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

NHpPD application manual

Guiding principles

2019 revised edition

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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

Contents

1. Aim

The aim of this document is to provide updated guidance and assistance for nurses and midwives to understand the Nursing Hours per Patient Day (NHpPD) workload methodology used within Western Australia (WA). It is noted ongoing development and refinement of the model is required to ensure reasonable workloads for all nurses and midwives.

Midwives have been included in this iteration of the guiding principles to align with the recent changes to the Health Practitioner National Law (WA) Act 2018 which recognises nursing and midwifery as separate and distinct professions regulated by a single Board.

2. Overview

Nursing and midwifery workload management within WA public sector is applied through a NHpPD methodology following an Exceptional Matters Order (EMO) issued by the WA Industrial Relations Commission on 11 February 2002.

The NHpPD model:

- Ensures flexibility in the supply of nursing and/or midwifery hours to meet the variable demands of patient care, with the recommendation of minimum safe staffing levels.
- Measures and reports on the direct clinical care hours required and provided by nurses and midwives.

NHpPD guiding principles (Table 3) specify ward category, associated hours and criteria for measuring diversity, complexity and nursing tasks required. The NHpPD guiding principles also includes criteria for the Emergency Department, Intensive Care Unit, Coronary Care Unit, High Dependency Unit and Mental Health services.

3. Roles and Responsibilities

There are a number of key roles and responsibilities in the application of NHpPD. The roles and responsibilities are outlined in Table 1.

Table 1: Key roles and responsibilities for NHpPD

Role	Responsibilities
Health Support Services	• Provide required support to the NMO surrounding the NHpPD monitoring and reporting tool • Provide data linkage to RoSTAR and PAS applications for NHpPD reporting

Role	Responsibilities
Chief Nursing and Midwifery Office	• Govern the NHpPD guidelines • Facilitate bi-annual reporting to the unions, Australia Nursing Federation and United Voice, as part of the industrial workload management case • Facilitate category classification and reclassification on behalf of the WA Health State Workload Review Committee
Health Service Providers	• Monitor and manage NHpPD • Report NHpPD to the NMO
WA Health State Workload Review Committee	• Assess and review business cases submitted by Health Service Providers where complexity of ward/department has changed • Determine whether ward category and NHpPD should be updated • Formally review the business case classification annually to ensure practice is contemporary and relevant
WA Health Nursing and Midwifery Workload Consultative Process Committee	• Consult and communicate with Health Service Providers regarding overall nursing and midwifery workload issues

4. Definitions

Table 2 provides an overview of the definitions associated with NHpPD workload methodology.

Table 2: Definitions

Boarder	An individual who is receiving food and/or accommodation but for whom the Health Service Provider does not accept responsibility for treatment and/or care (eg person assisting with care).
Clinical Services Framework	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. Clinical Services Framework 2014-2024 is the most current document.
Direct Hours	Nursing and Midwifery hours that deliver direct patient care which may involve any aspects of the health care of a patient, including treatments, counselling, self-care, patient education and administration of medication.
Doze	Paid shift but not at work due to ANF 9.5 Hour Breaks clause. Doze is classified as non-direct hours.
Mandatory Training	Compulsory training that is 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	Involves work that may support patient care, but the work does 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 including clinical nurse manager, nurse unit manager, associate nurse manager, staff development and Occupational Safety Health representative.
Non-productive Hours	Paid leave for nurses and midwives, including 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 Day	Total time a patient is allocated to the workload of a nurse or 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 or midwife.
Productive Hours	Ordinary hours, 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.

5. Guidelines

- Nursing and midwifery hours are sourced from staff rostering system, RoSTAR.
- Patient hours are sourced from Patient Administration System (PAS).
- Total nursing and midwifery hours will only include direct hours.
- Non-direct hours such as Doze, mandatory training, orientation, other clinical area and supernumerary are excluded.
- Clinical nurse managers, nurse unit manager and associate nurse managers are excluded from NHpPD calculations.
- Total nursing and midwifery hours will include productive hours provided by permanent, temporary, casual, agency and pool nurses.
- The Shift Coordinator is part of NHpPD and therefore is not excluded in any category.
- Nursing and midwifery hours and patient hours are reported on a monthly basis and are to capture the first to last day (inclusive) of each month.
- Nursing and midwifery hours are calculated on the shift duration provided to a ward/unit by the nurse or midwife (excluding meal break) starting from the shift start time, regardless if the shift overflows to the next day or next roster.
- Non-productive hours on any type of paid or unpaid leave are excluded (including personal leave, annual leave, long service leave, study leave, public holiday, workers compensation).
- All patient hours are counted with the exception of:
    - 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 1996* (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
		• Special Unit/Ward including Mental Health Unit
		• High Patient Turnover(1) > 50%
		• FHHS Paediatrics(2)
		• Secondary Paediatrics
		• Tertiary Maternity
		• MH – High risk of self-harm and aggression
		  ▪ Patients frequently on 30 minute observations
		  ▪ Occasional 1:1 nursing
		  ▪ Mixture of open and closed beds
		  ▪ Seclusion used as per Mental Health Act 1996 (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

Ward Category	NHpPD	Criteria for measuring diversity and complexity of tasks
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: NHpPP = B + (C x D) + E (*See Figure 1 for descriptors – Page 13*)
Intensive Care Unit (ICU)	31.60	Tertiary designated ICU.
Coronary Care Unit (CCU)	14.16	Designated stand alone CCU.
High Dependency Unit (HDU)	12.00	Designated stand-alone HDU High Dependency Unit at ≥6 beds
Renal (T)	3.02	Stand alone Tertiary Renal Unit
Renal (S)	2.18	Stand alone Satellite Renal Unit

Notes:

- 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 2018* and *WA Health System– United Voice – Enrolled Nurses, Assistants in Nursing, Aboriginal and Ethnic Health Workers Industrial Agreement 2018.* The NHpPD guiding principles will be reviewed as part of these current Agreements.
- The Emergency Department (ED) formula has been updated to calculate current ED workload.
- "Nursing" is excluded in NHpPD Guiding Principles third column title to align with recent changes to the Health Practitioner National Law (WA) Act 2018 which recognises nursing and midwifery as separate and distinct professions.

6. Application of the guiding principles

6.1 General wards

- Calculating Nursing Hours required for Ward/Unit, for a 7 day period:
  - Identify ward/unit category (A to G) to establish the NHpPD.
  - Calculate the daily average patient hours.
  - Calculate average daily required nursing hours for ward/unit.
  - Calculate total nursing hours for 7 day period.

> ***For example: Ward 4 has 30 beds and is a category B ward (6.0) with 96.6% occupancy which equates to 29 bed average occupancy***
>
> **Total NHpPD** = B (category of ward) x C (average occupancy)
>
> = 6.0 x 29
>
> = 174 nursing hours
>
> Total FTE/ wk = (174 nursing hours x 14 days) ÷ 76 hrs
>
> = 32.05 FTE

- Determining NHpPD Category of Split Ward
  - Wards may have a mix of patients that fall into two categories, found primarily in Level 2 - 4 sites.
  - Split wards are allocated a classification based on the percentage split of their patients.

> ***For example:*** **A 30 bed ward with split of 0.67% category C and 0.33% category D.**
>
> **Total NHpPD** = (C NHpPD x % split) + (D NHpPD x % split)
>
> = (5.75 x 0.67%) + (5.0 x 0.33%)
>
> = 3.85 + 1.65
>
> = 5.50

6.2 Intensive care, coronary care and high dependency

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

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
Additional Staff	Shift Coordinator Admission 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 admission nurse for 24 hours. If none of the minimum beds met for persons involved, the allocation will be on prorata basis. Clinical nurse managers [non-direct patient care] are in addition to direct patient care nurses and are excluded from NHpPD calculations.	10 beds required to access the shift coordinator for 26 hours Clinical nurse managers [non-direct patient care] are in addition to direct patient care nurses and are excluded from NHpPD calculations.	≥ 6 beds required to access the shift coordinator for 16 hours prorata. (Units with less than 6 Beds will be unlikely to have standalone status and be incorporated into a ward environment using split category calculations). Clinical nurse managers [non-direct patient care] are in addition to direct patient care nurses and are excluded from NHpPD calculations

6.3 Maternity services

- Maternity services within the WA health system have previously been categorised as tertiary, secondary and regional services. However, from a reporting perspective the NHpPD category and associated hours for maternity services are 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.

6.4 Emergency department

- Workload within the ED is referred to as Nursing Hours per Patient Presentation (NHpPP).
- ED data is centrally provided by the System Manager, namely the ED Data Collection (EDDC) team. Data is provided monthly to all ED managers within the Health Service Providers. ED Full Time Equivalent (FTE) are calculated based on the data provided. It is acknowledged that ED presentations fluctuate and therefore FTE requirements will vary.
- ED 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 Health Service Providers with a designated observation unit. This is generally restricted to the larger facilities that have a dedicated separately staffed emergency department rather than an emergency service that is staffed together with a ward based structure. As per Table 3 designated as C category (5.75) ward area as per the NHpPD Guiding Principles. In 2014 a system wide decision was made to increase the NHpPD to B Category (6.0) for observation areas.
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 time taken for a nurse or nurses to fully assess the patient. This will include initial observations, would review (where indicated), commencement of monitoring and other treatment modalities (eg intravenous cannula). Patient Assessment Time is a fixed figure (see Table 6). In NHpPP formula, value is “B”.
Triage	System used to sort and allocate patients based on the categories in the Australasian Triage Scale (see Table 6).
Triage Average Length	ALOS from the time of triage until departing the ED to a ward,

ED Terminology	Definition
of Stay (ALOS)	observation unit, interhospital transfer or mortuary. In the NHpPP formula, value “D” is dependent on ALOS.

ED Nursing Hours per Patient Presentation Formula

- The formula to calculate NHpPP is available in Figure 1.
- The fixed variables used to calculate NHpPP are related to the Australasian Triage Score (ATS) (Table 6).
- The NHpPP formula should be applied to each ATS to determine FTE requirements.
- Assistance to calculate the ED FTE is available through the WA Chief Nursing and Midwifery Office (CNMO).

Figure 1 – NHpPP Formula Description

NHpPP = B + (C x D) + E

B – Patient Assessment Time *(fixed figure)*
C – On going Care *(fixed figure)*
D – Number of NHpPP per triage score *(variable figure dependent on each department)*
E – Reflects on 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

7. Renal services

- The model of care for Renal Service delivery has changed significantly since 2007 in accordance to the CSF 2014 - 2024.
- Renal services are categorised in accordance with the CSF 2014-2024, Level 3 – Level 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.
- Despite the model of care changing for Renal service delivery it is to be acknowledged that Level 4 renal units are used and referred to in current practice as satellite units.

8. Mental health services

- Legislation and local reconfiguration of services for Mental Health have changed significantly since 2007. This includes but is not limited to the contribution of the following:
  - Mental Health Act 2014
  - WA Mental Health, Alcohol and Other Drug Services Plan 2015-2025
  - Inpatient units specific to service user needs (e.g. youth specific, mother and baby specific)
  - Hospital in the home services.

- Mental health services align to the NHpPD Guiding Principles in the *WA Health System – Australian Nursing Federation – Registered Nurses, Midwives, Enrolled (Mental Health) and Enrolled (Mothercraft) Nurses – Industrial Agreement 2018* and *WA Health System– United Voice – Enrolled Nurses, Assistants in Nursing, Aboriginal and Ethnic Health Workers Industrial Agreement 2018.* The NHpPD guiding principles including mental health will be reviewed as part of these current Agreements.

9. Review of Allocated Benchmark

- Utilising the NHpPD guiding principles (Table 3) each ward/unit is allocated the benchmark of a category to identify and report the number of direct nursing and midwifery hours required to meet direct patient care.

- In the event that there is a new ward/unit or, the complexity or the relative proportion of the ward/unit activity changes; the NHpPD model incorporates a classification and reclassification review process.

- The classification and reclassification process allows HSP to submit a business case to have their category formally reviewed and updated against criteria.

9.1 Process for Classification or Re-classification of a NHpPD category

- Refer to Figure 2 (on page 14) for the *Classification-Re-classification Flow Chart*.
- The CNMO coordinates all classification and reclassification requests, and consult directly with WA Health State Workload Review Committee (SWRC).
- A SWRC will comprise of the following membership (minimum of four):
    - Department of Health - CNMO
    - Metropolitan Level 6 Health Service Provider (HSP) – Executive Director of Nursing and Midwifery
    - Metropolitan Level 3 – 5 HSP – Director of Nursing and Midwifery
    - WA Country Health Service – Executive Director of Nursing and Midwifery
    - Specialty specific Director of Nursing for example in classifications such as mental health, paediatrics
    - Midwifery Director or Co-Director
- Any employee who believes that the benchmark category applied to a ward area does not reflect current activity or complexity can prepare the business case.

9.2 Business Case Submission

- All business cases must be accompanied by validated data as listed below:
    - Complete and submit the *Classification-Reclassification Request Form*
    - NHpPD evidence for at least the preceding two years (for reclassifications)
    - Inclusion of following information may assist 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,
        - Validate the criteria description of patient complexity/clinical mix

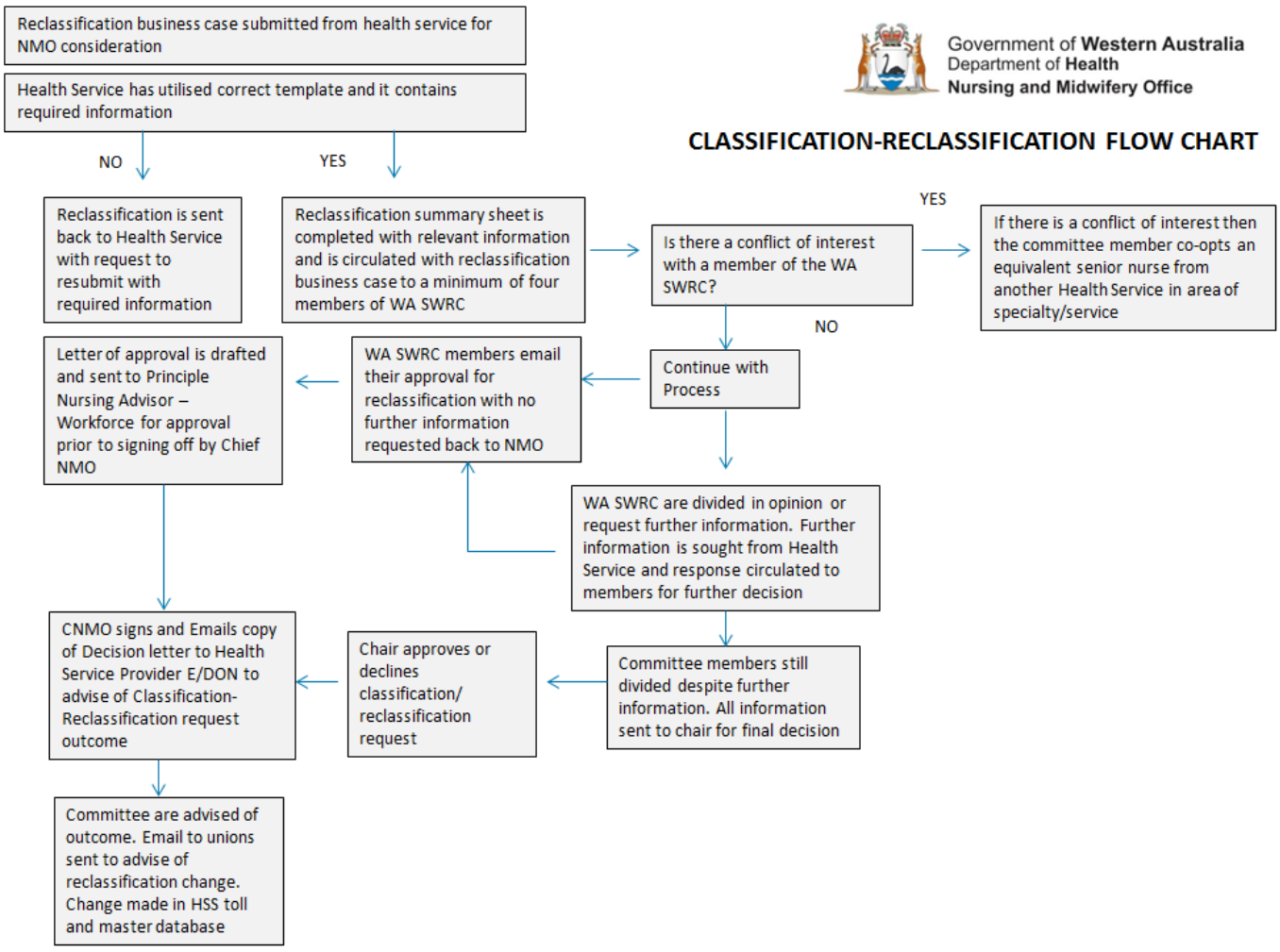
9.3 Endorsement

- Complete documentation must be endorsed and supported by Director of Nursing/Midwifery or Co-Director of the relevant HSP, and Executive Director of Nursing/Midwifery.

9.4 Review and Decision

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

Figure 2. Classification - Reclassification Flow Chart



10. 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

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