Initial Report on the Implementation of the NHPPD Management Tool for Nursing Staffing Levels

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on behalf of accessUTS Pty Ltd

for the Northern Territory Minister for Health

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# Table of Contents

Executive Summary ................................................................. 3  
Introduction ............................................................................ 5  
Background ........................................................................... 5  
The Review Process ............................................................. 6  
Progress to Date .................................................................... 7  
Review of Implementation .................................................... 8  
Issues to work on/consider .................................................... 14  
Appendix A .......................................................................... 16  
Appendix B .......................................................................... 17
Executive Summary

- The DHF Implementation Steering Committee has endorsed the proposed NHPPD Benchmarks for a range of ward types based on 4.5 years of data. Introduction of the agreed NHPPD commenced 18 October 2008 on these wards. Work in progress includes negotiation around NHPPD for the Emergency Department, Rehabilitation, Maternity (drop-ins), Special Care Nursery, Intensive Care/High Dependency (ICU/HDU), Coronary Care Unit (CCU), Rapid Admission and Planning Unit (RAPU), Hospice, Renal Inpatient Ward and Satellite Units. Units not included are Operating Theatres, Outpatients, Day Procedures, Hyperbaric Unit, Community Midwifery Programs and Mental Health.

- While data on staffing trends are available from September to November, only the November data reflect the introduction of the agreed NHPPD Benchmarks.

- A mechanism has been established at all five hospitals for the nursing executive and clinical nurse managers to monitor the implementation of NHPPD.

- There has been some success in recruitment. Alice Springs Hospital reports an increased number of enquiries on some wards; Ward 3A (RDH) has attracted additional staff and 41 new staff will commence at the Hospital in January; Katherine has recruited and retained four nurses from India; Tennant Creek is participating in a postgraduate training program which will increase its dialysis staff. It is anticipated that recruitment will be more successful early to mid year as is traditionally the case.

- The Clinical Nurse Manager (CNM) has received positive feedback from staff on Medical 4A at Royal Darwin Hospital where staffing has improved. Comments relate to a decreased workload and increased morale. Strategies should be considered in the longer term given these comments to change perceptions about ‘nursing’ and the workload of nurses in the Northern Territory, particularly at the Royal Darwin Hospital.

- On the November data there are a few clinical areas which are understaffed but within the 10% threshold. Areas which are understaffed by more than the 10% threshold include the Medical Unit at Alice Springs Hospital but this is trending down to approach the 10% threshold; Medical 4B at Royal Darwin Hospital; the Dialysis Unit at Tennant Creek Hospital which is trending down and has a recruitment strategy in place. Gove and Katherine Hospitals report no understaffing.

- To meet the Benchmarks hospitals have largely used overtime or agency staff.

- Skillmix has not been considered in this Report as data were not available. It is anticipated that this will be examined in 2009.

- No data were available on patient or staff outcomes (performance measures) for this Report. It is unclear whether these data exist or are accessible.

- Issues To Be Resolved include whether or not there is sufficient ‘scope’ within the Benchmarks to take account of the significant indigenous population cared for in hospital and some of the unique health challenges they present; whether the methodology adequately caters for the considerable amount of antenatal and post-natal follow-up provided for women in the communities; the inclusion of
‘boarders’ (clients awaiting transport home, family accompanying patients) in NHPPD calculations; whether CNMs are included in direct care hours; agreement on the NHPPD for units still under discussion.

- **Priority Areas** – Develop strategies which focus on increasing recruitment and retention to meet staffing Benchmarks rather than rely on overtime and agency use, particularly at Royal Darwin Hospital.
Introduction

The Contract specifies that the Consultant is to provide the Minister for Health with:

- An initial and six month report on the implementation of the NHPPD management tool for nursing staffing levels in the five Northern Territory acute care hospitals highlighting structural, process and outcome achievements and issues;
- A review and verification of the monthly Department of Health and Families (DHF) NHPPD data provided by the Project Officer, by visiting individual hospitals, wards and departments with feedback from nurse managers and staff; and
- Reports that consider both staff and patient outcome (performance) measures.

Background

Following the Northern Territory Coronial Inquest [2008] NTMC 049 the Minister for Health announced that the “Nursing Hours per Patient Day” (NHPPD), nursing workload management tool would be introduced throughout hospitals in the Northern Territory. The initial focus was to be on Ward 4A and other wards that have been staffing to a deficit. The implementation is to occur within current resources, but will identify if and where additional nursing staff are required.

A NHPPD Implementation Steering Committee was established in April 2008, when a Project Officer was also appointed. The Project Officer develops the monthly workload reports, assists with implementation and provides data for the ongoing implementation and evaluation. The Australian Nursing Federation (ANF) is a member of this Implementation Steering Committee and has access to all information relating to nursing workloads and the supply of nurses to meet patient demand.

On 15 September 2008, the DHF Implementation Steering Committee endorsed the proposed NHPPD Benchmarks. These benchmarks were based on 4.5 years of data. The Nursing Workload Benchmarks can be reviewed and changed using a business case model and based on the previous six months of data. The DHF Nursing Workload Steering Committee will review benchmarks every six months against an agreed variance (+/-10%) and assess the business cases for changes to the benchmark (see Appendix A for Terms of Reference). Introduction of the agreed NHPPD commenced 18 October 2008.

Each hospital is to establish a Nursing Workload Committee to be chaired by the Director of Nursing (see Appendix B for Terms of Reference). These Committees will assess the benchmarks monthly, monitor staffing levels and identify any related staffing issues. Each Director of Nursing will report monthly to their General Manager on the nursing workload (staffing levels) and issues that arise.

The aim of the Nursing Hours per Patient Day (NHPPD) implementation is to provide a staffing management tool for nurse managers based on patient needs and the matching of nursing workload to appropriate staffing levels, to ensure the provision of safe patient care. The NHPPD staffing tool should:
Provide for a minimum level of safe staffing;

- Provide staffing appropriate to patient demand; based on patient acuity, patient numbers and patient turnover (admissions and discharges);
- Provide NHPPD benchmark guidelines for the staffing of wards or departments;
- Determine the nursing staff establishment (FTE) for each ward or department based on patient care required;
- Provide a basis for roster staff profiles, the nursing numbers needed each shift, seven days per week; and
- Include all “direct” rostered nursing staff; permanent, casual, overtime and agency hours provided.

Bed occupancy data are collected using the Caresys Uniwarsum Midnight Census. As it collects data at midnight it does not capture the situation where more than one patient occupies a bed during the day. This ‘churn’ impacts on nursing workload (Duffield et al. 2007). Direct nursing hours are obtained from ONESTAFF and only nurses coded as providing direct care are included.

The Review Process

Initial consultations were undertaken 18 and 19 November 2008 with staff in the Department of Health and Families, Royal Darwin and Alice Springs Hospitals and the Ministry. These include:

- **Department of Health and Families** – Peter Beirne (Acute Care), Greg Rickard (Principal Nursing Adviser), Raelene Messenger (Project Officer)

- **Royal Darwin Hospital**
  - Acting Director of Nursing and Co-Directors Nursing (Sharon Sykes, Colleen Cox, Jennifer Byrnes, Maureen Brittin)
  - Clinical Nurse Managers (group meeting)
  - RDH Executive (Len Notaras, Jan Evans and Sharon Sykes)

- **Alice Springs Hospital**
  - ASH Executive (Vicki Taylor, Paul Nieuwenhoven, Bronwyn Taylor)
  - Clinical Nurse Managers (group meeting)

- **Minister for Health (Dr Chris Burns MLA)**

Telephone interviews were conducted with the Directors of Nursing at Gove, Katherine and Tennant Creek Hospitals early in December following dissemination and confirmation of the NHPPD results from September – November. Several discussions were also held late in December with the Directors of Nursing (DONs)/Nursing Executive at Alice Springs and Royal Darwin Hospitals following receipt of their NHPPD data from September – November.

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Progress to Date

**DHF Nursing Workload Steering Committee** - The DHF Implementation Steering Committee has endorsed the proposed NHPPD Benchmarks for a range of ward types based on 4.5 years of data. Introduction of the agreed NHPPD commenced 18 October 2008.

Work in progress includes negotiation around NHPPD for the Emergency Department, Rehabilitation, Maternity (drop-ins\(^2\)), Special Care Nursery, Intensive Care/High Dependency (ICU/HDU), Coronary Care Unit (CCU), Rapid Admission and Planning Unit (RAPU), Hospice, Renal Inpatient Ward and Satellite Units.

Not included are Operating Theatres, Outpatients, Day Procedures, Hyperbaric Unit, Community Midwifery Programs and Mental Health.

**Hospital Nursing Workload Committees** – Progress at each hospital is as follows:

- At **Alice Springs Hospital** the DON has indicated that it is his intention to have a separate item on the agenda of the monthly CNM meeting rather than convene a Nursing Workload Committee. This group met at the end of November.

- Discussion at the senior nurses meeting at **Gove Hospital** which has an ANF representative resolved that they will now have NHPPD as a standing item on the agenda.

- At **Katherine Hospital** there is a monthly staffing meeting held just before rostering for the next four weeks commences. The NHPPD will be discussed at this time.

- The Committee has been established at **Royal Darwin Hospital** with an initial meeting on 14 November chaired by Sharon Sykes – A/Director of Nursing. From the Minutes it was noted that this Committee wished to be an ‘isolated’ group rather than added as an agenda item on another committee. Also from the Minutes there were nine in attendance of which only three were CNMs (with one CNM apology) and four Co-Directors of Nursing and the NHPPD Project Officer. CNMs have queried whether they should all be members of this Committee. Membership will now be broadened to include all CNMs and the date of the next meeting has not yet been set.

- **Tennant Creek Hospital** has NHPPD as a standing agenda item on their Nursing Executive meeting.

**Recruitment** - Data on recruitment centrally by DFH are available from 1 July 2007 – 30 June 2008. Over that period 1105 inquiries were handled, an average of 92/month. The number recruited from these was 352 (32%), more than the previous two financial years

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\(^2\) Mothers at 20 weeks gestation who are not considered to be an emergency (and thus seen in the ED) but who present with health concerns. They require assessment by a registered midwife which can take up to four hours. As these clients present randomly no additional staff are allocated.
of whom 47% were registered nurses, 10% enrolled nurses and 18% from overseas. A reasonable number of enquiries are from interstate but the majority of new recruits is from overseas. No data were provided on recruitment to December 2008. This time of the year it is difficult to recruit staff to the Northern Territory and traditionally, many staff resign to take a break over the Christmas period, return home or seek employment elsewhere. This should improve in the coming months and if appropriate strategies are in place, may attract more staff to work in the Northern Territory.

Alice Springs Hospital has strategies in place to increase recruitment. Staff note an increase in enquiries for positions. The Hospital is currently recruiting up to their current establishment and will then work towards the NHPPD Benchmarks.

Katherine Hospital has recruited four nurses from India to areas of specialty in which it has traditionally been difficult to attract staff (paediatrics, dialysis and operating theatres). The Hospital’s nurse educator has completed the competency assessment for these staff; the nurses have achieved their registration and they have all been retained following completion of the program. The Hospital is also working with the local high school to promote nursing as a career and will be setting up a trainee position. In addition the Hospital has focused on the principles of “Magnetism” by for example, providing a supportive learning environment in which staff are encouraged to undertake further study. The Hospital reports a 96% retention rate.

Ward 3A at Royal Darwin Hospital has had some success recently at attracting staff to work on the Unit and the Hospital has 41 new graduate nurses commencing in January. At the Hospital level there does not appear to be a strategy in place to improve recruitment and retention. The constant change in nursing leadership may be a factor in this. The Hospital did not provide data on whether or not the number of FTEs has increased.

Tenant Creek Hospital has a strategy to increase the number of renal nurses, one of their targeted areas of shortage.

Education - Education sessions have been conducted for most Clinical Nurse Managers (CNMs) and Nursing Co-Directors from August to October 2008. These have entailed discussion about the NHPPD methodology, use of the spreadsheet and clarification of implementation issues or concerns. CNMs at RDH and ASH commented that they have found these helpful in understanding the staffing methodology. Ongoing education sessions will continue and be provided by the Project Officer as required.

Review of Implementation

The NHPPD presented for each of the five hospitals are correct at the time of writing and may vary as further negotiations between DHF and individual hospitals progress. While data are presented from September-November, implementation of the NHPPD did not commence until 18 October. The most relevant data for review purposes are therefore

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3 A Magnet hospital meets standards that define the highest quality of nursing practice and patient care. It has not only excellent patient outcomes, but its nurses report a high level of job satisfaction and low turnover rates.
for the month of November. Skillmix and patient outcomes have not been considered as data could not be provided for these indicators.

1. Alice Springs Hospital

The Hospital is recruiting to fill positions up to its current establishment and working towards staffing up to the NHPPD Benchmarks with permanent staff.

The 1 September to 30 November results indicate:

<table>
<thead>
<tr>
<th>Ward</th>
<th>Authorised Bed Nos</th>
<th>NHPPD</th>
<th>September 08 Variance</th>
<th>October 08 Variance</th>
<th>November 08 Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>45</td>
<td>5.75</td>
<td>-19.83</td>
<td>-21.12</td>
<td>-12.35</td>
</tr>
<tr>
<td>Surgical</td>
<td>30</td>
<td>5.38</td>
<td>-11.52</td>
<td>-13.38</td>
<td>-8.55</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>40</td>
<td>6.00</td>
<td>0.17</td>
<td>2.43</td>
<td>6.83</td>
</tr>
<tr>
<td>Renal</td>
<td>12</td>
<td>5.00</td>
<td>2.20</td>
<td>2.40</td>
<td>12.60</td>
</tr>
<tr>
<td>Maternity</td>
<td>16</td>
<td>7.57</td>
<td>1.19</td>
<td>-7.80</td>
<td>29.42</td>
</tr>
<tr>
<td>Special Care Nursery</td>
<td>8</td>
<td>7.50</td>
<td>-11.60</td>
<td>4.13</td>
<td>42.67</td>
</tr>
<tr>
<td>Dialysis In-patient</td>
<td>8</td>
<td>3.02</td>
<td>33.11</td>
<td>59.93</td>
<td>38.08</td>
</tr>
<tr>
<td>Dialysis - Flynn Drive</td>
<td>24</td>
<td>2.43</td>
<td>8.64</td>
<td>5.76</td>
<td>-3.13</td>
</tr>
<tr>
<td>ICU-CCU-HDU</td>
<td>8</td>
<td>22.00</td>
<td>-31.17</td>
<td>-24.73</td>
<td>20.45</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is an ongoing problem with the size and diversity of the 45 bed Medical Unit which impacts on recruitment, retention and ward/staff management. ASH is in the process of redesigning this ward by splitting it into two wards. The Hospital indicated it would focus efforts on staffing this Unit to the NHPPD benchmark initially. It is obvious from the results that they are moving towards this with the variance dropping to -12.35 on this Unit, only slightly above the 10% threshold.

The Surgical Unit is slightly understaffed in November but within the threshold while the Paediatric Unit is slightly overstaffed but average occupancy in November was only 22. This Unit experiences significant peaks and troughs in occupancy rates. The Hospital is investigating staffing in the Renal Unit. Sometimes patients do not occupy a bed and are instead in the dialysis chairs which may give the appearance of overstaffing. However there is also the issue of minimum safe staffing levels in a unit of only 12 beds. The Maternity Unit appears to be significantly above the threshold but there is an issue related to ‘drop-ins’ (see Footnote 2 earlier) as their care is not captured in the NHPPD model. Staff on this Unit also cover the Outpatient Clinic. Staffing in the Special

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4 Red indicates a negative staffing variance which is greater than the 10% threshold, blue a staffing surplus greater than the 10% threshold and black, results within the 10% variance.
Care Nursery has risen significantly above the 10% threshold but this in part relates to on average, only five of the eight beds being occupied in November and the issue again of minimum levels for safe staffing. The Dialysis Inpatient Unit is constantly also above the threshold. However the Hospital has realised that there is a coordinator position which has been included in the staffing hours but this individual does not provide direct patient care. This position will be removed from the next iteration. The ICU had an average of only four patients in November which led to overstaffing rather than understaffing in the previous two months.

To increase staffing levels overtime is being used (but this rate has declined by 570 hours from September to November). The Hospital reports that increased overtime is correlated with an increase in sick leave. ASH is advertising for staff for its nursing bank and is increasing the intake of new graduate nurses, overseas trained nurses and educators (to assist in skills development and maintenance). Staff report a pleasing increase in enquiries for positions. The Hospital anticipates recruitment will improve in the January-February period as it does traditionally. The Hospital has no access to use of shift-by-shift agency staff but does employ casual nursing staff.

The Hospital is checking availability of access to nursing sensitive outcomes.

Issues:
- Understaffing in the 45 bed Medical Unit, its size and design
- Recruiting staff to fill current vacancies to agreed NHPPD
- Minimise use of overtime as a staffing strategy
- Inclusion of ‘drop-ins’ in the NHPPD methodology
- Ensure correct direct care hours calculated in the Dialysis Unit

2. Gove Hospital

<table>
<thead>
<tr>
<th>Ward</th>
<th>Authorised Bed Nos</th>
<th>NHPPD</th>
<th>September 08 Variance</th>
<th>October 08 Variance</th>
<th>November 08 Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical/Paediatrics</td>
<td>22</td>
<td>4.50</td>
<td>25.28</td>
<td>10.57</td>
<td>20.44</td>
</tr>
<tr>
<td>Maternity</td>
<td>8</td>
<td>6.32</td>
<td>118.88</td>
<td>28.04</td>
<td>48.65</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Medical/Paediatric Unit has 22 authorised beds but averaged 15, 14 and 14 beds occupied over the three month period. In addition workflow on this Unit is quite variable and can increase substantially and quickly with an influx of paediatric patients (e.g. as it did during a recent bout of bronchiolitis). Staffing required for paediatric patients is usually higher than for adults and adjustment to the NHPPD to take this into account would bring the variance closer to the threshold. Respite patients are also cared for on this Unit but they are not ‘admitted’ despite being cared for overnight so occupancy is higher than is actually recorded. These patients are considered to be ‘high care’ as most have PCAs (patient controlled analgesia) for narcotic relief. Staff on the Unit also
relieve in the Emergency Department if it is busy and during the night shift. Staffing for the three shifts is 4:3:2.

The **Maternity Unit** is busy for a hospital of this size with 200-300 deliveries annually. The NHPPD do not take into account nurses’ attendance at clinics (antenatal care, postnatal care and follow-up) or an allowance for coverage in the Frangipani Suite (a culturally appropriate area within the Maternity Unit) which houses women from East Arnhem prior to birthing. This Unit reports very positive results from data collected over four years (pre and post implementation) including: an increase in rates of spontaneous vaginal delivery, decreased number of births born in communities at term, a culturally supported birthing environment, opportunities for care and education prior to birth, and increased satisfaction with the birthing experience. Two midwives are rostered on each shift on the Unit (minimum safe staffing) and so achievement of the NHPPD Benchmark is unlikely.

**Issues:**
- Data integrity and quality but amendments are being made
- Agreed NHPPD for paediatric and respite care patients – an unusual mix on a ward

3. **Katherine Hospital**

<table>
<thead>
<tr>
<th>Ward</th>
<th>Authorised Bed Nos</th>
<th>NHPPD 08</th>
<th>September 08 Variance</th>
<th>October 08 Variance</th>
<th>November 08 Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRW &amp; Pall C</td>
<td>28</td>
<td>4.65</td>
<td>2.85</td>
<td>1.28</td>
<td>7.53</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>18</td>
<td>4.50</td>
<td>78.35</td>
<td>40.70</td>
<td>113.76</td>
</tr>
<tr>
<td>Maternity</td>
<td>8</td>
<td>6.45</td>
<td>47.63</td>
<td>78.74</td>
<td>113.95</td>
</tr>
<tr>
<td>Dialysis KDH</td>
<td>7</td>
<td>2.43</td>
<td>0.24</td>
<td>13.97</td>
<td>-1.08</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>61</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**JRW** (adult medical-surgical unit including palliative care) is within the threshold despite having on average only 21, 21 and 19 beds occupied respectively over the three months. The **Paediatric Unit** is over the 10% threshold due in part to this being a quiet time for admissions of children (average bed occupancy in November is 7) but also, minimum staffing levels apply here (2:2:2 across the three shifts). Several staff have paediatric qualifications. The **Maternity Unit** similarly has been running at 50% occupancy (four beds) and again minimum staffing levels apply here (2:2:2 across the three shifts). The **Dialysis Unit** is within the 10% threshold.

If additional staffing hours are required (usually to cover annual or sick leave) these are provided through overtime or asking staff to come in from days-off. No shift-by-shift agency staff are available. As indicated earlier, the Hospital has been successful in recruiting staff and has a 96% retention rate this year – 86% the year before.
Issues

- 90-96% Indigenous patient population
- Boarders – at Katherine this consists of patients who bring in a family member to care for them and is common for younger mothers in maternity, most paediatric patients and on occasion, in the adult medical-surgical ward for older patients or those with dementia. Family members stay in the patient’s room on a chair which opens to a bed. It increases the nurses’ workload and is not a part of the NHPPD methodology.
- The NHPPD methodology does not take into account day surgery patients who are found in the surgical and paediatric wards at Katherine.
- There is considerable work involved in providing antenatal care for women in the communities and/or the women’s hostel on the hospital campus, in addition to post-natal care for women who return to the Hospital.

4. Royal Darwin Hospital

The Hospital’s priority is to focus on those clinical areas which have consistently been under-resourced – wards 3A, 4A and 4B. Monitoring of staffing levels is occurring on the remainder of clinical units where Benchmarks have been agreed.

<table>
<thead>
<tr>
<th>Ward</th>
<th>Authorised Bed Nos</th>
<th>NHPPD</th>
<th>September 08 Variance</th>
<th>October 08 Variance</th>
<th>November 08 Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical 4A</td>
<td>25</td>
<td>5.75</td>
<td>-10.78</td>
<td>-9.22</td>
<td>-5.40</td>
</tr>
<tr>
<td>Medical 4B</td>
<td>30</td>
<td>5.75</td>
<td>-1.39</td>
<td>-14.09</td>
<td>-12.17</td>
</tr>
<tr>
<td>Medical 7CC</td>
<td>12</td>
<td>5.05</td>
<td>9.90</td>
<td>12.08</td>
<td>12.16</td>
</tr>
<tr>
<td>Medical Renal</td>
<td>10</td>
<td>5.88</td>
<td>0.68</td>
<td>10.20</td>
<td>-3.40</td>
</tr>
<tr>
<td>Medical Hospice</td>
<td>12</td>
<td>6.00</td>
<td>29.50</td>
<td>29.72</td>
<td>29.67</td>
</tr>
<tr>
<td>Rehab</td>
<td>8</td>
<td>5.00</td>
<td>7.60</td>
<td>18.80</td>
<td>26.80</td>
</tr>
<tr>
<td>Surgical 2A</td>
<td>24</td>
<td>6.00</td>
<td>17.83</td>
<td>12.85</td>
<td>-2.87</td>
</tr>
<tr>
<td>Surgical 2B</td>
<td>26</td>
<td>5.75</td>
<td>9.04</td>
<td>9.09</td>
<td>0.98</td>
</tr>
<tr>
<td>3B</td>
<td>18</td>
<td>5.75</td>
<td>2.26</td>
<td>2.26</td>
<td>5.84</td>
</tr>
<tr>
<td>RAPU</td>
<td>24</td>
<td>7.50</td>
<td>14.00</td>
<td>17.64</td>
<td>13.86</td>
</tr>
<tr>
<td>Paediatrics 5B</td>
<td>21</td>
<td>6.00</td>
<td>32.33</td>
<td>37.33</td>
<td>27.35</td>
</tr>
<tr>
<td>Paediatrics 7B</td>
<td>15</td>
<td>6.45</td>
<td>37.52</td>
<td>26.11</td>
<td>18.09</td>
</tr>
<tr>
<td>Maternity</td>
<td>24</td>
<td>8.00</td>
<td>7.00</td>
<td>19.00</td>
<td>16.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Staffing on Medical 4A has improved and while still slightly understaffed, is within the 10% threshold despite having an average of 27 occupied beds (rather than 25) during November. Additional staff are provided through overtime and the use of agency nurses. The CNM reports staff feel that the workload has decreased and morale has improved. Medical 4B is understaffed by more than the 10% threshold but this has reduced slightly in November through the use of overtime and agency. The Hospital has been unable to recruit new staff but is anticipating doing so in the coming months. It is unclear what strategies will be established to do so. Clarification has been sought from the Hospital Executive. Orthopaedic 3A was understaffed by more than the 10% threshold but this is improving as they have been successful in recruitment.
Those wards which are frequently overstaffed by more than the 10% threshold include:

- **Medical 7CC** - staffing is 4:3:2 and so for the night shift minimum staffing levels apply which may explain this Unit’s result.
- **Medical Hospice** - an average of only 10 beds were occupied; staffing is 4:3:2 and so for the night shift minimum staffing levels apply and there is a question over the NHPPD allocated.
- **RAPU** - as this Unit is unique the Hospital questions the benchmark established.
- **Paediatrics 5B** – occupancy is calculated on the midnight census and so does not consider the number of day procedures and radiology outpatients cared for during the day. As a result the NHPPD do not reflect this work. Occupancy during November averaged 18 (of 21 possible beds).
- **Paediatrics 7B** – overstaffing is reducing.
- **Rehabilitation Unit** – staffed at 2:2:2 over the three shifts so minimum level of safe staffing applies here.

The **Maternity Unit** appears to be overstaffed but concern has been expressed about the allocated NHPPD. This Unit also staffs the labour room where NHPPD should be 12 for women in labour. This would mean NHPPD of 10.45 overall, in which case they believe they are understaffed.

The remainder of wards/units are within the 10% threshold. Data have not been included for ED, Dialysis, ICU, Special Care Nursery (unique in that it combines Level 1, 2 and 3 services) and CCU.

The Hospital disputes several of the NHPPD allocated and have been advised to refer these back formally to the DHF Implementation Committee. The Hospital has not considered moving staff from areas which appear to be consistently over the allocated NHPPD to those that are understaffed as they do not consider that all of these areas are in fact overstaffed. In addition some of these are specialist areas. For example, it would be difficult to move a midwife to an acute medical-surgical unit.

The Hospital is exploring the availability of data on patient outcomes.

**Issues:**

- Develop strategies which focus on increasing recruitment and retention to meet staffing Benchmarks rather than rely on overtime and agency use.
- RDH to seek clarification from the DHF Steering Committee of some of the NHPPD Benchmarks which they dispute.
- The Hospital questions whether ‘specials’ have been included in the calculation of NHPPD provided.
5. Tennant Creek Hospital

<table>
<thead>
<tr>
<th>Ward</th>
<th>Authorised Bed Nos</th>
<th>NHPPD</th>
<th>September 08 Variance</th>
<th>October 08 Variance</th>
<th>November 08 Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ward 1</td>
<td>20</td>
<td>4.65</td>
<td>39.78</td>
<td>31.58</td>
<td>49.03</td>
</tr>
<tr>
<td>Dialysis TCH</td>
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<td>2.43</td>
<td>-0.92</td>
<td>-18.84</td>
<td>-10.29</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The authorised bed numbers on Ward 1 are 20 comprising 14 adult beds and 6 paediatric beds. When there are paediatric patients the workload increases as the two locations are physically separate. Over the three month period bed occupancy averaged 8, 9 and 9 and staffing is 2:2:1 over the three shifts – minimum staffing levels which resulted in the variance greater than 10%. Not given any consideration in the NHPPD models is ‘boarders’ – individuals waiting for transport to Alice Springs for medical appointments. The bus leaves at 2AM and boarders are provided with a hospital bed if available or chairs (which become beds). There can be 14-20 boarders on any given day and there is an obvious impact on workload and staffing. The Hospital has stopped the policy of moving staff from the ward to the Emergency Department when this area becomes busy.

The Dialysis Unit is understaffed because of the difficulty of attracting renal trained nurses to the Hospital. However the Hospital has agreed recently to participate in a program from CDU on renal nursing at which rotations through the dialysis units in the Territory will be a feature. The program commences in 2009 and the Hospital will have one postgraduate course participant rotate through at all times in a supernumerary capacity. Staffing at the moment is at a minimum safe level – two per shift (two shifts).

Issues:
- Insufficient staff to cover absences such as annual leave, training days
- Additional staffing is provided through use of overtime which runs at approximately 2.8 FTE
- All the medical staff are locums on short term contracts which adds to the workload of nurses
- The inclusion of ‘boarders’ in the model
- Attraction and retention of nurses in dialysis

**Issues to work on/consider**

A small number of wards/units have outstanding issues to be resolved, but these will not impact on the overall implementation of the benchmarks. These units include the Special Care Nursery at RDH; the Maternity Units at ASH and RDH in relation to maternity “triage assessments” for women over 20 week gestation and requiring assessment over a minimum of four (4) hours each; and Emergency Departments.
There are several aspects of implementing NHPPD in the Territory which were raised by staff including:

- Whether or not there is sufficient ‘scope’ within the Benchmarks to take account of the significant indigenous population cared for in hospital and some of the unique health challenges they present.
- The issue of ‘boarders’ (clients awaiting transport home, family accompanying patients).
- The difficulty of recruiting staff to the Territory over Christmas and the wet season.
- Whether CNMs are included in the calculation of direct care hours.
- It is not always clear when a nurse has been redeployed from one clinical area to another whether this has been accommodated in the calculations. This potentially impacts on the calculation of NHPPD for both areas.
- The use of specials is not meant to be included in the direct care hours. However there is an impact on staff as they require relief during meal breaks. The greater the use of specials the greater the potential for a decrease in productive nursing hours and this is not captured in the current model or data collection.
- PSAs are not counted as part of the direct care hours but similarly, if they are used as specials they too are relieved during meal breaks, usually by nursing staff resulting in less availability of nursing staff for direct care activities.
Appendix A

DHF Nursing Workload Steering Committee Terms of Reference

Aim: Monitor and review the Nursing NHPPD for all Hospitals

Objectives:
2. Review the 6th monthly NHPPD Benchmarking Reports, commencing April 2009 provided by the Project Officer.
3. Review variances (+/- 10%) in Benchmarks and reasons for the variances.
4. Review workload and Benchmarking issues.
5. Identify workload issues and impact on the provision of safe and quality nursing care for individual hospitals.
6. Review and make recommendation on proposals for ward Benchmark re-classification.
7. Advise the Executive Director, Acute Care of the recommended proposed NHPPD Benchmark changes.

Membership:
- Principal Nursing Adviser (Chair).
- Directors of Nursing.
- Co-Directors/Nursing Directors.
- ANF nominee.
- NHPPD Project Officer (for advice only).

Frequency of Meetings:
- 6th Monthly, after the NHPPD Benchmark Reports have been received.

Reporting:
- General Managers of each hospital.
- Executive Director, Acute Care.
Appendix B

Hospital Nursing Workload Committee Terms of Reference

Aim: Monitor and review the Nursing Workloads of individual hospital wards and departments.

Objectives:
1. Review monthly NHPPD Benchmarking Reports, provided by the Project Officer.
2. Review variances (+/- 10%) in Benchmarks and reasons for the variances.
3. Review workload and Benchmarking issues.
4. Identify workload issues and their impact on the provision of safe and quality nursing care for individual wards and departments.
5. Develop proposals for ward Benchmark re-classification.
6. Advise the Nursing Resource Centres on redeployment of nurses (supply) to match workload (demand).

Membership:
- Executive Director of Nursing/Director of Nursing
- Co-Directors/Nursing Directors
- CNMs
- NHPPD Project Officer (for advice only)

Frequency of Meetings:
- Monthly, after the NHPPD Benchmark Reports have been received.

Reporting:
- Local Management Team, Business Manager, General Manager
- NHPPD Steering Committee