Safe Staffing

‘The Basics’
Nursing Hours per Patient Day Model
(NHPPD)

This resource has been developed for nurses employed within the Department of Health and Human Services.

Version 1.0
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1. What is this learning package all about?

The aim of this learning package is:

- to provide you with information regarding the Nursing Hours per Patient Day (NHPPD) workload model, and how it is applied to nurse staffing levels within the Department of Health and Human Services (DHHS) Tasmania.

By reading this learning package you will develop an understanding of the NHPPD model, its history and its application to nursing workload and staffing levels.

2. Why do I need to understand this?

Clause 4 of the Nurses (Tasmanian Public Sector) Enterprise Agreement 2007, (T13071 of 2007), NHPPD Model, Order by Consent, No 1 of 2008 states:

- “The employer shall ensure that the implementation of the NHPPD model shall be made clearly visible to nurses at all levels. Agreed educational resources will be developed by the parties…”

Knowledge about the NHPPD model and your ward/unit’s benchmarked nursing hours means you will:

- understand how your ward/unit staffing levels were established;
- develop an understanding of the terminology used regarding NHPPD and workload management;
- be able to verify your staffing requirements for the care required by patients/clients within your ward/unit;
- understand that in times of high demand or low demand for patient/client care your staffing requirements may alter; and
- understand the necessary processes and steps required if staffing issues exist or occur within your ward/unit.
3. What is the NHPPD Workload Model?

_Nursing Hours per Patient Day (NHPPD)_ was agreed to as the nursing workload model during the Tasmanian Nurses EBA negotiations in 2002.

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 area. The model is used to guide unit staffing levels during annual budget setting, establish resource allocation to meet patient care demands and as a framework to create a nursing roster.

The model consists of seven (7) categories that contain specified criteria for measuring patient activity, diversity, complexity and nursing tasks required. The categories are aligned with a nursing hour value over a 24-hour period ranging from 3.0 hours to 7.5 hours per patient. These are collectively termed the _NHPPD Guiding Principles_. (See Page 5)

The Guiding Principles detail the hours of _direct care only_ that are required for patients in a range of clinical settings. However, they do not fit all service areas where nurses are required to work. _Indirect care_ hours (e.g. nurse unit manager, clinical nurse educator) and leave allowances are not included in the guiding principles – they are added to the nursing hours after the direct care hours have been calculated.

The Guiding Principles apply to acute patient care areas and mental health in-patient units.

The NHPPD model is not a rigid, mandatory determinant of staffing. It provides a mechanism to ensure flexibility in the supply of nursing hours to meet the variable demand for patient care. The model relies on clinical judgement to assess variations in clinical needs on a shift-by-shift or patient-by-patient basis.

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4. **NHPPD Guiding Principles**  
(Incorporating Mental Health Inpatient Units - MH)

<table>
<thead>
<tr>
<th>Ward Category</th>
<th>NHPPD (Over 24hrs)</th>
<th>Criteria for measuring diversity, complexity and nursing tasks required</th>
</tr>
</thead>
</table>
| A             | 7.5                 | High Complexity  
Tertiary Step Down ICU  
High Intervention Level                           |

CNAH – Basic Learning Package — Version 1.0
<table>
<thead>
<tr>
<th>Code</th>
<th>Complexity</th>
<th>Description</th>
</tr>
</thead>
</table>
| B    | 6.0        | High Complexity  
No High Dependency Unit  
Tertiary Step Down CCU/ICU  
Moderate/High Intervention Level  
Special Unit/Ward including extended secure 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  
- a mixture of open and closed beds |
| C    | 5.75       | High Complexity Care Unit/Ward  
Moderate Patient Turnover > 35%, OR  
Emergency Patient Admissions > 50%  
**MH** – Moderate risk of self harm and aggression  
- Psychogeriatric Mental Health Unit |
| 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 |
| E    | 4.5        | Moderate Complexity  
Moderate Patient Turnover > 35%  
Sub Acute Unit/Ward  
Rural Paediatrics |
| 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 and Renal Dialysis Unit |

(1) Turnover = Admissions + Transfers + Discharges divided by Bed Number  
(2) FHHS (Fremantle Hospital & Health Service) Paediatrics additional formulae: Birth; Neonates; ED; OR.
5. Benchmarking (Model Application Process)

Benchmarking involves determination of the number of direct nursing hours that are required to care for the average patient on the ward/unit. This determination is made through assessment of criteria within the NHPPD Guiding Principles combined with the professional judgement of experienced senior nurses to allow for varying patient complexities.

Assessment of the criteria within the Guiding Principles requires the collection and analysis of retrospective patient activity data over the previous two (2) years (where available). This data includes patient occupancy rates, patient turnover numbers (admissions, discharges and transfers), and the percentage of emergency admissions. Retrospective data relating to benchmarked nursing hours compared to actual nursing hours worked are also reviewed to ensure safe staffing according to the ward/unit's activity.

By accurately selecting a ward category within the Guiding Principles, the calculation of the number of direct nursing staff required within a ward/unit can be determined. The aim is to ensure reasonable workloads for nurses to enable safe, quality care for patients.

Benchmarked nursing hours from wards/area within the DHHS can then be compared with other ‘like’ ward/areas across Australia.

There will be ongoing communication between the Department, ANF and HACSU, at an Agency level and at the service delivery level to manage the NHPPD model and its application to ensure safe staffing levels.

6. What are the application guidelines and data definitions that apply to the implementation of NHPPD?

During 2009, the NHPPD Steering Committee comprehensively reviewed the application guidelines and data definitions relating to the implementation of NHPPD at the local level, with an aim to develop a consistent state-wide approach to the NHPPD model application. (See Appendix 2).

7. Frequently Asked Questions:

Why are there some areas that are not benchmarked within the DHHS?
The criteria within the NHPPD Guiding Principles do not apply to all wards/units/areas at a level that adequately reflects the work that nurses do.

For areas where the NHPPD Guiding Principles do not apply, specific working parties will be formed to research the development of alternative models; aiming for a state-wide consistent approach.

In Tasmania, the Operating Suite is one example is where a new model was developed based on the ACORN (Australian Council of Operating Room Nurses) professional standards to determine the nurse staffing levels in Operating Suites across Tasmania.

**Will my Nurse Unit Manager be able to benchmark the ward/unit?**

If the criteria within the NHPPD Guiding Principles that measure patient diversity, complexity and the nursing tasks required can be applied to your ward/unit, then your Nurse Unit Manager together with senior nursing staff within the organisation will be able to benchmark the area. Benchmarking is undertaken in a planned way within each facility.

Educational resources have been designed to inform Nurse Unit Managers and senior nursing staff how to benchmark, the business planning processes and workload management. These include:

- The NHPPD User Manual
- Unit Management: a Resource Manual for Nurse Managers
- Nurse Rostering: a guide for Nurse Managers within the DHHS

**How can I learn more about Nursing Workload Monitoring?**

You can become familiar with data definitions that relate to the NHPPD model and how they apply to nurse staffing within your ward/area.

If your area has been benchmarked, find out what your NHPPD nursing hours are by talking to your NUM. Discuss nursing workload monitoring, occupancy, patient turnover rates, patient complexity and nursing intervention levels and actual nursing hours at ward/unit meetings.

Take interest in your ward/unit’s monthly NHPPD reports. Discuss data and variances at ward/unit meetings and with your NUM.
8. NHPPD Grievance Process

If you have any staffing issues you must firstly discuss them with your NUM. Within the NHPPD Model, Order by Consent there is a **grievance process**. Nurses may raise a grievance that relates to workload under this process.

The process consists of three (3) **defined steps** outlining how/who will assist with resolution of any grievance or dispute. Please refer to the Nurses (Tasmanian Public Sector) Enterprise Agreement 2007, (T13071 of 2007), **NHPPD Model, Order by Consent, No 1 of 2008** for more information regarding lodging a grievance.

**Please note:** refer to the Area Health Service, Executive Director of Nursing (EDON) unless the position of DON is relevant in the service area (e.g.: Mental Health Services).

### Grievance Procedure

#### Step 1 – Ward/Unit Level – must be concluded within one calendar week from the time raised with NUM
- Nurse/Group of Nurses discuss grievance with NUM
- NUM shall consult **EDON/DON** to assist resolution of grievance
- Agreement of interim measures between parties

#### Step 2 – Hospital Level – must be concluded within two calendar weeks from the commencement of Step 2
- Refer matter to **EDON/DON** in writing
- Convene specialist panel with 1 ANF & 1 HACSU Union Rep & 2 management reps without delay
- Provide recommendations to CEO for resolution
- If not resolved within 2 weeks proceed to Step 3

#### Step 3
- If the matter cannot be resolved at Step 2, either party may refer the matter to the Tasmanian Industrial Commission (TIC) for assistance which shall include conciliation and if necessary arbitration
9. Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Hours per Patient Day (NHPPD)</td>
<td>A systematic nursing workload monitoring and measuring system to ascertain the number of nurses required for service provision within a specific area.</td>
</tr>
<tr>
<td>Benchmarking</td>
<td>The term used when a ward/unit/area’s total nursing hours have been calculated and assessed to give direct nursing hours required (based on the guiding principles where applicable). In-direct hours and a leave factor are added to this figure to give a final number of full time equivalent nursing staff required to safely deliver care.</td>
</tr>
</tbody>
</table>

10. Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ACORN</td>
<td>Australian College of Operating Room Nurses</td>
</tr>
<tr>
<td>ANF</td>
<td>Australian Nursing Federation</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CNAH</td>
<td>Chief Nurse and Allied Health</td>
</tr>
<tr>
<td>CNE</td>
<td>Clinical Nurse Educator</td>
</tr>
<tr>
<td>DHHS</td>
<td>Department of Health and Human Services</td>
</tr>
<tr>
<td>DON</td>
<td>Director of Nursing (or facility equivalent)</td>
</tr>
<tr>
<td>EBA</td>
<td>Enterprise Bargaining Agreement</td>
</tr>
<tr>
<td>EDON</td>
<td>Executive Director of Nursing (Area Health Service level)</td>
</tr>
<tr>
<td>HACSU</td>
<td>Health and Community Services Union</td>
</tr>
<tr>
<td>NHPPD</td>
<td>Nursing Hours Per Patient Day</td>
</tr>
<tr>
<td>NMEx</td>
<td>Nursing and Midwifery Executive</td>
</tr>
<tr>
<td>NUM</td>
<td>Nurse Unit Manager</td>
</tr>
<tr>
<td>PAS</td>
<td>Patient Administration System</td>
</tr>
<tr>
<td>RN</td>
<td>Registered Nurse</td>
</tr>
<tr>
<td>SME</td>
<td>Senior Management Executive</td>
</tr>
<tr>
<td>TIC</td>
<td>Tasmanian Industrial Commission</td>
</tr>
<tr>
<td>TOIL</td>
<td>Time off in-lieu</td>
</tr>
</tbody>
</table>
Appendix 1

NHPPD Background Information

Clause 14 in the Nurses (Tasmanian Public Sector) Enterprise Agreement 2001, directed an examination of nurse rostering, patient acuity, staffing mix and skill mix by the unions and the DHHS. As a result, the Western Australian NHPPD model was adapted for use in the Tasmanian DHHS in 2002. The Northern Territory has also adopted the NHPPD model.

Consequently, the NHPPD ‘Consent Order’ dated May 2003 was designed and endorsed through the Tasmanian Industrial Relations Commission and has continued in the Nurses Enterprise Bargaining Agreements (EBA) to date.

The Consent Order is a document containing the NHPPD model in its entirety. It outlines:

• employer responsibilities to ensure that unreasonable workloads for nurses are prevented;
• key principles of workload allocation and rostering processes;
• consultative and communication requirements;
• a procedure for lodging grievances related to nursing workloads for all nurses;
• the NHPPD model application process; and
• the review process of the model’s functional effectiveness and method of implementation.

During 2002 - 2007 many acute clinical settings were benchmarked and this was coordinated within the Office of the Chief Nurse and Allied Health.

The 2007 Nurses Enterprise Bargaining Agreement included a clause ordering a review of the NHPPD Model. This resulted in the formation of a joint working party from the DHHS, the Australian Nursing Federation (ANF) and the Health and Community Services Union (HACSU) during 2008.

This review resulted in the Nurses (Tasmanian Public Sector) Enterprise Agreement 2007, (T13071 of 2007), NHPPD Model, Order by Consent, No 1 of 2008, which became operational in December 2008.

During 2009, the joint NHPPD Steering Committee (DHHS, ANF, and HACSU) worked together to refine the model and implement the changes agreed upon during 2008 with the aim to achieve consistent state-wide application of the NHPPD model in areas where nurses work.

Comprehensive review of the application guidelines that underpin the NHPPD model were undertaken together with assessment and development of refined business processes required to allow further implementation of the model at the local level by senior nursing staff.
Outcomes of the 2008 review

The joint NHPPD Steering Committee (DHHS, ANF, and HACSU) agreed:

- to maintain the current NHPPD model in accordance with the entirety of the revised NHPPD schedule;
- to develop an implementation plan for areas yet to be benchmarked;
- that alternative workload models may be trialled during the life of the current 2007 Nurses Enterprise Agreement;
- that educational resources regarding the NHPPD model will be developed; and
- that ongoing education programs will be delivered throughout the life of the current 2007 Nurses Enterprise Agreement.

NHPPD Model Application Process

- Benchmarking of a ward/unit/area will be undertaken by the Chief Executive Officer (CEO) /Director of operational unit and/or delegate (e.g.: senior nurse) in conjunction with the relevant Nurse Unit Manager (NUM).
- Where the NHPPD model is able to be applied, the total number of nursing hours relevant to the ward/unit where nursing services are provided within each individual facility/sector will be calculated (benchmarked) using the NHPPD Guiding Principles.
- The final benchmarking report will be reviewed by the EDON/DON and NUM in conjunction with the Business Manager/ Finance Officer, and forwarded to the CEO for endorsement within each individual facility/sector.
- Where the NHPPD guiding principles are not applicable to the service area, a process for determining an appropriate state-wide, consistent workload model will be researched and trialled within the service area prior to final application.
Appendix 2

NHPPD Application Guidelines

- Where applicable nursing hours are sourced from ProAct, the staff rostering system.
- Patient hours are sourced from the Patient Administration System (PAS).
- Nursing hours and patient activity are reported on a monthly basis and capture the first to the last day (inclusive) of each month.
- Sites must be able to verify by audit that the data submitted is accurate and complies with these application guidelines.
- Monthly NHPPD reports will include but are not limited to:
  - NHPPD patient category;
  - Average Daily Occupancy;
  - Direct nursing hours total;
  - Actual NHPPD;
  - Benchmarked NHPPD;
  - Direct nursing hours variance;
  - Direct nursing hour variance as a percentage;
  - Patient turnover as percentage; and
  - Percentage of Emergency Patient Admissions.
- Data is to be provided for the month and for the year to date.
- Monthly nurse staffing reports will include a breakdown of the monthly and year to date basis of the productive (direct and indirect) and non-productive nursing hours including the following: casual, overtime, permanent part time, fixed term part time, permanent full time, fixed term full time.
- When calculating NHPPD, two (2) years of data are to be used, if available. One (1) year of data may be used when calculating NHPPD for Acute Emergency Departments.
- Nurses providing direct care only will be included (eg: Nurse Unit Managers, Clinical Nurse Educators and other budgeted indirect hours are not counted).
- Total nursing hours providing direct patient care will comprise of any approved, paid hours worked including overtime and allocated time off in lieu (TOIL). When TOIL has been taken, the direct hours will be deducted from the unit nursing hours for that day.
- Total nursing hours declared will include direct patient care provided by permanent, temporary, casual, agency, or pool nurses.
- Nursing hours worked are calculated on the shift duration provided to a ward/unit by the nurse (excluding any unpaid meal break) starting from the shift start time, regardless if the shift overflows to the next day or next roster.

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1 Unit of Service/Occupancy reports from ProAct include data such as beds available, beds open and occupancy percentage.
2 Any additional indirect care hours to the NUM and CNE, must be approved through the CEO after consultation with the EDON. Additional indirect hours require submission of a business care proposal.
• Non-productive hours relating to nurses on any type of paid leave are excluded. (Including, but not limited to: personal leave, annual leave, workers compensation leave, study leave, maternity leave, compassionate leave, family leave, parental leave, accrued day off, professional development leave, etc).

• Standard orientation consists of up to five (5) days for new staff, and up to ten (10) days for new graduates. This includes standard agency induction and the facility/health service based orientation. These hours are calculated as indirect nursing hours.

• The additional allocation of indirect hours for supernumerary practice is at the discretion of the NUM in collaboration with their Manager.

• Patient activity data for calculation of NHPPD will include, but not be limited to, items listed in the NHPPD Guiding Principles (see Nurses (Tasmanian Public Sector) Enterprise Agreement 2007, (T13071 of 2007), NHPPD Model, Order by Consent, No 1 of 2008).

• One (1) category from the NHPPD Guiding Principles is to be used when benchmarking a ward/unit. A maximum of two (2) categories can be used where patient care requirements clearly differ (eg: ward patients / high dependency patients).

• All patient hours are counted.

• Patients on leave are not counted in the activity data.

• Boarder hours will be excluded (see definition below).

### NHPPD Data Definitions

<table>
<thead>
<tr>
<th>Description</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productive nursing hours</td>
<td>Include paid nursing time for direct and indirect nursing hours.</td>
</tr>
<tr>
<td>Direct hours</td>
<td>Include nursing hours that deliver direct patient care.</td>
</tr>
<tr>
<td>Indirect hours</td>
<td>Include nursing hours that are not available for patient care.</td>
</tr>
<tr>
<td>Non-productive hours</td>
<td>Any type of paid leave for nurses. This includes but is not limited to: sick leave, annual leave, workers compensation, study leave, maternity leave, compassionate leave, family leave, parental leave, accrued day off, professional development leave, etc.</td>
</tr>
<tr>
<td>Boarder patient</td>
<td>A person who is receiving food and/or accommodation but for whom the hospital does not accept responsibility for treatment and/or care. (eg: a person assisting with care)</td>
</tr>
<tr>
<td>Patient Care Day</td>
<td>Refers to the actual time that patients are present on a ward/unit, presented in decimalised days.</td>
</tr>
<tr>
<td>Average Daily Occupancy</td>
<td>The number of patient care days, divided by specified number of days within a given timeframe. (ie: calendar month, year)</td>
</tr>
<tr>
<td>Turnover %</td>
<td>Admissions, discharges, and transfers in and out divided by the Patient Care Days over a selected period, expressed as a percentage.</td>
</tr>
</tbody>
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3 Fairwork Act 2009 - Personal leave includes sick leave and carers leave