



a report on the work value of nurses  
employed in public health facilities  
april 2008

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## Executive Summary

The work value report and recommendations arise from a direction from the Papua New Guinea Conciliation and Arbitration Tribunal that an evaluation of nursing work be undertaken by the Department of Personnel Management and the Papua New Guinea Nurses Association.

The funding for the review and the preparation of this report was made available from the World Health Organization (WHO).

The WHO considered an integral aspect of addressing human resources in health within Papua New Guinea (PNG) was ensuring that remuneration levels for nurses be appropriate within the context of the environment. This would also positively address the recruitment and retention difficulties in the nursing profession within the public sector of PNG and enhance nursing as a career. It would assist in meeting the increasing care demands as a result of the HIV/AIDS epidemic.

### The Committee

A Nursing Job Evaluation Steering Committee was established with representatives from the Department of Personal Management, Department of Health, Papua New Guinea Nurses Association, Australian Nursing Federation and the University of Technology (Sydney, Australia).

The steering committee undertook the collection, analysis and validation of relevant data to determine the required role and responsibility of all public sector nurses.

The steering committee also conducted interviews with nurses, hospital management personnel and provisional authorities. The project team collected and analysed position descriptions and job specifications to determine their suitability and relevance to the role and responsibilities of nursing staff.

### Members of the Nursing Job Evaluation Steering Committee

Mary Roroi	Department of Health
Christine George	Department of Health
Geoff Clark	World Health Organization
Professor Christine Duffield	University of Technology (Sydney, Australia)
Eileene Seneve	Papua New Guinea Nurses Association
Elizabeth Pis	Papua New Guinea Nurses Association
Jill Iliffe	Australian Nursing Federation
Nicholas Blake	Australian Nursing Federation

## The recommendations

The Nursing Job Evaluation Steering Committee has made a number of recommendations which are intended to:

- Properly recognise the diverse role and responsibilities of nurses employed in public health facilities.
- Replace the existing classification structure and definitions with a new structure designed to encourage nurses to acquire additional skills and to be remunerated for the acquisition and use of such skills.
- Establish new wage levels for all nursing staff to more adequately reflect the work value of nurses in comparison to comparable health professionals and other professionals within Papua New Guinea.
- Ensure that all nurses receive an annualised salary which incorporates new wage rates, an allowance in recognition of a requirement to work additional hours and that also includes the payment of the existing Nursing Services Allowance and the Domestic Market Allowance.
- Ensure the PNGNA and the DPM establish a Classification Translation Committee to undertake the translation of all existing nurse positions from existing structures to the new classification structure.
- Ensure these recommendations are implemented and applied on and from 1 June 2008.

## Background to the review

On 5 October 2006 Mr Pex Avosa, Chairperson of the Public Service Conciliation and Arbitration Tribunal, sitting together with two tribunal members directed that a job evaluation review be undertaken by the Department of Personal Management and the PNG Nurses Association. The Tribunal further ruled that pending the completion of a job evaluation review of nurses' salary levels, current classification descriptions and progression within the existing salary structure continue in its present form.

The Tribunal directed that the job evaluation review be undertaken and completed within twelve months of their decision.

In April 2007 the Nursing Job Evaluation Steering Committee was established with the following agreed Terms of Reference:

- To evaluate the current nursing classification structures having regard to the needs of public sector nursing staff and PNG public health facilities.
- To collect data by analysing the current role and responsibility of public sector nursing staff to ascertain that it is consistent with nursing classification structures and wage rates.
- To ensure that nursing descriptors and nursing structures meet the needs of the PNG health system.
- To ensure that the remuneration of nurses reflect their skill, responsibility and educational levels.
- To submit a report and recommendation on these matters to the Chairperson of the Public Service Conciliation and Arbitration Tribunal.

The impetus for the review of the wages and classification of nurses employed in public health facilities in Papua New Guinea has a long and somewhat acrimonious history, due partly to the fact that an assessment of the value of nurses, in terms of both relativities within the profession and with other health professionals had not occurred.

The first award for nurses employed in public health facilities was made on the 10 June 1987 between the Department of Personnel Management and the Public Employees Association. That award provided for a minimal number of employment conditions as well as public sector based salary levels.

The 1987 Nurses Award was replaced in 2000 by a Memorandum of Agreement reached between the Department of Personnel Management on behalf of the public health facilities and the Papua New Guinea Nurses Association on behalf of its members. This agreement introduced the nursing service allowance, the domestic market allowance as well as a partial reclassification of nursing salary grades.

The 2000 agreement committed the parties to undertake a review of the work value of all nursing classifications. Unfortunately, the review did not take place and this has in part fuelled a level of cynicism and disappointment of many nurses have towards their employer and government generally.

In late 2005 nurses from a number of provinces walked off the job in protest at the perceived inaction by government in addressing their grievances relating to salary structure and career paths.

The dispute came before the Public Service Conciliation and Arbitration Tribunal. The Tribunal found that more robust and comprehensive information was required in order to reach a considered and detailed finding on the appropriate employment conditions for nurses.

In 2007/8 the Nursing Job Evaluation Steering Committee undertook the task to oversee the work that would be required to meet the request of the Tribunal and provide a comprehensive and detailed evaluation of nursing work.

The specific responsibilities of the Nursing Job Evaluation Steering Committee included:

- A comprehensive literature search of the historical and contemporary approaches to the roles and responsibilities of nursing within public health facilities;
- Comparative analysis of the remuneration arrangements for nurses and other relevant and comparable classifications in accordance with established work value criteria;
- An information and education campaign to inform nurses of the importance of their contribution and support for the job evaluation review;
- To survey all nurses to obtain relevant educational and professional nursing data, perception of the role of nurses and the suitability of existing workplace structures and remuneration practices;
- To undertake interviews with nursing and non-nursing personnel in hospital and clinical settings;
- To evaluate existing nursing classification structures to ascertain the suitability of the present arrangements to provide adequate levels of nursing care to PNG communities;
- To make recommendations intended to provide nurses and those contemplating a career in nursing with a more attractive and rewarding experience; and
- To make recommendations that provide medium to long term solutions to nursing recruitment and retention barriers.



## Recommendations

### Recommendation 1

That the existing nursing classification structure be replaced with the following;

#### Nurse Grade 1

The Nurse Grade 1 holds a qualification in nursing deemed satisfactory for purposes of registration by the relevant nursing authority and who holds a current practicing certificate.

The Nurse Grade 1 works under the supervision of a Nurse Grade 2 or above, and provides basic nursing care and services including the following: basic client observation and assessment; basic wound care; recognise changes required in nursing activity and to report and record information as necessary.

Salary progression for a Nurse Grade 1 will occur by annual increments, having regard to the acquisition and utilisation of skills and knowledge through experience in the practice setting/s over such period.

The Nurse Grade 1 shall have less than three years experience in nursing

The Nurse Grade 1 shall not include persons eligible to practice as a Nurse Grade 2 or above.

Indicative job titles include the following: General Nurse

#### Nurse Grade 2

The Nurse Grade 2 is the first level nurse who is licensed to practice nursing without direct supervision and who assumes accountability and responsibility for their own actions within an established policy setting. It is essential that the nurse is registered by the relevant nursing authority and holds a current practicing certificate.

The Nurse Grade 2 delivers direct nursing care to patients/health care consumers and is provided with access to and guidance from nurses with a higher level of clinical expertise.

Indicative job titles include the following: Midwife, Mental Health/Psychiatric Nurse, Infection Control Nurse, Oncology Nurse, Maternal and Child Health Nurse and General Nurse with over three or more years nursing experience.

Salary progression for a Nurse Grade 2 will occur by annual increments, having regard to the acquisition and utilisation of skills and knowledge through experience in the practice setting/s over such period.

### Nurse Grade 3

The Nurse Grade 3 role requires a broad developing knowledge in professional nursing issues and a sound specific knowledge-base in relation to a field of practice.

The Nurse Grade 3 assumes accountability and responsibility for own actions and acts to rectify unsafe nursing practice and/or unprofessional conduct.

The Nurse Grade 3 is responsible for a specific client population, and is able to function in more complex situations while providing support and direction to registered nurses and other non-registered nursing personnel.

The Nurse Grade 3 identifies, selects, implements and evaluates nursing interventions that have less predictable outcomes.

The Nurse Grade 3 is able to demonstrate:

- advanced level clinical skills and problem-solving skills;
- planning and coordination skills in the clinical management of patient care;
- ability to work within a collegiate/team structure;
- awareness of and involvement with the quality assurance process;
- contribution to professional practice of the unit.

Indicative job titles include the following: District Nursing Officer, Nutrition Officer, Community Nurse, Sub District Health Manager and Clinical Nurse Specialist (e.g. Theatre, Intensive Care and Accident & Emergency).

Salary progression for a Nurse Grade 3 will occur by annual increments, having regard to the acquisition and utilisation of skills and knowledge through experience in the practice setting/s over such period.

### Nurse Grade 4

The Nurse Grade 4 means a registered nurse who is appointed as such and who, within the guidelines and practices established by the Nurse Grade 5 assists in the overall clinical and administrative management of a ward or unit and deputises for the Nurse Grade 5 when required within these limits.

Indicative job titles include the following: Associate Nurse Unit Manager and Associate Charge Nurse.

Salary progression for a Nurse Grade 4 will occur by annual increments, having regard to the acquisition and utilisation of skills and knowledge through experience in the practice setting/s over such period.

## Nurse Grade 5

The Nurse Grade 5 means a registered nurse in charge of a ward or unit or group of wards or units in a hospital or health service or health organisation and shall include:

- (a) Co-ordination of patient services – liaison with all health care disciplines for the provision of service to meet patient needs; the orchestration of services to meet patient needs after discharge; monitoring catering and transport services.
- (b) Unit Management – implementation of hospital/health service policy: dissemination of information to all personnel; ensuring environmental safety; monitoring the use and maintenance of equipment; monitoring the supply and use of stock and supplies; monitoring cleaning services.
- (c) Nursing Staff Management – direction, co-ordination and supervision of nursing activities; training, appraisal and counseling of nursing staff; rostering and/or allocation of nursing staff; development and/or implementation of new nursing practice according to patient need.

Indicative job titles include the following: Nurse Unit Manager and Charge Nurse.

Salary progression for a Nurse Grade 5 will occur by annual increments, having regard to the acquisition and utilisation of skills and knowledge through experience in the practice setting/s over such period.

## Nurse Grade 6

The Nurse Grade 6 means a registered nurse appointed as such, who is a proficient practitioner accountable for the coordination of standards of care delivered in a specific patient/client care area.

The Nurse Grade 6 collaborates with senior nursing and non-nursing personnel to facilitate the provision of quality cost-effective care.

The Nurse Grade 6 demonstrates:

- an advanced level of clinical skills;
- proficiency in the delivery of nursing care;
- skilled coordination of nursing care;
- leadership qualities.

The Nurse Grade 6 has the authority to coordinate care for one patient/client unit and assumes accountability and responsibility for own actions and acts to rectify unsafe nursing practice and/or unprofessional conduct.

Indicative job titles include the following: Provisional Health Inspector, Family Health Service, Deputy Director Nursing Administration, Deputy Director Rural Services and Nurse Practitioner.

Salary progression for a Nurse Grade 6 will occur by annual increments, having regard to the acquisition and utilisation of skills and knowledge through experience in the practice setting/s over such period.

### Nurse Grade 7

The Nurse Grade 7 is a registered nurse who is responsible

- For the standards of clinical care and for the development of policy in respect of the clinical management of patients/clients whose nursing care is provided in an assigned number of clinical units or;
- Is responsible for the coordination and management of the human and material resources necessary for the delivery of nursing care within an assigned number of management units or;
- Is responsible for the coordination and delivery by registered nurses of education programme or staff development activities or;
- Deputises for the Director of Nursing.

Indicative job titles include the following: Assistant Director of Nursing and Deputy Director of Nursing

Salary progression for a Nurse Grade 7 will occur by annual increments, having regard to the acquisition and utilisation of skills and knowledge through experience in the practice setting/s over such period.

### Nurse Grade 8

The Nurse Grade 8 is a registered nurse appointed as the principal nursing executive officer, however titled, and is responsible for the provision of nursing services.

Salary progression for a Nurse Grade 8 will occur by annual increments, having regard to the acquisition and utilisation of skills and knowledge through experience in the practice setting/s over such period.

Indicative job titles include the following: Director of Nursing.

## Recommendation 2

That all nursing staff (however titled and wherever employed within the public sector) receive an annualised salary which incorporates:

- The base weekly wage level appropriate to the classification of the nurse.
- 30% allowance payable for all purposes in recognition of the requirement to work regular additional hours.
- The inclusion of the Nursing Services Allowances.
- The inclusion of the Domestic Market Allowance for the nursing classifications prescribed in the 2006 agreement between the Department of Personnel Management and the Papua New Guinea Nurses Association.

## Recommendation 3

### RECOMMENDED WAGE RATES \*

Classifications		Wage Rate
Nurse Gr 1	1 <sup>st</sup> yr experience	11,850
	2 <sup>nd</sup> yr experience	14,700
Nurse Gr 2	1 <sup>st</sup> yr experience	13,510
	2 <sup>nd</sup> yr experience	15,130
	3 <sup>rd</sup> yr experience	16,750
	4 <sup>th</sup> yr experience	18,370
	5 <sup>th</sup> yr experience	19,900
Nurse Gr 3	1 <sup>st</sup> yr experience	17,660
	2 <sup>nd</sup> yr experience	19,162
	3 <sup>rd</sup> yr experience	20,664
	4 <sup>th</sup> yr experience	22,166
	5 <sup>th</sup> yr experience	23,668
	6 <sup>th</sup> yr experience	25,170
Nurse Gr 4	1 <sup>st</sup> yr experience	23,700
	2 <sup>nd</sup> yr experience	25,022
	3 <sup>rd</sup> yr experience	26,344
	4 <sup>th</sup> yr experience	27,666
	5 <sup>th</sup> yr experience	28,990
Nurse Gr 5	1 <sup>st</sup> yr experience	26,410
	2 <sup>nd</sup> yr experience	27,724
	3 <sup>rd</sup> yr experience	29,038
	4 <sup>th</sup> yr experience	30,352
	5 <sup>th</sup> yr experience	31,666
	6 <sup>th</sup> yr experience	32,980
	7 <sup>th</sup> yr experience	34,294
	8 <sup>th</sup> yr experience	35,610

Classifications		Wage Rate
Nurse Gr 6	1 <sup>st</sup> yr experience	31,340
	2 <sup>nd</sup> yr experience	32,848
	3 <sup>rd</sup> yr experience	34,356
	4 <sup>th</sup> yr experience	35,864
	5 <sup>th</sup> yr experience	37,372
	6 <sup>th</sup> yr experience	38,880
Nurse Gr 7	1 <sup>st</sup> yr experience	34,710
	2 <sup>nd</sup> yr experience	36,380
	3 <sup>rd</sup> yr experience	38,050
	4 <sup>th</sup> yr experience	39,720
	5 <sup>th</sup> yr experience	41,390
	6 <sup>th</sup> yr experience	43,060
Nurse Gr 8	1 <sup>st</sup> yr experience	38,670
	2 <sup>nd</sup> yr experience	40,532
	3 <sup>rd</sup> yr experience	42,394
	4 <sup>th</sup> yr experience	44,256
	5 <sup>th</sup> yr experience	46,118
	6 <sup>th</sup> yr experience	47,980

\* The recommended wage rates do not include the increases to remuneration set out in Recommendation 2.

#### Recommendation 4

- That the Department of Personnel Management and the Papua New Guinea Nurses Association shall establish a Nursing Classification Translation Committee that will transfer all nursing positions from the existing structure to the new structure set out in Recommendation 1 of this report.
- That the Nursing Classification Translation Committee shall refer any disputes for conciliation and if necessary arbitration to the Public Service Conciliation and Arbitration Tribunal. The decision of the Tribunal shall be accepted by all parties.
- That the recommendations in this report shall be implemented no later than 1 June 2008.

## Inspections and interviews

The PNG Public Sector Nursing Job Evaluation Steering Committee determined that face to face interviews be held with nurses and non-nursing personnel to ascertain their personal views on their current role and responsibilities and the extent to which they believed the role of nursing had changed.

It was resolved that a sub-committee consisting of representatives from Department of Health, DPM, PNGNA and ANF would undertake inspections of health facilities and hold staff interviews in the month of October 2007.

The sub-committee attended Kavieng General Hospital on 15 October 2007, Goroka General Hospital on 16 October 2007, Popondetta General Hospital on 17 October 2007 and Port Moresby Hospital on 18 October 2007.

The sub-committee interviewed the following nursing and non-nursing officers:

### Kavieng General Hospital

- Principal Environmental Officer, Grade 12
- Provincial Administering Officer, Grade 13
- Nursing Officer, Grade 9 (Acting District Manager, Grade 10)
- Nursing Officer, Grade 8 – Maternal Child Health
- Unit Manager Operating Theatre – CSSD – Infection Control – Nursing Officer Grade 8
- Nursing Officer – O&G, Grade 7
- Acting Deputy Director NS, Grade 12

### Goroka General Hospital

- District Nursing Officer, Grade 10 (Lufa Health Centre)
- District Nursing Officer, Grade 10 (Daulo Health Centre)
- Acting Provisional Nutritionist, Grade 10
- Technical Officer Family Health – Community, Grade 12
- Work Manager, Grade 10
- Nursing Director, Grade 13
- Deputy Director Rural, Grade 12
- Specialist Nurse Midwifery (Unit Supervisor O&G, Grade 11)
- Nursing Officer (Psychiatric) Manager, Grade 12

### Popondetta General Hospital

- General Nurse, Grade 6 (Sagara Health Centre)
- District Health Manager, Grade 12 (Saiho Health Centre)
- District Family Planning Manager, Grade 10
- Acting Director of Nursing Services, Grade 14
- Assistant In Charge Nursing Officer (A&E)
- General Nurse, Grade 7 (CSSD)
- In-service Co-ordinator, Grade 11

### Port Moresby General Hospital

- Nurse Specialist, Grade 8
- Oncology Nurse, Grade 7
- Nursing Ward Manager, Grade 11
- Nursing Ward Manager, Paediatric Acute, Grade 11
- Assistant Nurse Manager (Psychiatric), Grade 9
- Ward Manager (Maternity Ward), Grade 11
- Ward Supervisor (Midwifery), Grade 12
- Nurse Unit Manager

As part of the face to face interviews, the sub-committee collected job descriptions and job specifications to better inform the steering committee of the expected roles and responsibilities of nurses.

While each interviewee provided different and detailed views of their changing roles and responsibility in their particular setting(s), there was general agreement that nursing across the clinical, administrative and educational specialties has undergone extensive change.

Firm views were expressed by the majority of those interviewed that there was an intensification of nursing practice at all levels primarily due to increased demands for public health services, labour shortages and the increased acuity of patients.

### The changing working environment

Most interviewees were of the view that the roles and responsibilities of nursing had changed because of a number of key structural developments that had impacted on nursing at all levels. These included the devolution of primary care responsibilities, changes in education and increases in nursing workloads and nursing interactions.

### Changes in work responsibility and the devolution of responsibility of medical officers and health executive officers

The shortage of medical officers and health extension officers has resulted in senior clinical nurses undertaking the new role and responsibility for providing primary care.

The primary care responsibilities, an integral part of the nursing role, included diagnosis, the prescribing of medication and referral of patients. This in many cases was a new and emerging role which has expanded the skills base and responsibility of many nurses. While most nurses had embraced the new role and welcomed the responsibilities, it was the opinion of nurses that the current classification structure and remuneration arrangements did not recognise or appropriately reward the increased responsibility and expanded practice.

### Changes in education

Nursing is now a profession where employees are required to have tertiary qualifications in order to practice. In addition to this, there is a responsibility for all nurses to maintain their clinical and professional competence and to keep abreast of changes in clinical practice, the use of new technology and medication administration.



In the vast majority of cases, the interviewees advised that the requirement of ongoing education was an undertaking that they initiated and pursued themselves.

Most interviewees were of the view that tertiary education for nursing officers had resulted in nurses being able to provide more complex services to patients at hospitals and rural health centres. A consequence of this is that in many settings, particularly in rural health centres, nurses had progressively assumed responsibility for work that has been traditionally undertaken by medical officers.

#### More patients and more nursing intervention

Clinical nurses now increasingly have responsibility for more patients and these patients require more nursing intervention than they did in the past. Clinical nurses have had to improve their clinical assessment skills as patient conditions have become more acute and demands on the public hospitals have increased.

The role of the clinical nurses has become more complex. Furthermore, the proportion of clinical nurses within the public sector workforce had decreased and the numbers of community health workers increased and therefore nursing responsibilities have become more complex while at the same time an increasing number of workers with less skills and training require their supervision and control.

In relation to administration and management, the interviewees spoke of the changes to the responsibilities and duties of nurse managers. In particular, many noted the ongoing difficulties with rostering, and juggling staff shortages, inpatient paper work, demands for training, occupational health and training issues, counseling of patients and families and ongoing and increased requirements arising from the budgetary and financial auditing processes.

#### Nurses employed in district health facilities

It was apparent that nurses working in district or sub-district health facilities saw their role as providing a frontline primary care nursing service. Many however expressed sadness at the lack of available services or the limitation on existing services due mainly to nursing staff shortages.

Other comments included

1. Staff shortages leading to a chronic under-utilisation of district health services.
2. Nurses progressively undertaking the role of primary health provider due to the reducing availability of medical officers and health extension officers.
3. Little, if any, co-ordinated effort to provide adequate training and professional or peer support resulting in the situation where nurses were responsible for maintaining their own clinical expertise and capacities.
4. The growing incidence of HIV/AIDS and the consequent proportion of nurses' time spent in education and counseling.

5. A lack of general awareness in the communities about the dangers of communicable diseases and the growing requirement that nurses be at the forefront of education and clinical treatments.
6. The demands by communities at district and sub-district health facilities continuing to increase with the consequent impact on nurses of increased workload, out of hours demands and stress in their working lives.
7. Nurses seeking to maintain a clinical career in district health facilities needing to undertake further education and qualifications beyond their basic nursing qualifications.

### Hospital sectors

Nurses and non-nurses employed within the hospitals sectors agreed that demands on nurses, particularly in the larger metropolitan and regional hospitals continued to increase. There was a general view that demands on hospitals had increased primarily because of growing populations and migration from rural areas to urban areas.

In many case hospitals responded to this increased service demand by increasing capacity - providing additional beds and accelerating patient throughput. (e.g. a maternity patient is now only expected to remain in hospital for 12 hours). Nursing staff have bore the full impact of the increased demand on hospital services.

Other comments included:

1. Increased patient acuity and throughput.
2. The long term decline in hospital infrastructure and consumables resulting in the ability to provide adequate patient care being quite difficult.
3. Increased number of community health workers employed in the hospital sectors and the subsequent decline of nurse numbers, and the need to supervise less qualified employees required to carry out nursing work.
4. Increased technology and the nurse's responsibility to operate and to teach others.
5. The ongoing need to undertake further study and to maintain up-to-date knowledge and skills primarily through self education.
6. A greater emphasis on administration, particularly for senior nurses who are required to prepare and submit reports, submissions and budgetary papers.

### Interviewees views about nursing wages and employment conditions

There was a universal view by nurses and non-nurses that nursing wages and working conditions compared unfavorably with that of other groups of workers with comparable levels of responsibility.

The interviewees were of the view that the requirement to hold a degree qualification to be registered as a nurse in Papua New Guinea was not recognized by the remuneration that they receive and compared poorly with other degrees qualified health professionals. Many nurses were of the view that their degree qualifications would also improve their chances of promotion and/or accessing specialist pathways and would therefore improve their pay. Many expressed disappointment that this was not the case.

That nurses pay and conditions of employment are inadequate underpinned a general view that the government was not committed to nurses. Nurses attributed insufficient remuneration as a reflection of the inability or unwillingness on the part of government to sufficiently budget for reasonable remuneration for nurses and this made nursing less attractive for potential entrants and more difficult for those who remained nursing. ("They just don't care" was a common statement).

Most of the interviewees considered that they were incorrectly classified and others had languished in temporary positions for many years.



## Job evaluation survey

### Summary

1362 completed surveys were received. The majority of respondents were from the Highlands region and the least from the Islands. When considered by province, most responses were from the National Capital District and Eastern Highlands. More than half (53.2%) of respondents indicated that their place of work was a provincial hospital, while less than one percent worked in a provincial clinic. The vast majority of respondents were female (81%), and were in the 25-44 age group (63.7%), followed by those between 45 and 54, and then 35 and 44. Most respondents were working as Nursing Officers Grade 6, 7 or 8 (71.6%).

In terms of qualifications more than half the respondents possessed a basic certificate as their highest nursing qualification (55.7%), with 31.4% possessing a diploma or bachelor degree. Less than 5% indicated they had obtained a post-graduate qualification. Approximately one-fifth of nurses indicated they had obtained a non-nursing qualification (21.7%) of whom most had obtained a certificate (65.7%), and nearly a quarter possessed a diploma.

Most respondents indicated that their supervisor was in the same workplace (86.9%) and that their immediate supervisor was a nurse (90.2%). When asked who they would seek assistance from if they had a work problem most said their supervisor, and a small proportion indicated they would seek help from other health staff, such as physiotherapists.

The mean total hours worked during the last week for all respondents was 55.9 (range 0 – 115). Paid hours ranged from 0 to 113 (mean 43.8), while unpaid ranged from 0 to 54 (mean 13.1).

Respondents indicated they spent on average 21.1 hours/week on direct care, 12.1 on indirect care, 6.7 on administration, 5.2 on management and 3.8 on professional activities. When asked about involvement in additional activities during their work time most nurses engaged in activities such as analysing and planning patient care (78.6%), seeking assistance with problems in the workplace (75.3%), providing advice to other nurses or health professionals (74.8%) and providing supervision to other nurses (73.3%). When asked about the number of patients attended to, the mean was 44.5 patients per day but considerable adjustment was made to the responses and the result should be viewed with caution.

More than three-quarters of respondents (75.4%) indicated that the quality of care they provided to patients in the previous week was satisfactory or better, while only 11.2% suggested that the care provided was unsatisfactory.

### Introduction

The PNG Public Sector Nursing Job Evaluation Steering Committee determined that all nurses in PNG would be asked to complete a survey titled “PNG Public Sector Nursing Job Evaluation Survey”. Data were sought on the demographics of the population including qualifications and supervisory reporting mechanisms, hours worked, amount of time spent in a range of ‘higher order’ activities and the number of patients cared for daily.

1362 completed surveys were returned for analysis.

## Analysis

Data were entered into a Microsoft Access (Microsoft Corporation, 2006a) database, and imported into SPSS v15 (SPSS Inc., 2006) and Microsoft Excel (Microsoft Corporation, 2006b) for cleaning, analysis and table creation.

Description of the sample and responses to the questions are presented in the section headed Descriptive Analysis and analyses of selected variables by region and province are presented in Appendix 1 and Appendix 2 respectively. Hours worked last week by selected categories is provided in Appendix 3, and the percentage of respondents undertaking the various activities listed in the course of their work is given in Appendix 4.

### Missing data and re-coding

Most items were completed by respondents, with the proportion of missing data below 2% for all items except for Question 7: *'If you have a work problem from whom are you most likely to seek assistance?'* (6.2% missing), and question 17: *'Given the number of patients you looked after last week, would you describe the care you were able to provide as: ...highly satisfactory (etc)'* (13.4% missing). Analysis presented in the *'Descriptive Analysis'* section indicates the proportion of missing data in each table.

Question 4: *'Please indicate your job designation'* provided respondents with a selection of categories. However, a large number of respondents indicated additional categories. All categories, whether in the initial list, or as provided by respondents, have been listed in the relevant table. In addition, these data were re-coded using the grade information supplied by respondents in order to provide details by job grade.

Responses to Question 7 were collected in text (rather than categorical) format, but on review were found to be generally constrained to five categories. The text was therefore converted to categories for analysis.

Responses to Question 13 *'Last week, how many hours did you spend on the following activities...'* were often well outside the range of hours it is possible to work in a week, with a maximum of 952 total worked hours reported by one respondent. Where reported by the respondents as hours worked for a fortnight, month or year these figures were adjusted accordingly. Otherwise the hours were capped at 55 hours per category (direct care, indirect care, etc), 50 hours for unpaid work, 100 hours for total paid work and 115 hours for total hours (paid and unpaid) worked.

Similarly, responses to Question 16 *'How many patients on average did you care for each day'* were often outside the range of possible patient numbers (maximum 1218). These patient numbers were capped at 100.

Data displayed in this analysis reflect these adjustments.

## Descriptive Analysis

The majority of respondents were from the Highlands region, with the least from the Islands (Table 1). When considered by province, most responses were from the National Capital District and Eastern Highlands (Table 2).

TABLE 1 REGION

	Frequency	Percent
Southern	391	28.7
Highlands	422	31.0
Islands	247	18.1
Mamrose	296	21.7
Missing	6	0.4
	1362	100

TABLE 2 PROVINCE

	Frequency	Percent
National Capital District	221	16.2
Central	4	0.3
Simbu	36	2.6
Eastern Highlands	116	8.5
East New Britain	69	5.1
East Sepik	46	3.4
Enga	114	8.4
Gulf	38	2.8
Madang	102	7.5
Manus	32	2.3
Milne Bay	60	4.4
Morobe	106	7.8
New Ireland	64	4.7
Oro	34	2.5
North Solomons	19	1.4
Southern Highlands	51	3.7
Western Province	43	3.2
Western Highlands	102	7.5
West New Britain	59	4.3
Saundaun	41	3.0
Missing	5	0.4
	1362	100

More than half (53.2%, Table 3) of respondents indicated that their place of work was a provincial hospital, while less than one percent worked in a provincial clinic.

TABLE 3 PLACE OF WORK

	Frequency	Percent
Urban Hospital	207	15.2
Provincial Hospital	725	53.2
District Hospital	54	4.0
Urban Clinic	111	8.1
Provincial Clinic	8	0.6
District Health Centre	90	6.6
Other	147	10.8
Missing	20	1.5
	1362	100

As stated previously, many respondents indicated their job designation as other than those categories listed. The majority of respondents were working as Nursing Officers Grade 6, 7 or 8 (a total of 71.6% of respondents, Table 4). This was also reflected when these responses were re-coded into job grade (Table 5).



TABLE 4 JOB DESIGNATION

	Frequency	Percent
Assistant Director Nursing Services Grade 12	17	1.2
Assistant Manager / Nursing Officer Grade 10	87	6.4
Casual Nursing Officer	2	0.1
Clinical Tutor Grade 8	1	0.1
Coordinator Family Health Services Grade 12	1	0.1
Coordinator Family Planning Grade 10	1	0.1
Coordinator Health Planning & Support Services	1	0.1
Coordinator Health Promotive Services Grade 13	1	0.1
Coordinator Infection Control and Nursing Standards Grade 11	1	0.1
Coordinator Inservice Grade 10	4	0.3
Coordinator Inservice Grade 9	1	0.1
Coordinator Nursing Services Program Grade 12	2	0.1
Coordinator Primary Health Care Grade 11	3	0.2
Director Finance & Administration Grade 13	1	0.1
Director Nursing Services Grade 12	1	0.1
Director Nursing Services Grade 13	11	0.8
Director Nursing Services Grade 14	3	0.2
District Family Health Coordinator	1	0.1
Health Information Officer Grade 10	2	0.1
Manager / Nursing Officer Grade 11	55	4.0
Manager / Nursing Officer Grade 12	22	1.6
Nurse Specialist Grade 3	1	0.1
Nursing Officer Grade 1	2	0.1
Nursing Officer Grade 2	4	0.3
Nursing Officer Grade 3	1	0.1
Nursing Officer Grade 5	2	0.1
Nursing Officer Grade 6	442	32.5
Nursing Officer Grade 7	289	21.2
Nursing Officer Grade 8	244	17.9
Nursing Officer Grade 9	137	10.1
Nutritionist Education Officer Grade 10	5	0.4
Provincial Disease Control Officer Grade 12	1	0.1
Provincial Family Health Service Coordinator	1	0.1
Provincial Health Educator/Promoter	1	0.1
Training Officer Grade 9	1	0.1
Missing	13	1.0
	1362	100

TABLE 5 JOB DESIGNATION GRADE

	Frequency	Percent
Grade 1	4	0.3
Grade 2	4	0.3
Grade 3	2	0.1
Grade 5	2	0.1
Grade 6	442	32.5
Grade 7	289	21.2
Grade 8	245	18.0
Grade 9	139	10.2
Grade 10	99	7.3
Grade 11	58	4.3
Grade 12	47	3.5
Grade 13	15	1.1
Grade 14	3	0.2
Missing	13	1.0
	1362	100

Most respondents indicated that their supervisor was in the same workplace (86.9%, Table 6) and that their immediate supervisor was a nurse (90.2%, Table 7).

TABLE 6 IS YOUR IMMEDIATE SUPERVISOR LOCATED IN THE SAME WORKPLACE AS YOU?

	Frequency	Percent
Yes	1183	86.9
No	162	11.9
Missing	17	1.2
	1362	100

TABLE 7 IS YOUR IMMEDIATE SUPERVISOR A NURSE?

	Frequency	Percent
Yes	1228	90.2
No	124	9.1
Missing	10	0.7
	1362	100

As described previously, responses to Question 7: *'If you have a work problem from whom are you most likely to seek assistance?'*, initially in text format, were coded into categories. Most indicated that they are most likely to seek assistance from their supervisor (Table 8), and a small proportion indicated they would seek help from other health staff, such as physiotherapists.

TABLE 8 IF YOU HAVE A WORK PROBLEM FROM WHOM ARE YOU MOST LIKELY TO SEEK ASSISTANCE?

	Frequency	Percent
Colleague	162	11.9
Colleague & Supervisor	111	8.1
Supervisor	969	71.1
Doctor	6	0.4
Other	30	2.2
Missing	84	6.2
	1362	100

The vast majority of respondents were female (81%, Table 9), and were in the age group 25-44 (63.7%). In descending order of percent of responses by age group, nurses aged between 25 and 34 years were the largest group, followed by those between 45 and 54, and then those between 35 and 44 (Table 10).

TABLE 9 GENDER

	Frequency	Percent
Female	1103	81.0
Male	243	17.8
Missing	16	1.2
	1362	100

TABLE 10 AGE GROUP

	Frequency	Percent
Under 25 Years	41	3.0
25-34 Years	491	36.0
35-44 Years	377	27.7
45-54 Years	390	28.6
55-64 Years	62	4.6
Missing	1	0.1
	1362	100

More than half of respondents possessed a basic certificate as their highest nursing qualification (55.7%), with 31.4% possessing a diploma or bachelors degree. Less than 5% indicated they had obtained a post-graduate qualification (Table 11).

TABLE 11 WHAT IS YOUR HIGHEST NURSING QUALIFICATION?

	Frequency	Percent
Basic Certificate	758	55.7
Post-Basic Certificate	118	8.7
Diploma	205	15.1
Bachelor Degree	222	16.3
Post-Bachelor Degree	49	3.6
Other	4	0.3
Missing	6	0.4
	1362	100

Approximately one-fifth of nurses indicated they had obtained a non-nursing qualification (21.7%, Table 12). Of these respondents, most had obtained a certificate (65.7%), and nearly a quarter possessed a diploma (Table 13).

TABLE 12 DO YOU HAVE NON-NURSING QUALIFICATIONS?

	Frequency	Percent
Yes	295	21.7
No	1067	78.3
	1362	100

TABLE 13 HIGHEST NON-NURSING QUALIFICATION

	Frequency	Percent
Certificate	194	65.7
Diploma	69	23.4
Degree	19	6.4
Post Graduate	9	3.1
Missing	4	1.4
	295	100

*Not applicable = 1067*

As noted in the *Introduction*

The PNG Public Sector Nursing Job Evaluation Steering Committee determined that all nurses in PNG would be asked to complete a survey titled “PNG Public Sector Nursing Job Evaluation Survey”. Data were sought on the demographics of the population including qualifications and supervisory reporting mechanisms, hours worked, amount of time spent in a range of ‘higher order’ activities and the number of patients cared for daily.

1362 completed surveys were returned for analysis.

2Analysis section (page 23), hours worked data were reviewed and adjusted. Using the revised data, it was found that the mean total hours worked during the last week for all respondents was 55.9 (range 0 – 115). Paid hours ranged from 0 to 113 (mean 43.8), while unpaid ranged from 0 to 54 (mean 13.1). See (Table 14) for detailed results. A further analysis of these data by region, province, and other categories was undertaken, and are presented in Appendix 3 (page 41).

TABLE 14 LAST WEEK, HOW MANY HOURS DID YOU SPEND ON THE FOLLOWING ACTIVITIES? (ENTIRE SAMPLE)

	Mean	SD	Min	Max
Hours spent on direct care	21.1	16.36	0	55
Hours spent on indirect care	12.1	12.24	0	54
Hours spent on administration	6.7	9.84	0	54
Hours spent on management	5.2	9.66	0	55
Hours spent on professional activities	3.8	8.18	0	54
Paid hours worked in the last week	43.8	25.7	0	113
Unpaid hours worked in the last week	13.1	14.21	0	55
Total hours worked in the last week	55.9	33.71	0	115

Analysis of responses to Question 14 *'In the course of your work and doing the activities listed in Question 13 did you spend any of your time in the following activities...'* shows that most nurses engaged in activities such as analysing and planning patient care, seeking assistance with problems in the workplace, and providing advice to other nurses or health professionals and supervision to other nurses (Table 15). Details of responses to this question by region, province and other categories are provided in Appendix 4 (page 44).

TABLE 15 LAST WEEK, DID YOU SPEND ANY TIME IN THE FOLLOWING ACTIVITIES? (ENTIRE SAMPLE)

AAA	N	%
Analyse patient and other information to plan and provide patient care	1070	78.6%
Seek assistance with problem solving in the workplace	1025	75.3%
Provide advice to other nurses or other health professionals	1019	74.8%
Provide supervision to other nurses	998	73.3%
Evaluate nursing care and adjust care plans accordingly	936	68.7%
Participate in quality improvement activities	902	66.2%
Undertake self evaluation of own nursing practice	900	66.1%
Contribute to the professional development of others	753	55.3%
Act as a mentor or preceptor to other nurses or nursing students	746	54.8%
Participate in orientation of new staff	646	47.4%
Participate in the development of strategies to enhance patient care and service delivery	587	43.1%
Develop the roster of nursing staff	508	37.3%
Act to improve workplace culture in relation to education, learning, research & prof. dev.	489	35.9%
Participate in the clinical education of student nurses	475	34.9%
Participate in performance appraisal	431	31.6%
Undertake liaison with external agencies in relation to patient care	368	27.0%
Participate in the development of strategic planning for nursing	307	22.5%
Participate in nursing related research	288	21.1%
Participate in the development of budgets and monitoring of financial performance	142	10.4%
Participate in the recruitment or selection of staff	60	4.4%
N	1362	

As noted previously, considerable adjustment was made to responses to Question 16, and the results should be viewed with caution. The revised results are presented in (Table 16), showing a mean of 44.5 patients per day.

TABLE 16 NUMBER OF PATIENTS CARED FOR EACH DAY LAST WEEK

	Mean	SD	Min	Max
Average number of patients cared for each day	44.5	31.05	1	100

More than three-quarters of respondents (75.4%) indicated that the quality of care they provided to patients in the previous week was satisfactory or better, while only 11.2% suggested that the care provided was unsatisfactory.

TABLE 17 QUALITY OF CARE I WAS ABLE TO PROVIDE LAST WEEK

	Frequency	Percent
Highly satisfactory	152	11.2
Moderately satisfactory	312	22.9
Satisfactory	563	41.3
Moderately unsatisfactory	117	8.6
Very unsatisfactory	35	2.6
Missing	183	13.4
	1362	100

## Appendix 1

### Details by Region

Data in the following tables are presented as a percentage of respondents per region. For example, (Table 26) indicates that 34.7% of respondents from the Southern region nominated their place of work as an Urban Hospital.

TABLE 18 PLACE OF WORK BY REGION

	Southern	Highlands	Islands	Mamrose
Urban Hospital	34.7%	6.9%	6.6%	9.0%
Provincial Hospital	35.2%	67.0%	49.8%	64.4%
District Hospital	0.3%	7.6%	6.2%	1.7%
Urban Clinic	13.0%	5.2%	3.7%	10.4%
Provincial Clinic	0.5%	0.7%	0.4%	0.7%
District Health Centre	3.6%	6.4%	7.8%	10.4%
Other	12.7%	6.2%	25.5%	3.5%

TABLE 19 SUPERVISION BY REGION

	Southern	Highlands	Islands	Mamrose
Immediate supervisor in the same workplace	88.1%	87.7%	85.2%	90.4%
Immediate supervisor a nurse	94.4%	88.0%	90.6%	90.2%

TABLE 20 CONTACT PERSON FOR PROBLEMS BY REGION

	Southern	Highlands	Islands	Mamrose
Colleague	12.9%	10.7%	16.4%	12.3%
Colleague & Supervisor	9.4%	8.2%	8.2%	8.8%
Supervisor	72.2%	79.8%	73.7%	76.5%
Doctor	0.6%	0.5%	0.4%	0.4%
Other	5.0%	0.8%	1.3%	2.1%

TABLE 21 AGE GROUP BY REGION

	Southern	Highlands	Islands	Mamrose
Under 25 Years	3.1%	3.3%	2.4%	3.0%
25-34 Years	32.2%	44.8%	35.4%	29.7%
35-44 Years	25.3%	29.4%	24.4%	31.4%
45-54 Years	31.2%	21.1%	30.9%	33.4%
55-64 Years	8.2%	1.4%	6.9%	2.4%

TABLE 22 NURSING QUALIFICATION BY REGION

	Southern	Highlands	Islands	Mamrose
Basic Certificate	47.4%	59.6%	63.3%	55.4%
Post-Basic Certificate	8.8%	7.8%	11.4%	7.4%
Diploma	16.2%	14.7%	16.7%	13.2%
Bachelor Degree	21.4%	14.5%	6.9%	20.3%
Post-Bachelor Degree	5.9%	3.1%	1.6%	3.0%
Other	0.3%	0.2%	0.0%	0.7%

TABLE 23 NON-NURSING QUALIFICATION BY REGION

	Southern	Highlands	Islands	Mamrose
Non-Nursing qualification	18.9%	20.9%	21.1%	26.7%
Certificate	67.6%	62.8%	71.2%	66.2%
Diploma	24.3%	29.1%	19.2%	20.8%
Degree	8.1%	4.7%	3.8%	9.1%
Post Graduate	0.0%	3.5%	5.8%	3.9%

TABLE 24 QUALITY OF CARE BY REGION

	Southern	Highlands	Islands	Mamrose
Highly satisfactory	11.0%	19.0%	11.5%	8.2%
Moderately satisfactory	30.4%	30.0%	24.0%	19.1%
Satisfactory	49.1%	40.5%	55.3%	49.4%
Moderately unsatisfactory	6.5%	9.6%	8.7%	15.4%
Very unsatisfactory	3.0%	0.8%	0.5%	7.9%



TABLE 25 PROVINCE BY REGION

	Southern		Highlands		Islands		Mamrose	
	N	%	N	%	N	%	N	%
National Capital District	215	55.3%	1	0.2%	1	0.4%	2	0.7%
Central	4	1.0%	0	0.0%	0	0.0%	0	0.0%
Simbu	0	0.0%	36	8.5%	0	0.0%	0	0.0%
Eastern Highlands	1	0.3%	114	27.0%	1	0.4%	0	0.0%
East New Britain	0	0.0%	0	0.0%	69	28.0%	0	0.0%
East Sepik	0	0.0%	0	0.0%	0	0.0%	46	15.6%
Enga	0	0.0%	114	27.0%	0	0.0%	0	0.0%
Gulf	37	9.5%	0	0.0%	0	0.0%	1	0.3%
Madang	0	0.0%	0	0.0%	1	0.4%	100	33.9%
Manus	0	0.0%	0	0.0%	32	13.0%	0	0.0%
Milne Bay	60	15.4%	0	0.0%	0	0.0%	0	0.0%
Morobe	0	0.0%	0	0.0%	0	0.0%	105	35.6%
New Ireland	0	0.0%	0	0.0%	64	26.0%	0	0.0%
Oro	34	8.7%	0	0.0%	0	0.0%	0	0.0%
North Solomons	0	0.0%	0	0.0%	19	7.7%	0	0.0%
Southern Highlands	0	0.0%	51	12.1%	0	0.0%	0	0.0%
Western Province	38	9.8%	4	0.9%	0	0.0%	0	0.0%
Western Highlands	0	0.0%	102	24.2%	0	0.0%	0	0.0%
West New Britain	0	0.0%	0	0.0%	59	24.0%	0	0.0%
Saundaun	0	0.0%	0	0.0%	0	0.0%	41	13.9%
Total	389		422		246		295	

*Note: Missing data excluded*



## Appendix 2

### Details by province

Data in the following tables are presented as a percentage of respondents per province. For example, Table 26 indicates that 57.3% of respondents from the National Capital District nominated their place of work as an Urban Hospital.

TABLE 26 PLACE OF WORK BY PROVINCE

	National Capital District	Central	Simbu	Eastern Highlands	East New Britain	East Sepik	Enga	Gulf	Madang	Manus	Milne Bay	Morobe	New Ireland	Oro	North Solomons	Southern Highlands	Western Province	Western Highlands	West New Britain	Saundaun
Urban Hospital	57.3	25.0	5.6	8.7	8.8	4.3	1.8	10.5	7.1	9.4	5.0	13.7	1.6	5.9	5.9	3.9	7.3	11.8	8.5	2.5
Provincial Hospital	6.9	0.0	94.4	71.3	22.1	89.1	46.5	50.0	47.5	65.6	95.0	60.8	42.9	61.8	29.4	96.1	65.9	59.8	88.1	92.5
District Hospital	0.0	0.0	0.0	5.2	0.0	2.2	22.8	2.6	3.0	0.0	0.0	1.0	6.3	0.0	64.7	0.0	2.4	0.0	0.0	0.0
Urban Clinic	17.0	0.0	0.0	7.8	0.0	0.0	6.1	7.9	11.1	15.6	0.0	17.6	6.3	14.7	0.0	0.0	9.8	6.9	0.0	2.5
Provincial Clinic	0.9	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	3.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
District Health Centre	0.5	0.0	0.0	1.7	0.0	4.3	8.8	23.7	23.2	0.0	0.0	3.9	28.6	2.9	0.0	0.0	9.8	14.7	1.7	0.0
Other	17.4	75.0	0.0	2.6	69.1	0.0	14.0	5.3	8.1	6.2	0.0	2.0	14.3	14.7	0.0	0.0	4.9	6.9	1.7	0.0

TABLE 27 SUPERVISION BY PROVINCE

	National Capital District	Central	Simbu	Eastern Highlands	East New Britain	East Sepik	Enga	Gulf	Madang	Manus	Milne Bay	Morobe	New Ireland	Oro	North Solomons	Southern Highlands	Western Province	Western Highlands	West New Britain	Saundaun
Immediate supervisor in the same workplace	94.1	100	94.1	85.1	85.3	93.2	84.2	92.1	91.2	96.9	83.1	87.5	73.0	66.7	94.4	92.0	81.4	89.0	89.8	92.7
Immediate supervisor a nurse	98.2	100	97.1	93.9	95.7	95.7	75.4	78.9	81.2	96.9	100	94.3	75.8	88.2	94.7	98.0	85.7	87.0	94.8	97.6

TABLE 28 CONTACT PERSON FOR PROBLEMS BY PROVINCE

	National Capital District	Central	Simbu	Eastern Highlands	East New Britain	East Sepik	Enga	Gulf	Madang	Manus	Milne Bay	Morobe	New Ireland	Oro	North Solomons	Southern Highlands	Western Province	Western Highlands	West New Britain	Saundaun
Colleague	13.1	25.0	2.9	12.6	23.8	13.3	5.7	25.7	10.9	0.0	6.9	17.2	16.1	10.0	22.2	26.7	12.5	8.8	12.5	2.5
Colleague & Supervisor	13.1	0.0	0.0	4.5	15.9	4.4	2.8	0.0	11.9	3.4	5.2	9.1	1.6	6.7	11.1	2.2	12.5	23.1	8.9	2.5
Supervisor	72.3	75.0	97.1	81.1	58.7	77.8	89.6	71.4	75.2	93.1	69.0	70.7	80.6	83.3	61.1	71.1	62.5	67.0	78.6	95.0
Doctor	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	5.6	0.0	5.0	0.0	0.0	0.0
Other	1.5	0.0	0.0	0.0	1.6	4.4	1.9	2.9	2.0	3.4	19.0	2.0	1.6	0.0	0.0	0.0	7.5	1.1	0.0	0.0

TABLE 29 HIGHEST NURSING QUALIFICATION BY PROVINCE

	National Capital District	Central	Simbu	Eastern Highlands	East New Britain	East Sepik	Enga	Gulf	Madang	Manus	Milne Bay	Morobe	New Ireland	Oro	North Solomons	Southern Highlands	Western Province	Western Highlands	West New Britain	Saundaun
Basic Certificate	41.4	0.0	50.0	55.2	78.3	54.3	61.4	59.5	52.0	50.0	61.7	56.6	60.3	54.5	57.9	68.6	51.2	61.4	56.9	61.0
Post-Basic Certificate	8.6	25.0	11.1	7.8	7.2	6.5	10.5	5.4	7.8	12.5	8.3	9.4	19.0	9.1	15.8	0.0	9.3	7.9	6.9	2.4
Diploma	18.2	25.0	16.7	19.0	8.7	6.5	15.8	13.5	9.8	15.6	5.0	13.2	15.9	24.2	21.1	3.9	16.3	12.9	27.6	29.3
Bachelor Degree	24.5	50.0	19.4	15.5	5.8	30.4	10.5	16.2	24.5	15.6	20.0	18.9	4.8	6.1	5.3	17.6	18.6	14.9	5.2	4.9
Post-Bachelor Degree	6.4	0.0	2.8	1.7	0.0	2.2	1.8	5.4	4.9	6.2	5.0	1.9	0.0	6.1	0.0	9.8	4.7	3.0	3.4	2.4
Other	0.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 30 NON-NURSING QUALIFICATIONS BY PROVINCE

	National Capital District	Central	Simbu	Eastern Highlands	East New Britain	East Sepik	Enga	Gulf	Madang	Manus	Milne Bay	Morobe	New Ireland	Oro	North Solomons	Southern Highlands	Western Province	Western Highlands	West New Britain	Saundaun
Non-Nursing qualification	15.4	0.0	22.2	27.6	31.9	34.8	19.3	18.4	39.2	3.1	23.3	16.0	17.2	17.6	26.3	7.8	34.9	20.6	22.0	12.2
Certificate	61.8	0.0	75.0	59.4	81.8	81.2	81.0	57.1	67.5	0.0	64.3	53.3	63.6	83.3	60.0	50.0	93.3	45.0	69.2	60.0
Diploma	29.4	0.0	12.5	28.1	18.2	0.0	14.3	42.9	20.0	0.0	21.4	33.3	9.1	16.7	20.0	25.0	0.0	55.0	30.8	40.0
Degree	8.8	0.0	0.0	9.4	0.0	18.8	4.8	0.0	7.5	100.0	14.3	6.7	9.1	0.0	0.0	0.0	6.7	0.0	0.0	0.0
Post Graduate	0.0	0.0	12.5	3.1	0.0	0.0	0.0	0.0	5.0	0.0	0.0	6.7	18.2	0.0	20.0	25.0	0.0	0.0	0.0	0.0

TABLE 31 QUALITY OF CARE PROVIDED BY PROVINCE

	National Capital District	Central	Simbu	Eastern Highlands	East New Britain	East Sepik	Enga	Gulf	Madang	Manus	Milne Bay	Morobe	New Ireland	Oro	North Solomons	Southern Highlands	Western Province	Western Highlands	West New Britain	Saundaun
Highly satisfactory	9.6	0.0	23.3	20.6	14.0	18.6	20.0	3.3	7.8	0.0	20.0	7.5	13.0	9.1	6.7	8.9	11.8	20.2	15.7	0.0
Moderately satisfactory	28.8	25.0	23.3	31.8	5.3	39.5	26.3	23.3	17.8	17.9	34.5	9.7	42.6	27.3	13.3	57.8	35.3	20.2	33.3	22.5
Satisfactory	51.0	0.0	53.3	40.2	68.4	41.9	38.9	56.7	53.3	75.0	43.6	41.9	40.7	59.1	73.3	24.4	47.1	46.4	39.2	65.0
Moderately unsatisfactory	7.6	50.0	0.0	5.6	10.5	0.0	13.7	13.3	14.4	7.1	0.0	24.7	3.7	4.5	6.7	8.9	2.9	13.1	11.8	12.5
Very unsatisfactory	3.0	25.0	0.0	1.9	1.8	0.0	1.1	3.3	6.7	0.0	1.8	16.1	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0

## Appendix 3

### Hours worked last week

The following tables indicate the mean number of hours worked during the last week. The standard deviation (SD) provides an indicator of the amount of variation between respondents.

TABLE 32 HOURS WORKED BY REGION

		Hours Spent on direct care	Hours Spent on indirect care	Hours spent on administration	Hours spent on management	Hours spent on Professional Activities	Paid hours worked in the last week	Unpaid hours worked in the last week	Total hours worked in the last week
Southern	Mean	18.9	11.8	6.3	5.0	3.4	45.4	11.2	49.9
	SD	16.30	12.49	9.04	9.21	6.93	36.10	13.81	34.34
Highlands	Mean	23.1	12.0	7.6	4.8	3.7	51.3	15.2	61.3
	SD	16.93	11.82	10.74	9.42	8.20	32.55	14.80	34.79
Islands	Mean	22.1	12.2	5.2	4.9	2.5	46.9	11.4	53.2
	SD	17.60	13.82	9.16	10.20	6.47	35.85	13.87	34.96
Mamrose	Mean	20.4	12.3	7.4	6.0	5.8	51.8	14.2	58.3
	SD	14.08	11.05	9.95	10.14	10.42	38.01	13.82	28.70



TABLE 33 HOURS WORKED BY PROVINCE

		Hours spent on direct care	Hours spent on indirect care	Hours spent on administration	Hours spent on management	Hours spent on professional activities	Paid hours worked in the last week	Unpaid hours worked in the last week	Total hours worked in the last week
National Capital District	Mean	19.2	13.1	7.5	5.1	3.7	48.6	11.8	50.9
	SD	17.05	13.87	10.24	9.62	7.43	41.26	14.84	37.23
Central	Mean	21.0	13.4	4.4	0.6	0.5	39.8	23.7	63.5
	SD	9.20	8.18	2.14	1.25	1.00	17.93	25.41	42.31
Simbu	Mean	21.2	9.5	7.0	3.2	2.2	43.1	12.6	50.3
	SD	18.51	13.32	12.35	6.34	3.77	38.71	12.47	35.13
Eastern Highlands	Mean	20.9	10.8	7.5	3.9	2.5	45.6	11.0	51.7
	SD	16.44	12.22	10.63	9.67	6.66	35.42	14.63	36.12
East New Britain	Mean	16.8	10.0	4.6	5.8	3.1	40.4	8.8	44.0
	SD	16.58	12.48	8.10	11.34	6.90	38.07	12.93	35.95
East Sepik	Mean	19.4	17.0	16.2	11.8	12.3	76.8	23.2	69.8
	SD	16.19	15.09	18.01	18.33	17.79	68.72	15.31	32.46
Enga	Mean	28.9	13.4	9.5	7.1	5.3	64.1	25.0	82.9
	SD	17.51	12.38	12.88	11.78	10.14	24.22	14.43	27.24
Gulf	Mean	17.4	9.5	5.5	6.3	2.8	41.4	8.6	46.2
	SD	16.57	13.55	6.45	9.14	7.99	34.20	12.66	36.87

		Hours spent on direct care	Hours spent on indirect care	Hours spent on administration	Hours spent on management	Hours spent on professional activities	Paid hours worked in the last week	Unpaid hours worked in the last week	Total hours worked in the last week
Madang	Mean	14.1	10.4	5.4	4.7	4.9	39.4	13.7	49.8
	SD	13.00	11.37	6.18	6.57	8.96	29.19	14.83	32.32
Manus	Mean	34.5	18.4	7.2	4.2	1.8	66.1	27.9	87.6
	SD	14.85	9.78	7.49	7.45	4.73	19.86	13.66	25.13
Milne Bay	Mean	22.0	11.3	3.8	2.9	2.8	42.8	7.9	50.7
	SD	12.73	6.19	4.28	5.56	3.67	15.13	7.37	19.72
Morobe	Mean	22.6	9.6	4.0	3.4	3.1	42.6	6.7	48.8
	SD	12.82	6.51	4.25	5.77	6.62	9.88	5.69	11.74
New Ireland	Mean	18.3	11.6	6.9	5.9	3.9	46.5	8.8	48.2
	SD	15.52	14.02	12.22	11.55	8.56	38.41	13.41	30.75
Oro	Mean	9.7	7.7	4.1	5.7	1.5	28.6	11.0	36.1
	SD	13.33	9.42	6.28	10.41	2.83	31.66	14.02	35.55
North Solomons	Mean	12.8	8.5	3.1	3.7	3.6	31.7	3.6	35.3
	SD	15.52	12.10	5.16	7.73	7.14	31.46	9.44	36.80
Southern Highlands	Mean	18.1	10.7	5.0	3.0	3.0	39.7	6.8	41.1
	SD	14.96	10.39	7.10	5.66	6.83	31.99	9.17	28.50
Western Province	Mean	23.4	11.9	6.5	5.7	3.5	50.9	13.9	59.5
	SD	16.18	12.35	10.81	9.90	8.20	29.74	13.12	27.25
Western Highlands	Mean	21.5	13.1	7.4	4.9	4.4	51.3	14.1	60.9

		Hours spent on direct care	Hours spent on indirect care	Hours spent on administration	Hours spent on management	Hours spent on professional activities	Paid hours worked in the last week	Unpaid hours worked in the last week	Total hours worked in the last week
	SD	15.92	10.93	8.97	8.27	8.96	32.09	13.33	32.83
West New Britain	Mean	30.2	13.7	3.8	3.8	0.5	52.0	11.5	59.6
	SD	16.73	16.67	8.22	9.58	2.59	34.25	10.11	28.67
Saundaun	Mean	30.0	17.9	10.3	9.6	8.0	75.7	24.2	87.9
	SD	9.72	10.53	8.01	10.38	7.13	30.42	11.72	18.57

TABLE 34 HOURS WORKED BY PLACE OF WORK

		Hours spent on direct care	Hours spent on indirect care	Hours spent on administration	Hours spent on management	Hours spent on professional activities	Paid hours worked in the last week	Unpaid hours worked in the last week	Total hours worked in the last week
Urban Hospital	Mean	19.9	11.7	6.9	4.3	3.3	46.0	11.8	49.2
	SD	16.43	12.61	9.80	7.84	7.43	38.35	15.35	35.49
Provincial Hospital	Mean	22.8	12.9	6.5	4.9	3.8	50.9	13.9	59.4
	SD	15.94	11.66	9.34	9.54	7.96	33.74	13.33	31.34
District Hospital	Mean	18.3	14.1	6.8	6.0	5.0	50.2	12.4	57.1
	SD	14.05	14.64	10.96	10.18	10.57	38.15	15.26	37.93
Urban Clinic	Mean	19.1	6.6	5.6	4.0	3.4	38.7	9.3	45.1
	SD	16.67	9.99	9.49	8.09	6.93	32.74	14.31	35.87
Provincial Clinic	Mean	18.1	12.2	6.6	10.8	7.3	54.9	4.6	44.8
	SD	21.42	14.18	6.73	13.53	15.42	48.61	4.99	33.89
District Health Centre	Mean	24.1	12.2	6.5	5.0	3.0	50.8	16.8	59.5
	SD	15.10	12.24	10.57	9.21	8.18	37.88	16.73	32.85
Other	Mean	15.6	11.5	8.8	7.5	5.5	48.9	13.0	54.7
	SD	17.87	14.01	11.81	12.30	9.82	37.01	14.53	36.82

TABLE 35 HOURS WORKED BY AGE GROUP

		Hours spent on direct care	Hours spent on indirect care	Hours spent on administration	Hours spent on management	Hours spent on professional activities	Paid hours worked in the last week	Unpaid hours worked in the last week	Total hours worked in the last week
Under 25 Years	Mean	29.0	12.2	2.1	0.3	1.7	45.4	12.2	55.0
	SD	16.28	12.34	3.63	1.33	3.37	25.73	11.98	30.09
25-34 Years	Mean	25.8	14.0	4.8	1.9	2.3	48.7	13.7	58.5
	SD	15.24	12.44	7.50	5.05	6.16	29.68	14.52	33.38
35-44 Years	Mean	20.4	11.9	8.3	6.9	4.7	52.2	13.1	57.2
	SD	16.37	12.46	11.24	11.10	9.12	39.82	13.73	34.20
45-54 Years	Mean	16.3	10.2	8.0	7.8	5.3	47.6	13.1	53.5
	SD	15.95	11.59	10.64	11.57	9.33	38.02	14.46	33.57
55-64 Years	Mean	12.8	9.6	7.9	6.7	3.6	40.6	9.5	42.5
	SD	14.45	11.12	11.11	9.74	8.46	37.87	14.42	33.58



## Appendix 4

### Activities undertaken at work

Data in the following tables are presented as a percentage of respondents per category. For example, (Table 36) indicates that 78.8% of respondents from the Southern region had provided advice to other nurses or other health professionals during the course of their work in the last week.

TABLE 36 ACTIVITIES UNDERTAKEN BY REGION

	Southern	Highlands	Islands	Mamrose
Provide advice to other nurses or other health professionals	78.8%	71.1%	64.8%	82.8%
Act as a mentor or preceptor to other nurses or nursing students	57.8%	57.1%	35.2%	63.2%
Analyse patient and other information to plan and provide patient care	81.6%	74.2%	76.5%	82.8%
Participate in quality improvement activities	64.5%	65.6%	66.0%	69.6%
Undertake self evaluation of own nursing practice	63.9%	64.7%	64.8%	72.0%
Contribute to the professional development of others	55.2%	53.1%	47.8%	64.5%
Evaluate nursing care and adjust care plans accordingly	66.5%	66.8%	67.2%	75.7%
Participate in the development of strategic planning for nursing	24.0%	21.8%	25.1%	19.3%
Participate in the development of budgets and monitoring of financial performance	8.4%	11.6%	15.0%	7.8%
Participate in nursing related research	15.1%	24.6%	16.6%	27.4%
Participate in the recruitment or selection of staff	4.6%	3.8%	4.9%	4.7%
Develop the roster of nursing staff	33.0%	34.6%	39.3%	44.9%
Participate in performance appraisal	30.4%	30.6%	25.1%	40.5%
Participate in orientation of new staff	43.0%	52.1%	35.2%	56.4%
Participate in the development of strategies to enhance patient care and service delivery	42.5%	42.7%	34.0%	52.0%
Undertake liaison with external agencies in relation to patient care	28.9%	24.2%	22.7%	31.8%
Act to improve workplace culture in relation to education, learning, research and professional development	30.7%	39.3%	27.5%	45.3%
Provide supervision to other nurses	75.7%	70.1%	67.6%	78.7%
Seek assistance with problem solving in the workplace	76.2%	75.1%	70.9%	77.7%
Participate in the clinical education of student nurses	39.1%	41.0%	9.7%	40.5%
N	391	422	247	296



TABLE 37 ACTIVITIES UNDERTAKEN BY PLACE OF WORK

	Urban Hospital	Provincial Hospital	District Hospital	Urban Clinic	Provincial Clinic	District Health Centre	Other
Provide advice to other nurses or other health professionals	73.4%	75.0%	81.5%	74.8%	87.5%	67.8%	75.5%
Act as a mentor or preceptor to other nurses or nursing students	68.6%	55.0%	50.0%	55.0%	50.0%	40.0%	44.2%
Analyse patient and other information to plan and provide patient care	81.2%	81.1%	72.2%	71.2%	50.0%	81.1%	68.7%
Participate in quality improvement activities	68.6%	66.3%	61.1%	63.1%	87.5%	64.4%	66.7%
Undertake self evaluation of own nursing practice	62.3%	70.9%	70.4%	58.6%	62.5%	63.3%	52.4%
Contribute to the professional development of others	57.0%	54.6%	55.6%	55.0%	37.5%	57.8%	57.1%
Evaluate nursing care and adjust care plans accordingly	66.2%	74.3%	63.0%	56.8%	62.5%	60.0%	61.2%
Participate in the development of strategic planning for nursing	21.7%	20.0%	31.5%	19.8%	25.0%	22.2%	34.7%
Participate in the development of budgets and monitoring of financial performance	5.8%	5.8%	16.7%	12.6%	25.0%	16.7%	32.0%
Participate in nursing related research	19.8%	23.2%	27.8%	18.9%	25.0%	15.6%	16.3%
Participate in the recruitment or selection of staff	1.9%	4.1%	9.3%	5.4%	12.5%	7.8%	4.8%

	Urban Hospital	Provincial Hospital	District Hospital	Urban Clinic	Provincial Clinic	District Health Centre	Other
Develop the roster of nursing staff	36.2%	37.4%	46.3%	32.4%	37.5%	55.6%	25.9%
Participate in performance appraisal	25.6%	35.6%	27.8%	30.6%	50.0%	23.3%	27.2%
Participate in orientation of new staff	54.6%	52.3%	40.7%	36.0%	50.0%	34.4%	33.3%
Participate in the development of strategies to enhance patient care and service delivery	43.0%	41.0%	46.3%	44.1%	62.5%	52.2%	45.6%
Undertake liaison with external agencies in relation to patient care	34.3%	23.3%	29.6%	28.8%	37.5%	40.0%	23.1%
Act to improve workplace culture in relation to education, learning, research and professional development	32.9%	38.8%	35.2%	30.6%	37.5%	34.4%	32.0%
Provide supervision to other nurses	75.8%	75.3%	75.9%	68.5%	87.5%	67.8%	66.0%
Seek assistance with problem solving in the workplace	74.9%	78.3%	74.1%	73.9%	50.0%	70.0%	68.7%
Participate in the clinical education of student nurses	46.4%	33.9%	29.6%	40.5%	37.5%	31.1%	21.8%
N	207	725	54	111	8	90	147

TABLE 38 ACTIVITIES UNDERTAKEN BY HIGHEST NURSING QUALIFICATION

	Basic Certificate	Post-Basic Certificate	Diploma	Bachelor Degree	Post-Bachelor Degree	Other
Provide advice to other nurses or other health professionals	68.5%	82.2%	76.6%	89.2%	85.7%	75.0%
Act as a mentor or preceptor to other nurses or nursing students	47.5%	55.9%	57.1%	72.5%	73.5%	75.0%
Analyse patient and other information to plan and provide patient care	78.6%	78.0%	76.1%	84.2%	71.4%	25.0%
Participate in quality improvement activities	62.3%	71.2%	68.3%	76.1%	67.3%	75.0%
Undertake self evaluation of own nursing practice	66.9%	64.4%	65.9%	65.8%	63.3%	100.0%
Contribute to the professional development of others	46.6%	62.7%	62.0%	71.2%	77.6%	50.0%
Evaluate nursing care and adjust care plans accordingly	68.6%	64.4%	70.2%	71.6%	69.4%	25.0%
Participate in the development of strategic planning for nursing	16.2%	22.0%	32.7%	30.2%	46.9%	25.0%
Participate in the development of budgets and monitoring of financial performance	6.3%	15.3%	17.6%	12.2%	24.5%	25.0%
Participate in nursing related research	17.5%	17.8%	23.4%	30.2%	34.7%	50.0%
Participate in the recruitment or selection of staff	2.0%	6.8%	6.3%	7.7%	14.3%	0.0%

	Basic Certificate	Post-Basic Certificate	Diploma	Bachelor Degree	Post-Bachelor Degree	Other
Develop the roster of nursing staff	31.3%	48.3%	40.5%	45.9%	53.1%	25.0%
Participate in performance appraisal	27.0%	33.1%	34.1%	41.4%	44.9%	25.0%
Participate in orientation of new staff	46.8%	49.2%	40.5%	55.9%	44.9%	50.0%
Participate in the development of strategies to enhance patient care and service delivery	36.9%	50.0%	46.3%	55.4%	59.2%	25.0%
Undertake liaison with external agencies in relation to patient care	22.8%	31.4%	27.8%	33.3%	51.0%	50.0%
Act to improve workplace culture in relation to education, learning, research and professional development	30.7%	34.7%	39.0%	47.7%	55.1%	50.0%
Provide supervision to other nurses	67.7%	82.2%	72.7%	85.6%	87.8%	50.0%
Seek assistance with problem solving in the workplace	71.8%	80.5%	78.5%	80.6%	81.6%	75.0%
Participate in the clinical education of student nurses	32.1%	32.2%	29.8%	47.7%	49.0%	50.0%
N	758	118	205	222	49	4

## References

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## An overview of the provision of public health services

The PNG health system, based on the primary health care approach, features:

- a national teaching hospital
- 18 provincial hospitals
- 45 urban clinics
- approximately 500 health centres
- a network of aid posts (over 2000, however, with many closed)

The national government is the largest provider of health services running all the hospitals, almost all the urban facilities and around half of the regional and rural health centres. Church groups operate around half of the rural health facilities and mining and other private companies also operate a small number of health facilities.

Provincial hospitals provide health services to geographical areas, support clinics and health centres and deliver the primary care needs of their community. Provincial hospitals typically provide A&E, theatre, oncology, obstetrics and paediatrics, mental health, infectious disease, pharmaceutical, outpatient and general services. Provincial hospitals range in size up to around 600 inpatient beds, however, nearly all of them operate above their capacity.

Port Moresby General Hospital is a national teaching hospital and also services the primary health care needs of the National District Capital. In addition the hospital provides neuro surgery and other specialised services.

The network of urban clinics and health centres are intended to provide primary care in local urban, rural and regional communities, to assist people to remain healthier, manage chronic disease and illness and effectively, stay out of hospitals.

Aid posts are managed and operated by provincial hospitals and provide clinical and primary care referrals to clinics and provincial hospitals in regional and remote areas. It is estimated that up to half of the Aid posts remain closed due to lack of nursing staff, drugs, supplies and financial support.

Nursing staff employed through all facilities are often the primary care giver in clinics and rural health centres.





## An overview of the role and responsibilities of nurses

Nursing is a process for assisting an individual or a defined population group to reach and/or maintain specified health goals. Nursing is based on holistic care principles and involves physical, mental, social, cultural and spiritual care.

Nursing care is provided in a variety of settings in urban, rural and remote locations in hospitals, health clinics and district and sub-district health facilities.

Nursing care encompasses:

- Assessment of nursing care to individuals and groups;
- Planning nursing care;
- Implementing nursing care in order to achieve the best possible outcome for the individual or group; and
- Evaluating nursing care and instituting further nursing interventions as necessary.

Nursing care is provided by registered nurses licensed to practice as nurses.

In PNG public health facilities nurses are employed in clinical, administration and educational roles.

### Registration

Nursing is regulated by Part three of the Medical Act 1980 and the Nursing Registration By-law 1984, which sets requirements for registration of nurses to practice. Registration/Enrolment includes:

- Newly graduated nurses
- Qualified overseas nurses
- Post graduate qualifications
- Probationary registrations
- Restoration of nurses
- Temporary registrations.

### Licensing and Renewal

Licenses are required and are issued for life. The Nursing Council of PNG renews an Annual Practice License once the nurse has declared that they have engaged in the nursing practice during the previous year. The Nursing Council of PNG keeps a Register and registration is valid for life unless revoked by cause.

Nurses must show evidence of the following to be able to be employed by the employing Agencies in PNG, be they Government, Church, NGOs or private sector. Applicants must have:

- Completed theory hours of 1235 in total
- Passed Nursing Council of PNG State final exam in nursing calculation, PCM, medical/surgical nursing and obstetrics
- Completed 100 weeks in clinical
- Completed required procedures
- Advance clinical nursing specialist in Midwifery, Paediatric, Mental Health, and Acute Care Nursing.

### Mutual Recognition

PNG recognises trained nurses in other countries such as; Australia, New Zealand, Fiji and other South Pacific Islands but has no agreement with any of these countries.

### EDUCATIONAL STANDARDS - NURSING

#### Education Standard Required to Enter Pre-Registration Programs

Entry by school leavers from grade 12 or form 6. Also through Correspondence but at grade 12. Subjects are: English, Maths and Science at credit and distinction level.

#### Accrediting Pre-Registration Programs

The Nursing Council currently accredits pre-registration programs at Diploma and Degree level (which are now University Programs under the Higher Education System. The Nursing Education Advisory Committee recommends to the Nursing Council of Papua New Guinea the accreditation required for minimum standards of any Institution accredited as a Nursing Institution. Previously certificate level programs were accepted as the basic qualification for practice.

#### Basic Qualification for Practice

Certificate: Nursing Department of Health

Diploma and Degree in Nursing (CBT based on competency standards) - University based under the Office of Higher Education

Programs provided by Education or Health Systems

Eight Schools of Nursing provide Basic Nurse training

Advanced Nursing Programs are provided by the University of PNG under the School of Medicine, Health Sciences and Nursing - Taurama Campus provides Nursing Specialist programs; Paediatric, Mental Health, Acute Care including Midwifery. The School also provides Nurse Managerial Programs like; Nursing Education, Administration and Community Health at Degree Level.

#### Length of Pre-Registration Program

3.5 years for Certificate level; 3 years for Diploma and Degree level.

## Nursing job evaluation terms of reference

To evaluate the current nursing classification structures having regard to the needs of public sector nursing staff and PNG public health facilities.

To collect data by various means to analyse the current role and responsibility of public sector nursing staff to ascertain that it is consistent with the nursing classification structures and wages levels.

To ensure that nursing descriptors and nursing structures meet the needs of the PNG health system.

To ensure that the remuneration of nurses reflects their skill, responsibility and educational levels.



## Nursing job evaluation project plan

### Project title

PNG Nurse Job Evaluation Review

### Project team

Name	Organisation	Phone	Email
Jill Iliffe	ANF	+ 61 2 6232 6533	fedsec@anf.org.au
Nicholas Blake	ANF	+ 61 3 9602 8500	industrial@anf.org.au
Geoff Clark	WHO	+ 675 325 7827	clarkg@png.wpro.who.int
Lawrence Namaro	PNGNA	+ 675 325 4203	pngna@daltron.com.pg
PNGNA Educator	PNGNA	+ 675 325 4203	pngna@daltron.com.pg
Mary Roroi	PNG Dept of Health	+ 675 301 3687	mary_roroi@health.gov.pg
Christine Duffield	UTS	+ 61 2 9819 6513	christine.duffield@uts.edu.au

### Project description

To evaluate the current nursing classification structures having regard to the needs of public sector nursing staff and PNG public health facilities.

To collect data by various means to analyse the current role and responsibility of public sector nursing staff to ascertain that it is consistent with the nursing classification structures and wages levels.

To ensure that nursing descriptors and nursing structures meet the needs of the PNG health system.

To ensure that the remuneration of nurses reflects their skill, responsibility and educational levels.

### Project scope

A project team (PNG National Department of Health, ANF, UTS, PNGNA and WHO) supported by a steering committee (comprising representatives from government, WHO, PNGNA, ANF and UTS) will undertake the collection, analysis and validation of data that determine the required role and responsibility of all public sector nurses (i.e. clinical, administrative and educational).

Data collected and validated will include position descriptions, interviews with nurses and hospital management and provisional health authorities.

A report and recommendations will be prepared for submission to the PNG Government and the Industrial Tribunal for their consideration.

#### Project methodology

Data Collection	- Survey instrument - Collecting job descriptions - Interviews
Data Analysis	- Using UTS analysis tools
Literature Review	- Including a review of job evaluation methods
Report and recommendations	

#### Project timelines

February 2007	Steering Committee to be established and Terms of Reference agreed  Project Team to undertake literature search and preparation of survey instrument
March to May 2007	Data to be collected, interviews to be undertaken
May to June 2007	Data analysis, interim report and recommendations
July to August 2007	Validation of data findings
August to September 2007	Final report and recommendations
October 2007	Agreed report and recommendations to be presented to Tribunal

#### Funding source

Primary funding source will be the World Health Organisation.

'In kind' funding will be provided variously by the Australian Nursing Federation; the PNG Nurses Association and the PNG Government.

### Budget planning summary

Consultant (UTS - Professor Christine Duffield): to oversee the project and provide expert advice	US\$ 15,000
Project management (ANF role: to drive the project and do some of the work; costs: travel, accommodation, some administrative costs (phone, email))	US\$ 10,000
Project officer (PNGNA - salary reimbursement for PNGNA Education Officer) to undertake data collection, assist with analysis and validation	US\$ 20,000
Project Advisory Committee (ANF) (held by teleconference x 6)	US\$ 3,000
Literature review (ANF) (five days)	US\$ 2,500
Customisation of data collection tools (ANF) (2 days)	US\$ 1,000
Data collection (PNGNA) (8 weeks)	US\$ 15,000
Validation (Focus groups and observation, PNGNA and ANF 2 weeks)	US\$ 20,000
Project Reports (ANF) (two interim reports - 3 days each and final report - five days)	US\$ 5,500
<b>TOTAL</b>	<b>US\$103,000</b>





## Nurse survey questionnaire

### INSTRUCTIONS:

Please answer all questions using a black or blue biro pen to tick the box or provide a written response.

1. In which Region do you work?

- 1. Southern
- 2. Highlands
- 3. Islands
- 4. Mamose

2. In which Province do you work?

- |   |   |
|---|---|
| <input type="checkbox"/> 1. National Capital District | <input type="checkbox"/> 11. Milne Bay          |
| <input type="checkbox"/> 2. Central                   | <input type="checkbox"/> 12. Morobe             |
| <input type="checkbox"/> 3. Simbu                     | <input type="checkbox"/> 13. New Ireland        |
| <input type="checkbox"/> 4. Eastern Highlands         | <input type="checkbox"/> 14. Oro                |
| <input type="checkbox"/> 5. East New Britain          | <input type="checkbox"/> 15. North Solomons     |
| <input type="checkbox"/> 6. East Sepik                | <input type="checkbox"/> 16. Southern Highlands |
| <input type="checkbox"/> 7. Enga                      | <input type="checkbox"/> 17. Western Province   |
| <input type="checkbox"/> 8. Gulf                      | <input type="checkbox"/> 18. Western Highlands  |
| <input type="checkbox"/> 9. Madang                    | <input type="checkbox"/> 19. West New Britain   |
| <input type="checkbox"/> 10. Manus                    | <input type="checkbox"/> 20. Saundاون           |

3. Please indicate your place of work:

- 1. Urban hospital
- 2. Provincial hospital
- 3. District hospital
- 4. Urban clinic
- 5. Provincial clinic
- 6. District health centre
- 7. Other

4. Please indicate your job designation?

- 1. Nursing Officer Grade 6
- 2. Nursing Officer Grade 7
- 3. Nursing Officer Grade 8
- 4. Nursing Officer Grade 9
- 5. Assistant Manager/Nursing Officer Grade 10
- 6. Manager/Nursing Officer Grade 11
- 7. Manager/Nursing Officer Grade 12
- 8. Assistant Director Nursing Services Grade 12
- 9. Director Nursing Services Grade 13
- 10. Principal School of Nursing Grade 13
- 11. Lecturer Grade 11

- 12. Lecturer Grade 10
- 13. Senior Tutor Grade 9
- 14. Tutor Grade 8
- 15. Clinical Tutor Grade 8
- 16. Coordinator Nursing Services Program Grade 12
- 17. Head of Nursing Studies Grade 13
- 18. Coordinator Primary Health Care Grade 11
- 19. Nutritionist Education Officer Grade 10
- 20. Coordinator In-service Grade 10
- 21. Health Information Officer Grade 10

5. Is your immediate supervisor located in the same work place as you?

1. Yes             2. No

6. Is your immediate supervisor a nurse?

1. Yes             2. No

7. If you have a work problem from whom are you most likely to seek assistance (e.g. colleague, supervisor)

\_\_\_\_\_

8. Please indicate your gender?

1. Female         2. Male

9. What is your age?

- 1. under 25 years
- 2. 25-34 years
- 3. 35-44 years
- 4. 45-54 years
- 5. 55-64 years
- 6. over 65 years

10. What is your highest nursing qualification?

- 1. Basic Certificate
- 2. Post Basic Certificate
- 3. Diploma
- 4. Bachelor Degree
- 5. Post Bachelor Degree
- 6. Other \_\_\_\_\_

11. Do you have non-nursing qualifications (e.g. in education or management)?

1. Yes             2. No

If yes, what is your highest non-nursing qualification?

- 1. Certificate
- 2. Diploma
- 3. Degree
- 4. Post graduate

12. Last week, how many hours did you spend on the following activities (please include paid and unpaid hours). If these do not apply to your position please write N/A in the column.

	Total Hours
<p><b>Direct care:</b> (where care provided involves direct contact with a patient or their family or carer) for example:</p> <ul style="list-style-type: none"> <li>▪ Admission and assessment of patients</li> <li>▪ Discharge of patients</li> <li>▪ Clinical care (e.g. hygiene, feeding, toileting),</li> <li>▪ Medication management (e.g. oral, injection, intravenous preparation and administration)</li> <li>▪ Procedures (e.g. wound care, specimen collection, preparation, setting up and cleaning, assisting other staff with procedures)</li> <li>▪ Patient/family interaction and support (eg.education, information)</li> </ul>	
<p><b>Indirect care:</b> (where care provided related to a patient or their family or carer but did not involve direct contact with them) for example:</p> <ul style="list-style-type: none"> <li>▪ Coordination of care (e.g. communicating with other staff, patient rounds, team meetings, follow-up of test results)</li> <li>▪ Patient transport</li> <li>▪ Documentation (e.g. care plans, progress notes)</li> <li>▪ Reporting (e.g. shift handover)</li> </ul>	
<p><b>Administration:</b> for example:</p> <ul style="list-style-type: none"> <li>▪ Meetings (e.g. committees)</li> <li>▪ Supervision of staff (mentoring, preceptoring)</li> <li>▪ Maintenance (cleaning, ordering supplies and stores, running errands)</li> </ul>	
<p><b>Management:</b> for example:</p> <ul style="list-style-type: none"> <li>▪ Budgeting</li> <li>▪ Rosters</li> <li>▪ Coordinating clinical services (e.g. making sure there is enough staff)</li> <li>▪ Quality assurance activities</li> <li>▪ Staff support (e.g. staff appraisals)</li> </ul>	
<p><b>Professional activities:</b> for example:</p> <ul style="list-style-type: none"> <li>▪ Ongoing education activities (e.g. in-service, training, reading, internet)</li> <li>▪ Providing education to other staff</li> <li>▪ Research activities</li> </ul>	
<b>TOTAL PAID HOURS</b> (sum of the activities above)	
Unpaid work (e.g. unpaid overtime)	
<b>TOTAL WORKED HOURS</b> (sum of total paid hours and unpaid work)	



14. Think again about last week, in the course of your work and doing the activities listed in Question 13 did you spend any time in the following activities (please tick only those you were involved in last week):

- 1. Providing advice to other nurses or other health professionals
- 2. Acting as a mentor or preceptor to other nurses or nursing students
- 3. Analysing patient and other information to plan and provide patient care
- 4. Participating in quality improvement activities
- 5. Undertaking self evaluation of own nursing practice
- 6. Contributing to the professional development of others
- 7. Evaluating nursing care and adjust care plans accordingly
- 8. Participating in the development of strategic planning for nursing
- 9. Participating in the development of budgets and monitoring of financial performance
- 10. Participating in nursing related research
- 11. Participating in the recruitment or selection of staff
- 12. Developing the roster of nursing staff
- 13. Participating in performance appraisal
- 14. Participating in orientation of new staff
- 15. Participating in the development of strategies to enhance patient care and service delivery
- 16. Undertaking liaison with external agencies in relation to patient care
- 17. Acting to improve workplace culture in relation to education, learning, research and professional development
- 18. Providing supervision to other nurses

19. Seeking assistance with problem solving in the workplace

20. Participating in the clinical education of student nurses

16. Think about last week. If you are providing direct clinical care, how many patients on average did you care for each day?

\_\_\_\_\_ exact number of patients.

Not applicable

17. Given the number of patients you looked after last week would you describe the care you were able to provide as:

Highly satisfactory

Moderately satisfactory

Satisfactory

Moderately unsatisfactory

Very unsatisfactory

THANK YOU

## An analysis of work value and its application to nursing

*Charles Patrick Mills in Industrial Laws - NSW (Sydney, Butterworth's, 4th ed., 1976) describes the work value function as follows:*

*The function, truly understood, is to consider all the relevant features of the work, to take into account all relevant material, including such as will furnish a guide to fair valuation, to bear in mind the contentions of the parties to the arbitration and, in the light of these things, to fix amounts which the tribunal itself deems to be just and reasonable to meet the circumstances of the case. The amount so fixed will represent the tribunal's view of the value of the work; Re Crown Employees' (Scientific Officers - Division of Science Services, Department of Agriculture) Award [Scientific Officers] (1962) AR 250 (p*

### 1. A Definition

Work value describes the monetary worth of a particular job, having regard to the nature of the work, the responsibilities and the conditions under which the work is performed.

#### 1.1 General principles

In a nursing context the work value of a particular nursing position would include the consideration of:

- Qualifications necessary for the job;
- The training period required to undertake the role and responsibility
- The attributes required in the performance of the work
- The quality of the work attributed to, and required of the nurse;
- The supervision of others or the necessity to work without supervision;
- The requirement to maintain levels of contemporary, clinical practice and an understanding of the relevant legislation and regulation;

### 2 Application of work value in PNG public sector

2.1 Work value consideration of employees within the PNG public sector (other than the application of Hay) has not been widespread.

2.2 In 1999 the National Research Institute published its report into the work value of teachers in PNG, including those teachers employed in the public sector. The report "Teachers Work Value Study, Last in Line" outlined 54 recommendations to improve the working conditions and pay of teachers.

2.3 Enquiries with PNG industrial tribunals demonstrate that there have been no other significant occupational work value reviews.

### 3. [The industrial and commercial application of work value in an Australian context](#)

#### 3.1 [Early application of work value to Australian nurses](#)

3.1.1 A significant work value case in the Commonwealth Conciliation and Arbitration Commission was the Hospital Employees Federation of Australia v Canberra Community Hospital Board (1966) 114 CAR 422).

3.1.2 The Commission undertook a comprehensive review of nursing work, including the learning incidental to the four years training period in residence, the skills of the profession, and the particularly high responsibilities incurred by nurses in their every day activities in the various sections of the industry (p 423).

3.1.3 The Decision refers to an earlier work value case which had been conducted in 1958 when, for the first time, a qualified nurse in the first year of service after graduation was awarded the same marginal standard as that which applied generally at that time to tradesmen in the ACT

3.2 In 1987 the Australian Industrial Relations Commission (in A257/88) considered the wages, working conditions and the career structure of nurses (covered by national awards) having regard to work value criteria

3.2.1 In its considerations the Australian Industrial Relations Commission indicated that they were satisfied that there had been changes in the nature of the work, skill and responsibilities which constituted a significant net addition to work requirements. There were six factors that they considered relevant to these work requirements included:

- the new categories of work,
- revised career structures,
- transfer of education from the workplace to the tertiary sector,
- the effect of shortages of the work value of nurses,
- the national character of nursing,
- and the need for continuous in-service and education programmes.



3.3 In 1993 the Queensland Industrial Tribunal established pay and conditions for public sector nurses based on work value criteria (QIRC no.54/1993). In their decision the Commission acknowledged that the following issues should be recognised as leading to net additions to the work value of nurses:

- An increase in patient acuity;
- New drugs, new techniques and drug administration and intravenous therapy;
- Changes in clinical practices, including an increase in responsibility;
- Alterations in nursing techniques and functions;
- Technological changes and new procedures which have affected the work of nurses;
- Greater responsibility in isolation and infection control which have risen due to multi-bacteria and new diseases;
- The quality of functions performed and the care required for nurses in the exercise of their responsibilities.

#### 4. [The application of work value in a commercial context](#)

##### 4.1 [The Hay Job Evaluation System](#)

4.1.1 The Hay job evaluation system scheme was developed in the United States of America in the 1950's. It is a scheme which is based on a point factor approach. It is a scheme which is currently used to value the work of all employees in the PNG public service.

4.1.2 The Hay job evaluation system requires the grading and analysis of the various aspects of a job which are usually split in the following Hay system categories:

1. Know how;
2. Problem solving;
3. Accountability;
4. Working conditions.

4.1.3 The description of the job is then compared with the set of descriptors (i.e. set of statements from the job grading manual which describe the aspects of the job) and the most appropriate descriptors in each category, for that job are selected from the set. For the Hay system a manual with descriptors in each of the categories is used to grade a job. Each descriptor has a score associated with it.

For example, there is a point score for each of the “know how”, “problem solving” and “accountability”. These points are then used to calculate a total point’s score for that particular job. The tally score for each job is then interpreted as the importance of that job within a business relative to other jobs.

4.1.4 It is widely accepted that the Hay system was originally designed specifically for the valuation of managerial jobs. As stated by Hay, “We have seen that the Guide Chart Profile Method was designed for a specific purpose – evaluating managerial and technical jobs in order to get equitable salary standards”. From its inception, the Hay system was designed with a bias toward managerial and executive levels and as is not considered suitable for executive or non management positions within a business.

## 4.2 Cullen Egan & Dell

4.2.1 Similar to Hay the Cullen Egan Dell (CED) Job Evaluation System measures the value of individual jobs according to their function in, and value to, an organisation.

4.2.2 It is a system designed to rate similar types of jobs at very similar scores.

4.2.3 The system assumes that there is a hierarchy among the jobs in an organization and that more senior jobs require higher skills, greater experience, less supervision, entail more complex duties and accept greater responsibilities.

4.2.4 The system is based on the analysis of a structured document known as a Job Analysis Questionnaire (JAQ). The JAQ describes the duties, responsibilities and accountabilities of the job together with the qualifications and experience needed to do the job.

4.2.5 The CED Job Evaluation System is described as a ‘point’s factor system’. It expresses the worth of a job in “work value points”. These points are determined by assessing the eight sub-factors that are considered to be common to all jobs.

These sub-factors are grouped into three primary factors as follows:

- Expertise
- Judgement
- Accountability



4.2.6 The required inputs are defined in terms of skills, knowledge and experience needed to do the job.

4.2.7 The processing components of the job; are defined in terms of complexity of tasks, the framework in which the job operates and the requirement for resolving problems.

The outputs from the job are defined in terms of the impact, freedom, stature and authority of the job.

## Indicative role and responsibility of nursing under existing structure

### ROLES AND RESPONSIBILITIES

#### Junior Nursing Officer

1. Provide safe nursing care to patients
2. Managing the physical and human resource for cost effectiveness and promotion of quality
3. Responsible for writing accurate and meaningful nursing histories, care plans discharge plans and reports
4. Monitor the condition of patients
5. Ensuring medical treatment are carryout
6. Monitor the condition of patients
7. Responsible for diagnosis of patients as prescribed by medical officer
8. Coordinate activities for theatre
9. Ensuring safe nursing care is practice in all areas of hospital wards
10. Ensuring ward linen and other medical and nursing equipments are in stock
11. Coordinate health education talks for patients and relatives or communities

### ROLES AND RESPONSIBILITIES

#### Senior Nursing Officer

1. Provide safe nursing care to patients and be able to interpret and assess the physical mental and spiritual status of patients
2. Coordinate the prescribing therapy and disseminate relevant health information
3. Responsible for accurately observations of patients
4. Responsible for writing accurate and meaningful nursing histories, care and plans discharge plans and reports
5. Monitor the condition of patients
6. Responsible for diagnosis of patients as prescribed by medical officer
7. Coordinate activities for theatre
8. Ensuring safe nursing care is practice in all areas of hospital wards
9. Ensuring ward linen and other medical and nursing equipments are in stock
10. Coordinate health education talks for patients and relatives or communities

## ROLES AND RESPONSIBILITIES

### Specialist Nursing Officer

1. Provide nursing care to patients using nursing process and control of surgical/medical ward
2. Provide hands on care and supervision of subordinate
3. Direct care to patient with a holistic approach
4. Treating of patients following nursing process
5. Assessment, planning, intervention and evaluation of care
6. Managing the physical and human resources available with the aim of cost effectiveness and promotion of quality
7. Judgement and advising medical officer of adverse changes in patients conditions
8. Ensuring that patients care services are provided correctly accordingly to standards
9. Ensuring that dangerous drugs are properly accounted for

## ROLES AND RESPONSIBILITIES

### Evening/Night Supervisor

1. Responsible to the director nursing services
2. Responsible for the safe efficient administration of the nursing services and the hospital
3. Manage the physical and human resources available with the aim of cost effectiveness and promotion of quality
4. Ensuring incidence reports are completed
5. Monitor the condition of sick patients in all wards
6. Liaising with medical officer and recalling various on-call staff
7. Provide hands on care and treating patients with a holistic approach
8. Counseling of staff and disciplinary
9. Liaising with deputy director nursing for job training of nursing staff

## ROLES AND RESPONSIBILITIES

### Unit Supervisor

1. Oversee and implementation processes
2. Coordinate all activities of the wards including obstetric and gynecology, paediatric, medical and surgical in developing long term and short term nursing care plans in line with the nursing services policies, procedures and standards
3. Responsible to the director nursing services administration
4. Oversee the deliver of effective and efficient nursing care services to patients
5. Monitor and evaluate nursing care
6. Coordinates with different specialists in the health profession in implementation of nursing care procedures
7. Coordinate training activities for nursing personnel
8. Counseling and disciplining of nursing staff
9. Promote the spirit of co-operation between co-workers and patients

## ROLE AND RESPONSIBILITIES

### Deputy Director Nursing Services

1. Provide and developed nursing policies and set standards for improvement of patient care
2. Assist the director nursing in the monitoring and evaluation of policies
3. Coordinate, plan and review new and existing programs through analysing of health information
4. Organise resources to adequately equip nursing staff and facilities or hospital wars
5. Organise and participates in nurses association meetings
6. Provide budgetary preparation and monitor the same
7. Communicates and negotiates program policies with non government/government organizations

## ROLES AND RESPONSIBILITIES

### Director Nursing Services

1. Oversee the management of nursing services branch in all management aspects
2. Responsible for development, implementation and monitoring of quality health care to the hospital
3. Oversee the activities of nursing services for safe delivery of health care
4. Provide directive management to all nursing staff
5. maintained and monitor nursing standards to improve quality of nursing care
6. Provide and developed programmes to improve quality of nursing care
7. Responsible for budget preparation of the management of nursing services resources
8. Provide reports on nursing achievement and etc in conferences, seminars to board of hospital
9. Coordinate programmes for in-services training for all categories of nurses
10. Maintain a good relationship with principle school of nursing in organizing and coordination of clinical teaching of students