • Moderate Patient Turnover >35% • Sub-Acute Unit/Ward

		• Rural Paediatrics • Rural Maternity
F	4.0	• Moderate/Low Complexity • Low Patient Turnover < 35% • Care Awaiting Placement/Age Care • Sub-Acute Unit/Ward • MH Slow stream rehabilitation
G	3.0	• Ambulatory Care including: • Day Surgery Unit
Emergency Department (ED)		ED Nursing Hours per Patient Presentation (NHpPP) Formula: (Assessment time) + (Ongoing care component x Average length of stay) + (Observation Ward occupied bed days x 5.75 hours where appropriate)
Intensive Care Unit (ICU)	31.60	Tertiary designated ICU
Coronary Care Unit (CCU)	14.16	Designated standalone CCU
High Dependency Unit (HDU)	12.00	Designated standalone HDU High Dependency Unit at ≥6 beds
Renal (T)	3.02	Standalone Tertiary Renal Unit
Renal (S)	2.18	Standalone Satellite Renal Unit

Notes:

- Turnover = admissions + transfers + discharges divided by number of beds
- The NHpPD Guiding Principles are in alignment with the *WA Health System – Australian Nursing Federation – Registered Nurses, Midwives, Enrolled (Mental Health) and Enrolled (Mothercraft) Nurses – Industrial Agreement 2024* and *WA Health System – United Workers Union (WA) – Enrolled Nurses, Assistants in Nursing, Aboriginal Health Workers, Ethnic Health Workers and Aboriginal Health Practitioners Industrial Agreement 2024.*

7. Application of the Guiding Principles

7.1 General Wards

To calculate the nursing hours and staffing profile for a ward / unit you will need to know:

1. The ward category (A to G) and target NHpPD
2. Number of inpatient beds
3. Average daily bed occupancy (%)
4. Average roster period unit is open (e.g., 14 days)

Figure 1: Formula FTE calculations

Formula:

Nursing hours = Ward / unit NHpPD x average number of occupied beds

Total FTE/week = $\frac{\text{Nursing hours x number of days in roster period}}{\text{full time equivalent hours (76hrs)}}$

Figure 2: Example general ward FTE calculation

Ward 4 (General ward):

Ward 4 has 30 beds and is identified as category B with a NHpPD of 6.0. The average daily bed occupancy of the ward is 96.6% (29 beds). This ward operates a 24/7 roster.

Total Nursing Hours = Ward / unit NHpPD x average number occupied beds

= 6.0 x 29

= 174 nursing hours

Total FTE/week = (Nursing hours x number of days in roster period) ÷ FTE hrs

= (174 nursing hours x 14 days) ÷ 76 hrs

= 32.05 (FTE)

When determining NHpPD Category of a mixed ward consider the following:

- Wards may have a mix of patients that fall into more than one category
- Mixed wards are allocated a classification based on the percentage split of their patient cohorts (see example Figure 3 below)

Figure 3: Example calculation of NHpPD for a for a mixed ward

Ward A (Mixed ward/unit)

Ward A has 30 beds with 67% category C (5.75hrs) and 33% category D (5.0hrs).

Total NHpPD = (C NHpPD x % split) + (D NHpPD x % split)

= (5.75 x 0.67) + (5.0 x 0.33)

= 3.85 + 1.65

= 5.5 NHpPD

8. Intensive Care, Coronary Care and High Dependency

Table 4 below outlines the calculations required to determine the FTE required in intensive care, coronary care, and high dependency units.

Table 4: Intensive Care, Coronary Care and High Dependency Units benchmark

	Intensive Care	Coronary Care	High Dependency Unit
NHpPD	31.60	14.16	12.00
Includes additional staff	Shift Coordinator Access Nurse	Shift Coordinator	Shift Coordinator
Minimum beds	10 beds required to utilise the shift coordinator for 26 hours. 8 beds required to be entitled to utilise the Access nurse for 24 hours. If none of the minimum beds met for additional staff, the allocation will be on pro rata basis. Nurses in non-direct roles are in addition to direct patient care nurses and are excluded from NHpPD calculations e.g., Nurse Manager, Staff Development etc.	10 beds required to access the shift coordinator for 26 hours. Nurses in non-direct roles are in addition to direct patient care nurses and are excluded from NHpPD calculations e.g., Nurse Manager, Staff Development etc.	≥ 6 beds required to access the shift coordinator for 16 hours pro rata. (Units with less than 6 beds will be unlikely to have standalone status and be incorporated into a ward environment using split category calculations). Nurses / midwives in non-direct roles are in addition to direct patient care nurses / midwives and are excluded from NHpPD calculations e.g., Nurse / Midwife Manager, Staff Development etc.

9. Maternity Services

- Maternity services within the WA health system have previously been categorised as tertiary, secondary and regional services. NHpPD category and associated hours for maternity services are now defined according to the level of service.
- Maternity services are categorised in accordance with the CSF, Level 1 – Level 6.
- Level 4, Level 5 and Level 6 maternity services assign NHpPD to their post-natal wards only (see Table 3). It is acknowledged the number of births varies for each reporting period and therefore for reporting purposes NHpPD is not applied or will vary month by month.
- Level 2 and Level 3 maternity services use a combined methodology utilising the ward and labour and birth component of care to allocate NHpPD (Table 3).
- NHpPD are not applied to Midwifery Group Practice models.

10. Emergency Department

- Workload within the Emergency Department (ED) is referred to as Nursing Hours per Patient Presentation (NHpPP).
- ED data is gathered centrally by the System Manager, namely the ED Data Collection (EDDC) team. This data is provided monthly to all ED managers within the HSPs. ED FTE are calculated based on the data provided. It is acknowledged that ED presentations fluctuate and therefore FTE requirements will vary.
- EDs with more than 60 000 presentations per annum are entitled to a Shift Coordinator.

Table 5: ED NHpPP Terminology and Definitions

ED Terminology	Definition
Additional Roles	Related to direct patient care (for example pod coordinator, team leader role). This does not include Senior Registered Nurse roles. Additional Roles is a fixed figure (see Table 6). In NHpPP formula, value is “E”.
Dead on Arrival (DOA)	Patients declared as DOA should be included in patient presentation.
Did not Wait (DNW)	Patients declared as DNW should be included in patient presentation.
Observation Ward	Only applies to HSPs with a designated observation unit. This is generally restricted to the larger facilities with a dedicated

	separately staffed ED. The NHpPD category for observation areas was increased to category B (6.0) in 2014 following system-wide consultation.
Ongoing Care	The nursing time per hour or part there of required for the ongoing nursing care of the patient whilst in the ED. Ongoing Care is a fixed figure (see Table 6). In NHpPP formula, value is "C".
Patient Assessment Time	The nursing time taken for full assessment of the patient. This will include initial observations, review (where indicated), commencement of monitoring and other treatment modalities (e.g. intravenous cannula). Patient Assessment Time is a fixed figure (see Table 6). In NHpPP formula, value is "B".
Triage	Prioritisation system used to determine clinical urgency and allocate patients to the most appropriate assessment / treatment area. NHpPP categories used as defined in the Australasian Triage Scale (see Table 6).
Triage Average Length of Stay (ALOS)	ALOS from the time of triage until disposition from the ED In the NHpPP formula, value "D" is dependent on ALOS.

ED Nursing Hours per Patient Presentation Formula:

- The formula to calculate NHpPP is provided in Figure 4 below.
- The fixed variables used to calculate NHpPP are related to the Australasian Triage Score (ATS) (Table 6 below).
- The NHpPP formula should be applied to each ATS to determine FTE requirements.

Figure 4: NHpPP Formula

NHpPP = B + (C x D) + E

B – Patient Assessment Time (fixed figure)
C – Ongoing Care (fixed figure)
D – Number of NHpPP per triage score (variable figure dependent on each department)
E – Reflects additional roles within ED for example pod coordinator, team leader role. These roles are related to direct patient care (Clinical, registered, enrolled nurse). This does not include Senior Registered Nurse roles. (fixed figure)

Table 6: ED Triage Workload Variables required to calculate ED NHpPP

Australasian Triage Scale	Maximum waiting time for medical assessment and treatment	Patient Assessment Time (hours) (B)	Ongoing Care (hours) (C)	Additional Roles (hours) (E)
1 Resuscitation	Immediate	2.00	1.00	1.00
2 Emergency	Ten minutes	1.00	0.50	0.50
3 Urgent	30 minutes	0.50	0.33	0.33
4 Semi-urgent	60 minutes	0.50	0.25	0.25
5 Non-urgent	120 minutes	0.25	0.17	0.17

11. Renal Services

- Renal services are categorised in accordance with the CSF 2025-2035, Level 3 – 6.
- Workload within Renal Service delivery is referred to as Nursing Hours per Patient Session (NHpPS).
- The renal model will be applied based on actual sessions, not capacity. The actual session's information is required to be drawn from the site patient information and financial systems.
- NHpPS for satellite units is 2.18 and 3.02 for Level 5 - 6 units. The higher allocation to these units is in recognition of the increased complexity of the patient load.
- Level 4 renal units are used and referred to in current practice as Satellite units.

12. Review of Allocated NHpPD Category

- Utilising the NHpPD guiding principles (Table 3), each ward/unit is allocated a NHpPD category to identify and report the number of direct nursing and midwifery hours required to meet direct patient care.
- Classification or reclassification of NHpPD category may be applied for in the event of creation of a new ward/unit or, the complexity or composition (mix) of the ward/unit

changes. HSPs may submit a business case for a ward/unit category to be formally reviewed and updated.

- The CNMO must be notified of any newly established wards or any reconfiguration of existing wards within 6 months of the change being implemented.
- NHpPD reclassification requests may not be submitted in the 6 months prior to transition to the WA Ratio Model.

12.1 Process for Classification or Reclassification of a NHpPD category

- The CNMO coordinates consultation with the WA Health State Workload Review Committee (SWRC) for all classification and reclassification requests.
- The SWRC is comprised of members of the WA Health Nursing and Midwifery Advisory Council (WAHNMAC).
- Further information regarding of the classification – reclassification process can be found in the "Prepare a business case of classification-reclassification of NHpPD" document located on the Department of Health website.

12.2 Business Case Submission

- All business cases must be accompanied by:
    - Completed and endorsed *Classification-Reclassification Request Form*
    - NHpPD evidence for at least the preceding two years (for reclassifications)
    - Inclusion of following information may support the business case:
        - Benchmarking of similar specialty wards/areas (locally/nationally)
        - Average length of stay (ALOS)
        - Patient turnover
        - Births
        - Occupied bed days averaged
        - Admissions via emergency department/community/other
        - Provide evidence of the patient complexity/clinical (patient) mix.

12.3 Endorsement

- The business case including any supporting documentation must be endorsed and supported by the Divisional Nurse/ Midwife Director or Nurse / Midwife Co-Director, ***and*** Area or Executive Director of Nursing/Midwifery of the relevant HSP.

12.4 Review and Decision

- A formal letter signed by the CNMO outlining the decision and outcome will be forwarded to the Area or Executive Director of Nursing/Midwifery and/or Director of Nursing/Midwifery.
- It is the responsibility of the Area or Executive Director of Nursing/Midwifery and/or Director of Nursing/Midwifery to notify and inform relevant personnel of the classification / reclassification review outcome.
- The Australian Nursing Federation Industrial Union of Workers Perth (ANF) and United Workers Union WA are advised of endorsed classifications and reclassifications via 6 monthly NHpPD reporting.

13. Authorisation

Version	**Date Issued**	**Compiled / Revised By**	**Committee/Consumer Group Consulted**	**Endorsed By**	**Revision due**
1	09/2019	Chief Nursing and Midwifery Office	WA Health Nursing Midwifery Advisory Council	WA Health Nursing Midwifery Advisory Council	10/2020
2	12/2025	Chief Nursing and Midwifery Office	WA Health Nursing Midwifery Advisory Council	WA Health Nursing Midwifery Advisory Council	12/2027

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

health.wa.gov.au