AUDITOR-GENERAL'S REPORT PERFORMANCE AUDIT

Attracting, Retaining and Managing Nurses in Hospitals

NSW Health



The Legislative Assembly Parliament House SYDNEY NSW 2000 The Legislative Council Parliament House SYDNEY NSW 2000

In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled **Attracting**, **Retaining and Managing Nurses in Hospitals: NSW Health**.

Peter Achterstraat Auditor-General

Vote Achterstrant

Sydney
December 2006

State Library of New South Wales cataloguing-in publication data New South Wales. Audit Office. Performance audit: attracting, retaining and managing nurses in hospitals: NSW Health / [New South Wales Auditor-General] 1921252 006

1. New South Wales. Dept. of Health - Auditing. 2. Nursing services - New South Wales - Administration - Auditing. 3. Public health nurses - New South Wales. I. Title: Attracting, retaining and managing nurses in hospitals: NSW Health. II. Title: Auditor-General's report: performance audit: attracting, retaining and

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managing nurses in hospitals: NSW Health.

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Foreword

Nurses play a vital role in providing quality patient care in public hospitals.

A national review of the nursing workforce predicts the demand for nurses will increase by over two per cent a year due to expected increases in hospital admissions. With many nurses nearing retirement, a national shortage of up to 40,000 nurses is predicted by 2010.

The NSW Department of Health is responsible for managing nurse supply. It needs to identify the extent and nature of shortages and develop ways to attract, retain and best manage nurses working in public hospitals.

This audit looks at how nurses are managed in four of our public hospitals and examines how the Department has responded to expected nurse shortages.

It also highlights actions that have helped reduce the number of nurses leaving hospitals. These may be of interest to others.

Peter Achterstraat Auditor-General

December 2006

	Exe	ecutive summary
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The focus of our audit

Nurses, including midwives, make up over 40 per cent of the staff employed by the public health sector in NSW with over 40,000 nurses working on any day.

Hospitals need to attract and retain sufficient nurses to operate amidst a world-wide shortage. The ageing population, advances in medical treatments and technology and community expectations drive the demand for more hospital beds and consequently more nurses. At the same time the supply of nurses is constrained by the ageing workforce, the move to part-time work and the number of university places available for nursing.

This audit examines how nursing resources are managed in ten general wards at four hospitals - Royal Prince Alfred (RPA), Bankstown, Tamworth and Scone. We looked at this sample of hospitals to find out if:

- nursing resources are well managed
- hospitals effectively attracted and retained nurses.

We also wanted to find out how well the Department of Health was addressing the risk of a future shortage of nurses in public hospitals.

Audit opinion

The department has done well to attract and retain nurses. Between 2001-02 and 2005-06 the average number of nurses employed increased to 39,804 with the annual resignation rate falling from 16 to 14 per cent. Overall, the public health sector gained 5,588 nurses, representing an average annual increase of four per cent.

The department advises that an additional 6,744 nurses were employed between January 2002 and September 2006.

The department used a number of strategies to increase nurse numbers. The department improved nurses' wages to make them the highest paid in Australia, recruited over 1,000 nurses from overseas and attracted nearly 1,500 ex-nurses back to the public health sector. The department has also improved the working conditions of nurses with more flexible rosters and greater access to professional development.

The public health sector is working to better manage its nurses.

In consultation with the Nurses' Association, the department is moving to manage nurse workloads in a more transparent, consistent and consultative way. Hospitals are moving to determine the number of nurses on a ward according to the patient load.

The department recognises the need for new models of patient care and changes in work practices. Hospitals are reviewing the work of nurses and employing more enrolled nurses to free up registered nurses for more complex tasks.

These initiatives have increased the number of nurses in public health. But around 45 per cent of nurses work part-time and the department can not quantify the net gain in resources or judge whether we have enough nurses working in hospitals.

Despite the gains, there are indicators that there may still not be enough nurses.

Firstly, the public health sector used overtime and agency nurses to provide the equivalent of 1,217 full time nurses in 2005-06. This was an increase of 21 per cent from 2001-02.

Secondly, we found instances where some of the hospitals visited had closed beds temporarily and deferred admissions for elective surgery because there were not enough nurses to provide appropriate care.

The department is doing further work to assess the nature and extent of nurse shortages and develop strategies to address shortfalls. It is also working with the Commonwealth government on national strategies to increase the number of nurses entering the workforce.

Recommendations

We recommend that the Department of Health:

Assess and review the number of nurses needed

- require all hospitals to use the general workload calculation tool to assess the number of nurses needed in appropriate wards by December 2007 (page 13)
- encourage hospitals to review the quality and completeness of their workload monitoring (page 14)
- encourage hospitals to consider staffing for patients who need more than expected levels of care (patient specials) when calculating whole of hospital nursing needs (page 21)
- continue to encourage hospitals to increase the use of appropriately trained and supervised enrolled nurses (page 32)
- expand its efforts to encourage and promote innovative nursing practices across the public health sector (page 32)

Monitor the impact of shortages

- require hospitals to monitor bed closures and deferred elective surgery resulting from a shortage of nurses (page 21)
- encourage hospitals to adopt patient care indicators, which are sensitive to nursing care, as a means of monitoring whether or not the number and skill mix of nurses in a ward are adequate (page 14)

Reduce hospital reliance on overtime and agency nurses

- require hospitals to review the use and cost of overtime, casual and agency nurses (page 20)
- encourage hospitals to review their systems for managing the performance of individual agency and casual nurses (page 13)

Further reduce resignations

- monitor the number of nurses leaving the public health sector altogether (page 25)
- encourage hospitals to analyse nurse resignation data, set targets and develop strategies to further reduce resignation rates (page 26)

Continue workforce planning

- adopt a consistent definition of nurse full time equivalents (FTE) to be used by hospitals and the department to identify the size of the nurse workforce employed and needed (page 28)
- review and report on current and projected nurse shortages in public hospitals by December 2007 (page 31)
- expedite the development of workforce plans and strategies at a state and area level (page 31).

Key audit findings

Chapter 1: How do hospitals manage nurses?

The four hospitals had an effective framework for the day-to-day management of nurses. The hospitals had centralised some aspects of nurse management to promote consistency and reduce the administrative load on ward managers.

There is no one objective approach to determine nurse numbers, and different jurisdictions calculate how many nurses are needed in a variety of ways.

The department's reasonable workload approach is a positive step. It provides a consistent and transparent means of assessing the number of nurses required based on a ward's patient load.

The four hospitals have improved their monitoring of workloads and have better information to manage their nursing workforce. However, there is scope for further improvement.

Chapter 2: Are general wards adequately staffed?

All four hospitals continuously reviewed the adequacy of ward nursing levels. Two had implemented the new reasonable workload approach to determine the number of nurses needed and two were in the process of doing so.

Generally the hospitals maintained ward operations in the face of day-to-day nurse shortages. But we found instances where shortages had caused some wards to temporarily close beds and defer admissions for elective surgery. The incidence of closures due to nurse shortages was not monitored.

Shortages arise when positions are vacant, nurses are absent from the ward, patients need more care than usual or extra beds open. Hospitals manage these shortages by getting nurses on duty to cover the gap or by employing overtime, agency and casual nurses.

The department used overtime and agency nurses to provide the equivalent of 1,217 full time nurses in 2005-06. This was an increase of 21 per cent from 2001-02. The total cost of overtime and agency nurses is not monitored. The department advises that it will introduce standard contracts and tendering processes to improve arrangements with nursing agencies.

The use of agency nurses and overtime can be a cost-effective way to manage unanticipated absences and spikes in demand. But it is not a cost-effective way to meet ongoing increases in demand or predictable supply problems.

The hospitals visited did not have adequate information on the reasons for using agency nurses and overtime. Nevertheless, three of the hospitals had reduced or maintained their use of agency nurses and overtime.

Chapter 3:
Do hospitals
effectively retain
and attract nurses?

The department has reduced the nurse resignation rate and recruited more nurses. Over the last four financial years the average number of nurse employees increased by 5,588. The department advises that an additional 6,744 nurses were employed between January 2002 and September 2006.

But nearly half the nurses work part-time and the department is not able to quantify the gain in nursing resources or assess whether it is adequate to meet demand. While the number of nurse vacancies fell by 13 per cent between 2001-02 and 2005-06, the use of overtime and agency nurses suggest that there may still not be enough nurses employed.

The rising demand for nurses and the imminent retirement of many existing nurses has led to projections of a national shortage of 40,000 nurses by 2010.

The NSW health workforce action plan supports the national strategic framework and recognises that doctors, nurses, allied health and support staff need to work together more effectively, change work practices and develop new models of care.

In respect of nursing, the department has encouraged hospitals to review the work of nurses and extend the roles and functions of enrolled nurses, freeing up registered nurses to deliver more sophisticated nursing treatments.

Some of the hospitals visited were using more enrolled nurses and some wards had moved to team-based nursing models.

These are all positive initiatives, but it is too early to judge whether they will ensure that the nursing workforce in public hospitals will be adequate in the future.

The provision of undergraduate training places affects the supply of health professionals and the department is working with the Commonwealth on strategies to increase the number of nurses entering the workforce.

Response from NSW Health

I am pleased that your performance audit on "Attracting, retaining and managing nurses in Hospitals" acknowledges that the Department of Health has done well to attract and retain nurses in the public health system in New South Wales.

The task has not been an easy one. Like the rest of Australia's workforce the profile of nurses working in both public and private health sectors is ageing. The supply of freshly trained nurses through the University system has not kept pace with the increasing demands of population growth and more complex medical conditions.

I wish to acknowledge the efforts of all of those who have been engaged in developing and implementing recruitment and retention policies and practices across NSW Health that have seen our nursing numbers grow by an additional 6,744 nurses in the last four years to September 2006. This has been a commendable effort.

Your recommendations encourage the Department to continue its efforts in specific areas, to expand some of its existing strategies and to urge hospitals to review and improve their nursing recruitment, retention and management practices.

Your recommendations focus on:

- spreading the use of the nursing workload tool already in use in many public hospitals.
- continuing to monitor the impact of the demand for more nursing positions, now and into the future.
- reducing reliance on overtime and agency nurses.
- retaining our valued nurses in the system.

In that context I am pleased to accept the thrust of your recommendations.

There is no doubt that to meet the need for more nurses to provide more care into the future we need to increase our efforts, at a national, state and local level to enlarge our nursing workforce. I believe that we can meet that challenge.

I would like to recognise those nurses who have joined us and stayed with us after their initial training, those who have served their hospitals and patients with great compassion for many years, and those who have come back to us to renew their care for the sick and injured.

(signed)

Robyn Kruk Director-General

Dated: 5 December 2006

1.	How do hospitals manage nurses?

At a glance

The four hospitals had an effective framework for the day-to-day management of nurses. The hospitals had centralised some aspects of nurse management to promote consistency and reduce the administrative load on ward managers.

There is no one objective approach to determine nurse numbers, and different jurisdictions calculate how many nurses are needed in a variety of ways.

The department's reasonable workload approach is a positive step. It provides a consistent and transparent means of assessing the number of nurses required based on a ward's patient load.

The four hospitals have improved their monitoring of workloads and have better information to manage their nursing workforce. However, there is scope for further improvement.

1.1 Background

Why managing the nurse workforce is important

The public health sector provides the majority of hospital care in the state.

Hospitals provide care around the clock. Nurses are rostered on shifts to provide a continuum of care ranging from help with basic personal needs to sophisticated clinical treatments.

NSW hospitals need to attract and retain sufficient nurses to operate amidst a world-wide shortage of nurses. The ageing population, improved medical technology and community expectations drive the demand for more hospital beds and more sophisticated nursing care. Hospitals must also compete for nurses with private hospitals, community care and residential aged care.

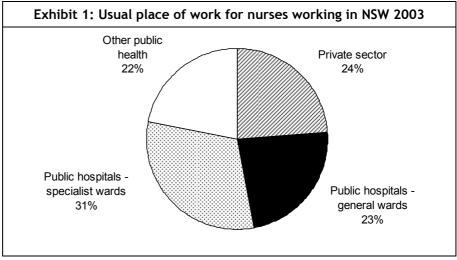
On the other hand, the supply of nurses is affected by general workforce shortages. Since 1985, registered nurses have been university trained and sometimes they change careers soon after starting work in hospitals. Many nurses are nearing retirement or choosing to work fewer hours. The availability of university places also limits the number of new nurses-intraining.

Studies commissioned by the Commonwealth government estimate a shortage of as many as 40,000 nurses nationally by 2010 making it essential that health providers better manage their existing workforce.

What we looked at

This audit looked at how hospitals managed nurses, whether wards were staffed adequately, and whether hospitals were attracting and keeping the nurses they needed to continue operations.

We focused on general (medical and surgical) wards because these wards employ the largest homogenous group of the Department of Health's nurses (30 per cent) and 23 per cent of all nurses working in New South Wales. We did not look at specialist wards, which employ midwives and emergency, intensive care and mental health nurses.



Source: Department of Health 2003.

Note: Other public health and private sector employment groups include

residential aged care facilities.

Appendix 1 provides more detail about the audit.

1.2 Current status

Nurse wages and conditions have been reviewed

Nurses' wages and conditions are set by the *Public Health System Nurses'* & *Midwives'* (State) Award.

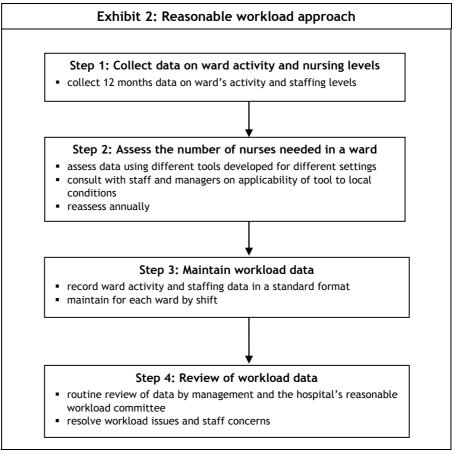
In 2000, the NSW government recognised that falling nurse numbers were threatening the provision of health care. The department developed strategies to address nurses' concerns that they were not valued or able to deliver an appropriate quality of care.

The department and the Nurses' Association have negotiated wage increases, approved by the Industrial Relations Commission, that make NSW nurses the highest paid in Australia. The department and the Association have also agreed to provisions in the Award to improve the working environment of nurses.

In December 2003, the Award introduced reasonable workload conditions. These required hospitals to employ a reasonable number of nurses to provide care. What is reasonable will depend on demand including the number and condition of patients in a ward and local circumstances. The Award required hospitals to establish reasonable workload committees with nurse and management representatives to discuss and resolve workload issues.

The department has required hospitals to adopt a uniform approach to collect data on, assess and review nurse workloads.

Also, the department is improving conditions by promoting flexible rostering, part-time work and opportunities for professional and clinical development.



Source: Audit Office research 2006.

1.3 Do hospitals have a framework to support the effective management of nurses?

Our assessment

The hospitals visited generally had an effective framework for the day-to-day management of nurses. They had centralised some aspects of nurse management to promote consistency and reduce the administrative load on ward managers.

Hospitals have a framework for managing nurses

Hospitals determine how many nurses they employ within the constraints of their wages and salary budget.

In the hospitals we visited, the Director of Nursing (DoN) managed nurses across the hospital and determined how many nurses were to be employed in each ward. This includes sufficient nurses to staff the ward around the clock and is expressed in terms of full time equivalents (FTE), or the number of nurses needed if each worked 76 hours a fortnight.

Prior to 2003, the DoN used professional judgement and historical staffing levels to determine nurse numbers. In 2003, the department and the Nurses' Association negotiated a reasonable workload condition that provided a consultative approach to determining nurse numbers based on the number of patients and how much care they require.

The ward manager organises patient care in the ward within the nursing FTE set by the DoN. The ward manager supervises nurses, plans rosters and determines the number and mix of nurses on each shift.

Wards employ a mix of nurses. Most are registered nurses with the professional competency to provide a wide range of nursing treatments. Others are enrolled and trainee nurses who provide basic personal and other nursing care under the supervision of a registered nurse. Protocols and codes of practice specify what different nurses can and can not do. Enrolled nurses, for example, can not administer certain drugs unless they have additional training and certification.

Hospitals have centralised some management functions

All of the hospitals we visited had a middle tier of nurse managers between the DoN and the ward managers. These nurse managers responded to nurse shortages, organised overtime, agency and casual nurses, monitored workloads and managed nurse recruitment and training. The centralisation of these tasks reduced the load on ward managers and promoted consistency across the hospital.

Exhibit 3: Common arrangements for the management of nurses			
Role	Responsibility		
Director of Nursing (DoN)	overall management of hospital's nurse workforce, budget and workload		
nurse managers	assist the DoN to manage beds, staff shortages, overtime, agency and casual staff, workforce monitoring, recruitment and professional development		
ward managers	manage patient care, the ward and nurses on a day-to-day basis and prepares rosters		

Source: Audit Office research 2006.

1.4 Do hospitals have an objective basis for determining the nursing resources needed to staff general wards?

Our assessment

There is no one objective approach to determine nurse numbers, and different jurisdictions calculate how many nurses are needed in a variety of ways.

The department's reasonable workload approach is a positive step. It has provided a consistent and transparent means of calculating and reviewing the number of nurses needed on a ward.

The department is oversighting the introduction of the reasonable workload approach, but implementation is taking longer then expected.

Different approaches are used elsewhere to determine nurse numbers Healthcare providers in many countries report that nurses are treating more patients who are sicker but staying in hospital for shorter periods. In response, managers have looked for an objective way to judge how many nurses are needed.

Victoria requires a minimum of one nurse to be on duty for every four patients (eight at night) in a general ward. Such standard nurse-patient ratios are simple to use, but do not account for variations in patient need.

Other states have introduced nurse staffing levels based on the amount of nursing care, or nurse hours per patient day (NHPPD), required in a ward.

For example, Western Australia categorises general wards into three groups according to the diversity and complexity of nursing tasks and the level of patient turnover. This results in staffing based on the provision of between five and six NHPPD.

NSW uses a consultative approach based on ward activity to determine nurse numbers

New South Wales also bases its nursing levels on NHPPD. But instead of categorising wards, the department has tools to assess the number of nurses needed using historical data on nurse and patient numbers and the patients' need for care.

The department and the Nurses' Association agreed to incorporate this approach in the Award as a reasonable workload provision in 2003.

The department and the Nurses' Association adopted a consultative approach to staffing levels and agreed that:

- a simple formula could not apply to all patient settings
- a range of tools would need to be developed
- the tools were to facilitate informed discussion about nurse numbers, not to calculate a mandatory staff number
- the tool would focus on the overall number of nurses needed in a ward.

In September 2004 the general workload calculation tool (the GWC Tool) was introduced under the Award for general medical and surgical wards. The NHPPD is based on the ward's nursing weight which varies according to its case mix. In applying the GWC Tool, a nursing weight of one is equal to 4.8 NHPPD.

The Director of Nursing and ward manager use the GWC Tool to determine how many full time nurses are needed by a ward based on 12 months data on patient acuity and the ward's level of occupied beds.

The GWC Tool provides guidance on the recommended number of nurses needed to staff the ward. It is not prescriptive and does not dictate how rosters are to be organised. Ward and nurse managers retain the flexibility to manage their resources to maximise care.

Where implemented, the GWC Tool has improved workloads by making allowance for overheads such as ward management, leave and mandatory training. The GWC Tool can also accommodate seasonal changes such as the opening of additional beds in winter.

The department is progressively rolling-out the GWC Tool

Since 2004 the department has been providing training to hospital managers on how to monitor ward staffing levels and how to use the GWC Tool.

However, it has taken hospitals longer than expected to collect staffing data, consult with staff about local conditions and use the GWC Tool to determine nursing numbers.

The department oversights the implementation of the reasonable workload initiative through its Statewide Steering Committee for Nursing Reasonable Workloads.

Recommendation

The department should require all hospitals to use the general workload calculation tool to assess the number of nurses needed in appropriate wards by December 2007.

1.5 Do hospitals have the information needed to manage their nursing resources?

Our assessment

The hospitals we visited had adequate information for the day-to-day management of nurses.

Monitoring of nurse workloads has improved the quality of information about the resources needed in wards, but there is still room to improve data completeness.

Existing systems are adequate for day-to-day rostering

Ward managers use data from a number of systems to plan rosters. These provide adequate information on the availability, classification and seniority of nurses and the currency of their registration and enrolment.

However, some hospitals did not have effective systems to gather and review feedback from ward managers on the performance of individual agency and casual nurses.

Recommendation

The department should encourage hospitals to review their systems for managing the performance of individual agency and casual nurses.

Workload monitoring has improved ward information

As part of the reasonable workload initiative hospitals collect and review nurse staffing data for every ward and shift. All wards must collect data on:

- the number of occupied beds
- the number of nurses rostered on and the number who actually worked
- the number of nurses rostered on but absent because of illness
- the number of agency and casual nurses on duty
- the number of patients who required one on one care (referred to as 'specials')
- the reasons why the ward was staffed over or under the planned roster after the deployment of overtime, agency and casual nurses.

This data is used to inform the:

- annual assessment of the number of nurses needed in a ward by the DoN
- routine review of workloads by the ward and nurse managers, DoN and reasonable workload committee.

There is scope to further improve data quality and completeness

The hospitals visited collect data in this standard format, but not all of the hospitals recorded data on bed occupancy. None of the four consistently record the reasons for staffing over or under the planned roster.

The most recent of the four hospitals to start collecting the data was Scone in November 2005. At this stage, only Royal Prince Alfred hospital has collected adequate data for sufficient duration to analyse trends in ward activity and nurse staffing.

Recommendation

The department should encourage hospitals to review the quality and completeness of their workload monitoring.

Hospitals should monitor quality of care indicators

The department recognises that the number and skill-mix of nurses in a ward can affect the quality of patient care. Hospitals review staffing whenever a critical incident such as a fall occurs.

Some hospitals, such as the Princess Alexandra Hospital in Brisbane, monitor additional quality of care indicators that are sensitive to the level of nurse staffing. Indicators such as near misses, pressure sores and medication errors are a means of judging whether or not the number and skill mix of nurses is adequate.

Recommendation

The department should encourage hospitals to adopt patient care indicators, which are sensitive to nursing care, as a means of monitoring whether or not the number and skill mix of nurses in a ward are adequate.

•	
2.	Are general wards adequately staffed?
2.	Are general wards adequately staffed?

At a glance

The key question we wanted to answer was whether general wards are adequately staffed.

All four hospitals continuously reviewed the adequacy of ward nursing levels. Two had implemented the new reasonable workloads approach to determine the number of nurses needed and two were in the process of doing so.

Generally the hospitals maintained ward operations in the face of day-to-day nurse shortages. But we found instances where shortages had caused some wards to temporarily close beds and defer admission for elective surgery. The incidence of closures due to nurse shortages was not monitored.

Shortages arise when positions are vacant, nurses are absent from the ward, patients need more care than usual or extra beds open. Hospitals manage these shortages by getting nurses on duty to cover the gap or by employing overtime, agency and casual nurses.

The department used overtime and agency nurses to provide the equivalent of 1,217 full time nurses in 2005-06. This was an increase of 21 per cent from 2001-02. The total cost of overtime and agency nurses is not monitored. The department advises that it will introduce standard contracts and tendering processes to improve arrangements with nursing agencies.

The use of agency nurses and overtime can be a cost-effective way to manage unanticipated absences and spikes in demand. But it is not a cost-effective way to meet ongoing increases in demand or predictable supply problems.

The hospitals visited did not have adequate information on the reasons for using agency nurses and overtime. Nevertheless, three of the hospitals had reduced or maintained their use of agency nurses and overtime.

2.1 Is the number and mix of nurses sufficient?

Our assessment

All four hospitals collected and reviewed data on the adequacy of nursing resources at ward level.

Two hospitals used professional judgement to determine the number of nurses needed on the wards and two used the GWC Tool to analyse historical data and calculate the number of nurses.

Ward staffing is not always determined using objective means The ward managers in the four hospitals relied upon professional judgement to decide the actual number and mix of nurse skills and experience needed for each shift.

The department encourages hospitals to employ more enrolled nurses where appropriate. Three of the four hospitals visited employed at least one enrolled or trainee nurse to every four registered nurses. At a ward level, managers determine the skills and mix of registered and enrolled nurses needed to ensure appropriate patient care.

The main requirement is that the nurse-in-charge of a ward for a shift be registered.

Hospitals routinely review nurse numbers

Reasonable workload committees made up of nurses and management representatives routinely reviewed the adequacy of nursing levels and negotiated and resolved workload issues raised by staff in the four hospitals.

The committees are informed by a number of systems including the shift-by-shift collection of ward activity and staffing data.

At this stage, only RPA has the data to demonstrate its nurse levels matched that indicated by the GWC Tool.

2.2 Do hospitals manage vacancies and absences well?

Our assessment

Generally, hospitals managed nurse shortages to ensure the provision of care. But we found instances where some of the hospitals visited had closed beds temporarily and deferred admissions for elective surgery because there were not enough nurses.

Nurse shortages arose when positions were vacant, nurses were absent from the ward, patients need more care or extra beds were opened.

Hospitals manage these shortages by getting nurses on duty to cover the gap or using overtime, agency and casual nurses. Generally the hospitals visited had limited the use of the more expensive options of overtime and agency nurses to a reasonable level. But two wards used agency nurses for more than 10 per cent of all shifts worked in 2005-06.

Hospitals address nurse shortages centrally

In all four hospitals, nurse managers addressed shortages centrally to maintain care across the facility. This improved consistency and relieved the ward manager of the time-consuming task of finding overtime, agency and casual nurses to fill gaps in the roster.

Nurse managers covered anticipated gaps (arising, for example, from study leave) in the planned roster by offering extra shifts to permanent part-time employees, then considered casual nurses and finally agency nurses.

Nurse managers did not always cover unplanned gaps in the roster. The managers considered, but were not bound by the nurse FTE set by the DoN, or the number and mix of nurses in the roster planned by the ward manager.

In exercising their professional judgement, nurse managers also considered the demand for nurses and patient care across the hospital, risk, nurse competency and the availability of overtime, agency and casual nurses.

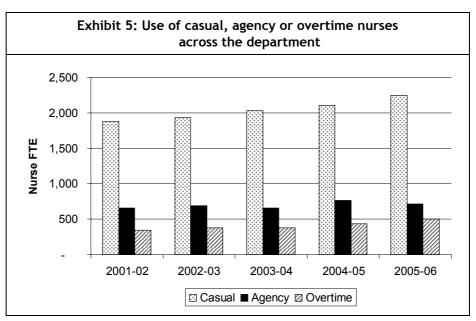
Nurse managers used a hierarchy of strategies to manage shortages.

Exhibit 4: Hierarchy of responses to unplanned absences				
Strategy	Potential risk	Observations		
Cover absence with nurses on duty including nurses from other wards	Unreasonable workload Staff dissatisfaction	Commonly used when ward is quiet. Not consistently monitored, but committee reviews staff concerns about workloads		
Extra shifts from part-time staff	Delayed action to address underlying reasons for gaps in the roster	Commonly used. Not monitored		
Casual nurses	Additional cost: ten per cent loading to reflect lack of annual leave and paid sick leave	Wards visited used casual nurses for between five and 20 per cent of all shifts worked		
	Lack of familiarity with ward and patients			
	More supervision required			
Agency nurses	Additional cost: ten to 40 per cent more expensive than an employee	Used by three hospitals Some wards used agency nurses for up to 19 per cent of all		
	Lack of familiarity with ward and patients	shifts worked		
	More supervision required			
Overtime	Additional cost: 50 to 100 per cent more expensive than normal time	The hospitals visited used overtime for between one and three per cent of all shifts		
	Unreasonable workload	worked		
	Staff dissatisfaction	Committee reviews staff concerns about workloads		
Reduce patient numbers through	Patient condition may deteriorate	Occasionally used at three hospitals		
temporary bed closures	Bed availability in other wards affected (bed block)	Unavoidable if there are insufficient nurses to provide care		
	Elective admissions delayed	Not monitored		

Source: Audit Office research 2006.

The department monitors the use of overtime and agency and casual nurses All hospitals report to the department on those responses that incur additional costs, that is overtime and the use of agency and casual nurses.

Over the last four years, the amount of overtime increased by 45 per cent to the equivalent of 499 full-time nurses across the state. The use of casual nurses increased by 20 per cent (to 2,248 full-time nurses) and the use of agency nurses stabilised (at 718 full time nurses).



Source: Department of Health 2006.

The department is not able to report on:

- the proportion of total nursing hours worked by overtime or agency or casual nurses
- the total cost of overtime, casual and agency nurses.

The department advises that it is introducing standard contracts and tendering processes to improve arrangements with nursing agencies.

Hospitals encourage the use of casual nurses

The hospitals visited encouraged the use of casual nurses over the use of overtime or agency nurses.

The public health sector employs casual nurses directly. The hospitals visited have encouraged wards to build ongoing relationships with casual nurses so that the nurses have more familiarity with the ward's environment and practices.

The use of casual nurses provides flexibility to both the employee and the hospital. It recognises that some nurses choose casual work to suit their family, social and educational commitments. On the other hand the wards can use casuals to juggle the peaks and troughs of patient care activities.



The hospitals visited recognised that they needed to better manage and develop their casual workforce. Hunter New England Area Health Service, for example, is centralising the employment, deployment, personnel and PRACTICE professional management and development of its staff including casual nurses.

Hospitals have tried to reduce the use of overtime and agency nurses

We estimate that all four hospitals maintained their use of nurse overtime in 2005-06 to less than three per cent of all shifts worked.

In respect of agency nurses, Tamworth used none and Scone less than one FTE in 2005-06.

Bankstown reduced its use of agency nurses by 45 per cent and overtime by 19 per cent. This was achieved by recruiting permanent employees and reducing nurse vacancies from 48 to zero.

In contrast, RPA increased its use of overtime and agency nurses in 2005-06 from the previous year. The hospital hired the equivalent of 61 full-time agency nurses (up 35 per cent) and 15 overtime nurse (up 26 per cent).

In the three RPA wards examined, agency nurses worked between six and 19 per cent of all shifts.

Hospitals need better information on why overtime, casual and agency nurses are used Hospitals can identify the number of vacancies, shifts worked by agency and casual nurses, absences due to leave, extra beds and patient 'specials' requiring extra care.

But they do not have adequate information on why overtime, agency and casual nurses were used. As a result it is difficult to assess why in some circumstances overtime, agency or casual staff were used, but in similar circumstances elsewhere they were not.

The use of overtime, agency and casual nurses can be more cost-effective than recruiting additional permanent staff to meet short-term vacancies such as sick leave or spikes in demand. However the use of agency nurses and overtime to meet increased demand that is stable or foreseeable is not cost-effective.

Hospitals may be able to reduce their reliance on overtime, casual and agency nurses if they had more complete information on why additional nurses were needed and used this information to better manage ward staffing. For example if a ward:

- uses overtime, agency and casual staff to cover annual leave, the ward manager should review rostering practices as there should be enough employees to cover annual leave
- constantly uses part-time nurses to work extra shifts, the hospital should review its staffing level
- requires ongoing overtime, agency and casual nurses to cover long-term vacancies, the hospital should consider alternative recruitment strategies or other ways of providing care.

Recommendation

We recommend that the department require hospitals to review the use and cost of overtime, casual and agency nurses.

Hospitals did not monitor the use of alternate strategies to manage staff shortages Managers at all four hospitals indicated that the first response to a nurse shortage was to assess if patients could be adequately cared for by nurses on duty or part-time nurses willing to work extra shifts. The hospitals visited were not monitoring the extent to which extra shifts were worked.

As a last resort, the DoN may reduce the number of patients to a manageable level when a ward is understaffed and no relief is available. While the hospitals visited had not closed wards because of nurse shortages, we found instances where hospitals had closed beds temporarily or deferred the admission of patients for elective surgery.

This places additional pressure on bed management in the rest of the hospital. While hospitals monitor bed closures and the deferral of surgery, they do not know how often this is because of a nurse shortage.

Recommendation

We recommend that the department require hospitals to monitor bed closures and deferred elective surgery resulting from a shortage of nurses.

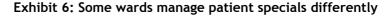
Increased patient demand can also cause nurse shortages The changing needs of patients can also create temporary staffing shortages.

Sometimes, wards require extra nurses to look after very sick patients who need closer monitoring and observation. Patients may also need extra attention because of behaviours associated with dementia, mental illness or substance abuse. The department refers to these patients requiring higher than usual levels of care as 'patient specials'.

It is common practice to hire agency or casual nurses to provide one-to-one care for patient specials. One of the wards visited used over 1,900 shifts of agency and casual nurses to cover patient specials in 2005-06. In contrast it used around 5,500 shifts to care for its normal patient load.

Even though the incidence of patient specials may fluctuate at ward level, monitoring may indicate some predictable trends across the hospital. At present, however, hospitals do not consider care for patient specials during the annual assessment of nursing requirements.

In some hospitals, we found alternative means of caring for patient specials that did not always require one-to-one nursing.





Some hospitals manage patient specials by:

- grouping two or three patients at risk of falling in the same room so that they can be cared for by one nurse
- developing programs to enhance the mobility of dementia patients
- using electronic devices to alert staff when patients wander from the ward; this can be appropriate for patients with mild dementia who are not otherwise at risk
- transferring patients with medium or severe behavioural issues to a more appropriate setting.

Source: Audit Office research 2006.

Recommendation

We recommend that the department encourage hospitals to consider staffing for patients who need more than expected levels of care (patient specials) when calculating whole of hospital nursing needs.

3	3.	Do hospitals effectively retain and attract nurses?

At a glance

The key question we wanted to answer was whether hospitals effectively attract and retain nurses.

The department has reduced the nurse resignation rate and recruited more nurses. Between 2001-02 and 2005-06 the average number of permanent nurses employed increased to 39,804 (by head-count). This was a net gain of 5,588 nurses and represents an annual increase of four per cent. The department advises that an additional 6,744 nurses were employed between January 2002 and September 2006.

But nearly half the nurses work part-time and the department is not able to quantify the gain in nursing resources or assess whether it is adequate to meet demand. While the number of nurse vacancies fell by 13 per cent between 2001-02 and 2005-06, the use of overtime and agency nurses suggest that there may still not be enough nurses employed.

The rising demand for nurses and the imminent retirement of many existing nurses has led to projections of a national shortage of 40,000 nurses by 2010.

The NSW Health Workforce Action Plan supports the national strategic framework and recognises that doctors, nurses, allied health and support staff need to work together more effectively, change work practices and develop new models of care.

In respect of nursing, the department has encouraged hospitals to review the work of nurses and extend the roles and functions of enrolled nurses, freeing up registered nurses to deliver more sophisticated nursing treatments.

Some of the hospitals visited were using more enrolled nurses and some wards had moved to team-based nursing models.

These are all positive initiatives, but it is too early to judge whether they will ensure that the nursing workforce in public hospitals will be adequate in the future.

The provision of undergraduate training places affects the supply of health professionals and the department is working with the Commonwealth on strategies to increase the number of nurses entering the workforce.

3.1 Are hospitals keeping the nurses they have?

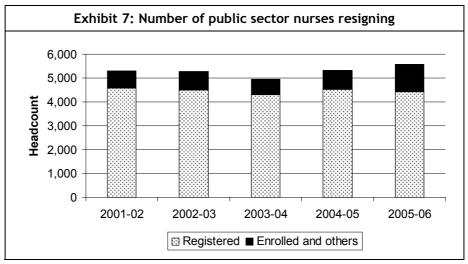
Our assessment

The annual rate of resignations has fallen from 16 per cent in 2001-02 to 14 per cent in 2005-06.

Fewer nurses are resigning

In 2005-06, 5,569 nurses resigned compared to 5,300 in 2001-02. Due to the increase in nurse numbers, this represents a fall in the resignation rate of two per cent to 14 per cent in 2005-06. The actual number of nurses leaving the public health sector is even lower than these figures indicate because they include nurses who resign from one public hospital to work in another.

The department does not know how many nurses have actually left the public hospital system altogether.



Source: Department of Health 2006.

Note: This data excludes Trainee Enrolled Nurses.

Recommendation

We recommend that the department monitor the number of nurses leaving the public health sector altogether.

High turnover creates risks for hospitals

Despite the overall reduction in nurse resignations, one of the hospitals visited had resignation rates of over 18 per cent. In one of its wards, a third of nurses were in their first year of nursing and another third were agency or casual nurses.

High staff turnover increases the:

- cost of running a hospital through increased recruitment action and greater use of overtime, agency and casual nurses to cover vacancies
- workload of existing staff who have to cover vacancies and provide training and supervision to agency and casual nurses and new recruits.

Most of the hospitals did not routinely conduct exit interviews to find out why nurses were resigning, although current employees had participated in surveys conducted by the Area Health Services to monitor staff concerns.

Managers indicated that resignation rates were affected by:

- nurses' age
- local and regional factors
- nurses' length of service.

The department and hospitals report overall resignation rates but they do not analyse the resignation rates by considering factors such as length of service.

Better analysis would be useful in developing targeted retention strategies.



Exhibit 8: Reducing nurse turnover

After identifying that new recruits were most likely to resign, some hospitals in the USA targeted retention programs at new nurses and reduced their resignation rate from 34 to eight per cent. These programs:

- screen whether the applicant is suited to nursing during recruitment
- ensure that new recruits joining a ward are given the information they need to start their career in a realistic and positive way
- partner new nurses with an experienced nurse to serve as coach, mentor and role model.

Source: Nursing Crisis: retention strategies for hospital administrators. Chan, et al. 2004.

The department is improving nurses' working conditions

Around 2001, the department recognised hospitals had to do more to retain nurses. The department identified that nurses were resigning because they felt under-valued and considered themselves unable to deliver an appropriate quality of care.

The department sought to address these concerns by improving pay and conditions. In addition to introducing reasonable workloads, the department developed policies to provide more flexible working arrangements, support professional development and regularly conduct surveys to gather feedback from nurses.

The hospitals visited had implemented initiatives recommended by the department to improve working conditions.

For example, until recently nurses worked fixed rotating rosters of morning, afternoon and night shifts. In the ten wards we examined nurses now use request-based rostering. Nurses must work a minimum number of weekend and night shifts but are given some choice as to when these will be. Five of the wards gave nurses more flexibility with a variety of roster patterns, start times and shift lengths including 12-hour night shifts.

The hospitals were also providing nurses with more opportunities for ongoing professional and clinical training and development.



Exhibit 9: Planning to keep nurses

Bankstown hospital set a target resignation rate and implemented strategies to achieve it, such as targeting recruitment efforts at local and overseas nurses seeking permanent employment.

Bankstown hospital has programs to help recruits from overseas settle into the community and routinely conducts exit interviews with nurses to determine their reasons for leaving.

Between December 2004 and June 2006 Bankstown hospital reduced the rate of nurse resignations from 14 to ten per cent.

Source: Audit Office research 2006.

Recommendation

We recommend that the department encourage hospitals to analyse nurse resignation data, set targets and develop strategies to further reduce resignation rates.

3.2 Have hospital recruited enough nurses to meet operational needs?

Our assessment

Over the last four years the department recruited an additional 5,588 parttime and full-time nurses. Together with the reduced resignation rate, this represents an average increase of four per cent a year in nurse numbers.

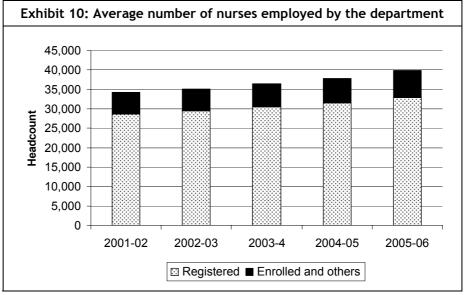
But around 45 per cent of nurses work part-time and the department can not quantify the net gain in resources or judge whether we have enough nurses working in hospitals. While the department reduced the number of nurse vacancies by 13 per cent between 2001-02 and 2005-06, the use of overtime and agency nurses suggests that there may still not be enough nurses in hospitals.

NSW Health has recruited more nurses

Apart from pay and conditions, the department has used a range of strategies to attract nurses including:

- incentives that have attracted nearly 1,500 ex-nurses back to the workforce
- programs that have recruited over 1,000 qualified nurses from overseas.

These initiatives increased the number of permanent full-time and parttime nurses employed by the department from 34,216 in 2001-02 to 39,804 in 2005-06 which equates to an average annual increase of four per cent.



Source: Department of Health 2006.

It is difficult to assess the capacity of the nursing workforce The department monitors the size of its nurse workforce by counting the number of employees regardless of hours worked. But with more than 45 per cent of nurses working part-time, a head count does not provide a complete picture of the capacity of the nurse workforce in public hospitals.

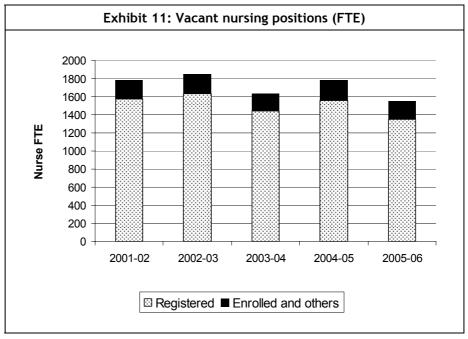
It is difficult to assess whether hospitals have recruited enough nurses to meet needs. Although wards plan their need for nursing resources based on nurse full time equivalents, hospitals and the department do not monitor and report the use of nursing resources in a consistent way.

Overall, although the use of overtime and agency nurses indicates a need for more nurses, there are indications that the public health sector has increased its nursing capacity.

First, the department estimates the nurse FTE employed on 30 June each year from payroll data. This includes all employees paid under the nurses' award even though they may not be providing nursing care. Nevertheless, it indicates that the department employed 36,917 nurse FTE in June 2006, an increase of 17 per cent since June 2002.

Second, the average number of vacant nursing positions fell by 233 or 13 per cent between 2001-02 and 2005-06. These positions are those that the hospital (or other health facility) intends to fill by recruiting a permanent employee. Positions that are temporarily filled by agency and casual nurses are not considered vacancies, unless the hospital intends to permanently fill them.

The reduction in vacancies has occurred during a period in which hospitals opened more than 2,000 beds and consequently needed more nurses.



Source: Department of Health 2006.

Recommendation

We recommend that the department adopt a consistent definition of nurse FTE to be used by hospitals and the department to identify the size of the nurse workforce employed and needed.

Hospitals have centralised nurse recruitment

In all of the hospitals we visited, nurse managers organised nurse recruitment to promote consistency and to reduce the administrative burden on ward managers. One Area Health Service was moving all recruitment, including nursing, to an area level to further streamline the process.



Exhibit 12: Recruiting nurses in rural hospitals

Hunter New England Area Health Service identified nurse recruitment by rural hospitals as one of its major risks.

Scone hospital had been unable to attract new graduate nurses in the last 18 months and could access only five casual nurse shifts a week to cover absences. Because the hospital was unable to resolve the shortage locally, the Area has intervened to help Scone:

- organise an agency nurse from Sydney as a short-term measure
- develop strategies to attract new graduate and overseas nurses.

Source: Audit Office research 2006.

3.3 Are hospitals managing the nurse workforce to support the continued provision of care?

Our assessment

The demand for nurses and the imminent retirement of many existing nurses has led to a projected national shortage of up to 40,000 nurses by 2010. The department is assessing the nature and extent of the nurse shortage and developing strategies to address it.

The NSW Health Workforce Action Plan supports the national strategic framework and is developing new approaches to provide hospital care.

It is too early to judge whether these activities will ensure that the supply of nurses for public hospitals will be adequate.

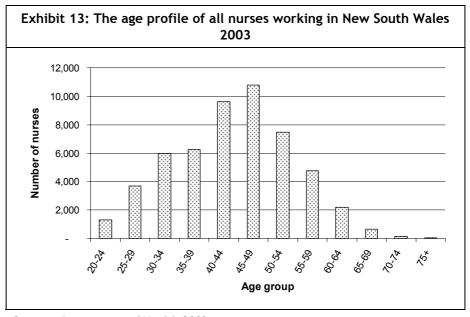
The demand for nurses is increasing

The ageing population, advances in medical treatments and community expectations drive the demand for hospital beds and consequently more nurses. Research indicates that the nursing workforce for hospitals will need to grow by two per cent a year while the smaller aged care sector will require nearly five per cent growth.

Over the last four years, the department has increased the number of nurses employed by four per cent a year but this does not necessarily mean that the capacity of the workforce, or nurse FTE, grew by the same amount. We do not know whether the workforce is sufficient to meet demand.

Many nurses are nearing retirement

In addition to the growth in demand, hospitals are facing the imminent retirement of a large number of nurses. Nearly 30 per cent of nurses are over 50 years old and most of these will retire by 2013.



Source: Department of Health 2003.

Note: This includes private sector and aged care nurses.

Nurse shortages are predicted

Overall, studies predict a national shortage of up to 40,000 nurses by 2010.

In 2005, Victoria forecast a shortage of 9,113 nurses by 2012 and is implementing strategies to address the shortfall.

The department has advised that it has estimated the number of additional undergraduate nursing places required to meet demand in both private and public sectors in New South Wales to 2015. The department is yet to undertake separate modelling of the nursing needs of the public hospital sector.

The department is developing a workforce plan in line with the national framework

In order to address the potential shortfall in nurse numbers, the department is developing a NSW Health Workforce Action Plan. This plan is in line with the National Health Workforce Strategic Framework (NHWSF) endorsed by the Council of Australian Governments.

The NHWSF focuses on seven principles:

- national self sufficiency in health workforce supply while acknowledging Australia is part of a global market
- workforce distribution that optimises access to health care and meets the health needs of all Australians
- workplace environments where people want to work
- an appropriately skilled and competent workforce
- the optimal use of available skills and workforce adaptability
- a health workforce policy and planning regime that is informed by the best available evidence and linked to the broader health care system
- collaborative pursuit of the objectives of the framework by all of the stakeholders.

The department recognises that the relief provided by overseas recruitment is unlikely to be sustainable given the predicted global shortage of nurses. For example, the USA government forecasts that in 2020, it will have 808,000 or 29 per cent fewer nurses than needed.

Consequently the department is planning to use its existing doctors, nurses, allied health and support staff more effectively, changing work practices and developing new models of care.

In line with developments elsewhere, the department's workforce plan will address the health workforce as a whole, rather than distinct professional groups, such as nurses.

The department is assessing the nature and extent of future shortages

The department has established a workforce development unit at head office and in each of the Area Health Services to identify the number and types of staff required to meet needs over the next three to five years.

This data will help the department develop strategies and inform the education system on the numbers and types of staff that need to be trained.

The department is also:

- examining the impact of ageing on the workforce and working with the Premier's Department on strategies to encourage nurses to continue working past retirement age
- examining strategies to manage and reverse the trend towards a casual and part-time nurse workforce
- working with the Commonwealth to increase the number of funded university places for trainee nurses.

It is not yet possible to judge whether these activities will ensure an adequate nursing workforce in hospitals.

Recommendation

The department should:

- expedite the development of workforce plans and strategies at a state and area level
- review and report on current and projected nurse shortages in public hospitals by December 2007.

Hospitals are making better use of their nurses

In respect of nurses, the department has encouraged hospitals to increase the proportion of enrolled and trainee nurses where appropriate.

Since 2001-02 the public health sector has increased the number of enrolled and trainee nurses by 21 per cent compared to a 15 per cent increase for registered nurses. The employment of non-registered nurses:

- gives hospitals access to a much larger pool of employees who can provide basic nursing and personal care
- frees up registered nurses from routine duties allowing them to manage care and deliver more sophisticated nursing treatments.

The department has:

- developed protocols to allow enrolled nurses to do tasks previously performed by registered nurses, such as the sterilisation of surgical instruments and the administration of certain drugs
- increased the average number of trainee enrolled nurses employed from 494 in 2001-02 to 854 in 2005-06
- examined ways of changing clinical practices.

GOOD PRACTICE

Exhibit 14: Hospitals are redesigning how nurses provide care

The department's Nursing and Midwifery Office has promoted innovative ways of providing nursing care. Locally developed initiatives have been publicised across the public hospital sector through the Models of Care Roadshow. For example individual wards:

- allocate patients to a team of registered, enrolled and other nurses who
 provide a continuum of care under appropriate supervision. This
 contrasts to traditional models of care that allocate patients to a
 registered nurse
- have established new roles including shift coordinators responsible for coordinating daily admissions, ensuring discharges are organised and effective and mentoring and supporting new, casual and inexperienced staff members.

These initiatives have helped free up registered nurses to provide more complex clinical care.

Source: Department of Health 2006.

In addition, all of the hospitals visited were supporting nurses to study to further develop their professional skills.



Exhibit 15: Hospitals seek to maintain capacity by developing existing staff

Scone has an older workforce with a significant proportion of nurses nearing retirement. Eight registered nurses have left in the last two years.

Scone is off-setting this loss by supporting its full-time enrolled nurses to further their careers. Four are training for qualifications to administer drugs and the fifth is studying to be a registered nurse.

Source: Audit Office research 2006.

Recommendation

The department should:

- expand its efforts to encourage and promote innovative nursing practice across the public health sector
- continue to encourage hospitals to increase the use of appropriately trained and supervised enrolled nurses.

		Appendices

Appendix 1: About the audit

Audit objective

Given that the available supply of nurses will be an issue for some time, this performance audit examined how well hospitals manage the nurses that they have and attract additional nursing staff.

Lines of inquiry

In reaching our opinion against the audit objective, we sought to answer the following questions:

- are nursing resources well organised?
- do hospitals effectively attract and retain nurses?

Audit criteria

In answering the lines of inquiry, we used the following audit criteria (the 'what should be') to judge performance. We based these standards on our research of current thinking and guidance on better practice. They were discussed and agreed with the department.

For line of inquiry 1, we assessed the extent to which:

- hospitals have a framework to support the effective management of nurses
- hospitals have an objective basis for determining the nursing resources needed to staff general wards
- hospitals have the information they need to manage their nursing resources
- the number and mix of nurses in general wards match that indicated by objective workforce planning
- hospitals manage vacancies and absences well.

For line of inquiry 2, we assessed the extent to which:

- hospitals have managed and minimised nurse attrition
- hospitals have recruited enough nurses to meet operational needs
- hospitals attract and retain the right nurses to continue to provide care.

Audit scope

The audit focused on the management of nurses in general medical and surgical wards. These wards employ 30 per cent of the public health sector nurses.

This audit did not examine:

- specialist nurses employed by other wards including maternity, emergency, intensive care and mental health
- overall staffing levels across New South Wales or within individual Area Health Services
- arrangements to train and educate nurses at colleges and universities
- Commonwealth and state funding of health and nurse education.

Audit approach

We acquired subject matter expertise through:

- interviewing staff from the department, Area Health Services and hospitals and relevant stakeholders
- reviewing relevant data, documents and guidelines on nurse workforce management.

We also researched nurse workforce management in other jurisdictions to identify best practice including:

- other Australian states
- United Kingdom National Health Service
- United States Magnet Hospitals.

We examined ten wards in four hospitals:

- three wards at Royal Prince Alfred, a large referral hospital
- three wards at Bankstown, a major metropolitan hospital
- three wards at Tamworth, a major rural hospital
- one ward at Scone, a small rural hospital.

We also visited:

- the two Area Health Services which managed these hospitals, Sydney South West and Hunter New England
- Princess Alexandra Hospital in Brisbane which is a Magnet accredited hospital. Magnet is a USA based system of accreditation for best practice nurse management.

Audit selection

We use a strategic approach to selecting performance audits which balances our performance audit program to reflect issues of interest to Parliament and the community. Details of our approach to selecting topics and our forward program are available on our website.

Audit methodology

Our performance audit methodology is designed to satisfy Australian Audit Standards AUS 806 and 808 on performance auditing, and to reflect current thinking on performance auditing practices. We produce our audits under a quality management system certified to International Standard ISO 9001. Our processes have also been designed to comply with the auditing requirements specified in the *Public Finance and Audit Act 1983*.

Acknowledgements

We gratefully acknowledge the cooperation and assistance provided by the Department of Health. In particular we wish to thank our liaison officers Trevor Craft, Debra Thoms, Karen Crawshaw, Kathy Baker, Jill Hennessy, Gary Sly and staff who participated in interviews, assisted with file review or provided other material relevant to the audit. Thanks also to Pauline Ross from Princess Alexandra Hospital.

Audit team

Our team leader for the performance audit was Michael Johnston, who was assisted by Kristine Skelton. Jane Tebbatt provided direction and quality assurance.

Audit cost

Including staff costs, printing costs and overheads, the estimated cost of the audit is \$380,000.

Appendix 2: Glossary

Area Director of Nursing is a registered nurse responsible for the overall management of nursing services in an Area Health Service.

Area Health Service is a geographically based, distinct corporate entity responsible for managing health services including hospitals.

department

is the Department of Health which supports the Minister for Health in performing his functions of promoting, protecting, developing, maintaining and improving the health and wellbeing of the people of NSW. Amongst other things the department is responsible for providing the public health sector with state-wide:

- strategic planning and policy development
- performance management
- employee relations
- workforce development.

Director of Nursing (DoN) is a registered nurse responsible for the overall management of nursing services in a hospital.

enrolled nurse

is a nurse who has completed a 12 to 18 month nursing diploma through a college or vocational education provider and is enrolled by the NSW Nurses' and Midwives' Board

full time equivalent (FTE)

is a measure of nursing resources that represents the equivalent of a nurse working standard hours, which in NSW is 76 hours a fortnight.

general workload calculation tool (GWC Tool) is a tool for assessing the number of full-time nurse equivalents needed to staff a ward. It was developed by the department, agreed to by the Nurses' Association and incorporated into the Nurses' Award.

nurse hours per patient day (NHPPD) is used to assess ward staffing levels. The NHPPD of a ward depends on the complexity of the nursing care and the dependency of the patients.

nurse manager

is a registered nurse who assists the DoN and is responsible for aspects of hospital, clinical, workforce or patient management across a number of wards.

patient special

is a patient who requires closer monitoring and observation than other patients in the ward. This may be due to their medical condition or to behaviours associated with dementia, mental illness or substance abuse.

public health sector

comprises the department, Area Health Services and health care facilities including hospitals. The NSW public health sector is the largest health care provider in Australia. Also known as NSW Health.

reasonable workload is an approach used to assess the number of nurses required on a ward according to the number of patients and their need for care.

registered nurse

is a nurse (or midwife) registered by the NSW Nurses' and Midwives' Board able to provide a broad range of nursing care. Completion of a three year university degree in nursing has been a prerequisite for registration since 1985

ward manager

is a registered nurse in charge of a ward whose responsibilities include coordination of patient services, unit management and nursing staff management. Also known as nurse unit managers or NUMs.

	Perfori	mance	Audits	by the
Audit	Office	of Ne	w South	n Wales

Performance Auditing

What are performance audits?

Performance audits determine whether an agency is carrying out its activities effectively, and doing so economically and efficiently and in compliance with all relevant laws.

Performance audits may review a government program, all or part of a government agency or consider particular issues which affect the whole public sector.

Where appropriate, performance audits make recommendations for improvements.

If you wish to find out what performance audits are currently in progress, visit our website at www.audit.nsw.gov.au.

Why do we conduct performance audits?

Performance audits provide independent assurance to Parliament and the public that government funds are being spent efficiently and effectively, and in accordance with the law

Performance audits seek to improve the efficiency and effectiveness of government agencies so that the community receives value for money from government services.

Performance audits also assist the accountability process by holding managers to account for agency performance.

What are the phases in performance auditing?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team will develop audit criteria and define the audit field work.

At the completion of field work we will meet with agency management to discuss all significant matters arising out of the audit. Following this, we will prepare a draft performance audit report.

We meet with agency management to check that facts presented in the report are accurate and that recommendations are practical and appropriate. Following this, a formal draft report is provided to the CEO for comment. The relevant Minister is also provided with a copy of the final report. The final report, which

is tabled in Parliament, includes any comment made by the CEO on the conclusion and the recommendations of the audit.

Depending on the scope, performance audits can take several months to complete.

Copies of our performance audit reports can be obtained from our website or by contacting our Office.

How do we measure an agency's performance?

During the planning phase, the team develops the audit criteria. These are standards of performance against which the agency or program is assessed. Criteria may be based on best practice, government targets, benchmarks, or published guidelines.

Do we check to see if recommendations have been implemented?

Every few years we conduct a follow-up audit. These follow-up audits look at the extent to which action has been taken to address issues or recommendations agreed to in an earlier performance audit.

The Public Accounts Committee (PAC) may also conduct reviews or hold inquiries into matters raised in performance audit reports. Agencies are also requested to report actions taken against each recommendation in their annual report.

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards. This includes ongoing independent certification of our ISO 9001 quality management system.

The PAC is also responsible for overseeing the activities of the Audit Office and conducts a review of our operations every three years.

Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament and from internal sources.

Further information

Further information can be obtained from our website www.audit.nsw.gov.au or by contacting us on 9275 7277.

Performance Audit Reports

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
81	Department of Housing	Maintenance of Public Housing	11 April 2001
82	Environment Protection Authority	Controlling and Reducing Pollution from Industry	18 April 2001
83	Department of Corrective Services	NSW Correctional Industries	13 June 2001
84	Follow-up of Performance Audits	Police Response to Calls for Assistance The Levying and Collection of Land Tax Coordination of Bushfire Fighting Activities	20 June 2001
85*	Internal Financial Reporting	Internal Financial Reporting including a Better Practice Guide	27 June 2001
86	Follow-up of Performance Audits	The School Accountability and Improvement Model (May 1999) The Management of Court Waiting Times (September 1999)	14 September 2001
87	E-government	Use of the Internet and Related Technologies to Improve Public Sector Performance	19 September 2001
88*	E-government	e-ready, e-steady, e-government: e-government readiness assessment guide	19 September 2001
89	Intellectual Property	Management of Intellectual Property	17 October 2001
90*	Intellectual Property	Better Practice Guide Management of Intellectual Property	17 October 2001
91	University of New South Wales	Educational Testing Centre	21 November 2001
92	Department of Urban Affairs and Planning	Environmental Impact Assessment of Major Projects	28 November 2001
93	Department of Information Technology and Management	Government Property Register	31 January 2002
94	State Debt Recovery Office	Collecting Outstanding Fines and Penalties	17 April 2002
95	Roads and Traffic Authority	Managing Environmental Issues	29 April 2002
96	NSW Agriculture	Managing Animal Disease Emergencies	8 May 2002
97	State Transit Authority Department of Transport	Bus Maintenance and Bus Contracts	29 May 2002
98	Risk Management	Managing Risk in the NSW Public Sector	19 June 2002
99	E-Government	User-friendliness of Websites	26 June 2002
100	NSW Police Department of Corrective Services	Managing Sick Leave	23 July 2002
101	Department of Land and Water Conservation	Regulating the Clearing of Native Vegetation	20 August 2002

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
102	E-government	Electronic Procurement of Hospital Supplies	25 September 2002
103	NSW Public Sector	Outsourcing Information Technology	23 October 2002
104	Ministry for the Arts Department of Community Services Department of Sport and Recreation	Managing Grants	4 December 2002
105	Department of Health Including Area Health Services and Hospitals	Managing Hospital Waste	10 December 2002
106	State Rail Authority	CityRail Passenger Security	12 February 2003
107	NSW Agriculture	Implementing the Ovine Johne's Disease Program	26 February 2003
108	Department of Sustainable Natural Resources Environment Protection Authority	Protecting Our Rivers	7 May 2003
109	Department of Education and Training	Managing Teacher Performance	14 May 2003
110	NSW Police	The Police Assistance Line	5 June 2003
111	E-Government	Roads and Traffic Authority Delivering Services Online	11 June 2003
112	State Rail Authority	The Millennium Train Project	17 June 2003
113	Sydney Water Corporation	Northside Storage Tunnel Project	24 July 2003
114	Ministry of Transport Premier's Department Department of Education and Training	Freedom of Information	28 August 2003
115	NSW Police NSW Roads and Traffic Authority	Dealing with Unlicensed and Unregistered Driving	4 September 2003
116	NSW Department of Health	Waiting Times for Elective Surgery in Public Hospitals	18 September 2003
117	Follow-up of Performance Audits	Complaints and Review Processes (September 1999) Provision of Industry Assistance (December 1998)	24 September 2003
118	Judging Performance from Annual Reports	Review of Eight Agencies' Annual Reports	1 October 2003
119	Asset Disposal	Disposal of Sydney Harbour Foreshore Land	26 November 2003
120	Follow-up of Performance Audits NSW Police	Enforcement of Street Parking (1999) Staff Rostering, Tasking and Allocation (2000)	10 December 2003
121	Department of Health NSW Ambulance Service	Code Red: Hospital Emergency Departments	15 December 2003

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
122	Follow-up of Performance Audit	Controlling and Reducing Pollution from Industry (April 2001)	12 May 2004
123	National Parks and Wildlife Service	Managing Natural and Cultural Heritage in Parks and Reserves	16 June 2004
124	Fleet Management	Meeting Business Needs	30 June 2004
125	Department of Health NSW Ambulance Service	Transporting and Treating Emergency Patients	28 July 2004
126	Department of Education and Training	School Annual Reports	15 September 2004
127	Department of Ageing, Disability and Home Care	Home Care Service	13 October 2004
128*	Department of Commerce	Shared Corporate Services: Realising the Benefit including guidance on better practice	3 November 2004
129	Follow-up of Performance Audit	Environmental Impact Assessment of Major Projects (2001)	1 February 2005
130*	Fraud Control	Current Progress and Future Directions including guidance on better practice	9 February 2005
131	Follow-up of Performance Audit Department of Housing	Maintenance of Public Housing (2001)	2 March 2005
132	Follow-up of Performance Audit State Debt Recovery Office	Collecting Outstanding Fines and Penalties (2002)	17 March 2005
133	Follow-up of Performance Audit Premier's Department	Management of Intellectual Property (2001)	30 March 2005
134	Department of Environment and Conservation	Managing Air Quality	6 April 2005
135	Department of Infrastructure, Planning and Natural Resources Sydney Water Corporation Sydney Catchment Authority	Planning for Sydney's Water Needs	4 May 2005
136	Department of Health	Emergency Mental Health Services	26 May 2005
137	Department of Community Services	Helpline	1 June 2005
138	Follow-up of Performance Audit State Transit Authority Ministry of Transport	Bus Maintenance and Bus Contracts (2002)	14 June 2005
139	RailCorp NSW	Coping with Disruptions to CityRail Passenger Services	22 June 2005
140	State Rescue Board of New South Wales	Coordination of Rescue Services	20 July 2005
141	State Budget	In-year Monitoring of the State Budget	28 July 2005
142	Department of Juvenile Justice	Managing and Measuring Success	14 September 2005
143	Asset Management	Implementing Asset Management Reforms	12 October 2005

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144	NSW Treasury	Oversight of State Owned Electricity Corporations	19 October 2005
145	Follow-up of 2002 Performance Audit	Purchasing Hospital Supplies	23 November 2005
146	Bus Transitways	Liverpool to Parramatta Bus Transitway	5 December 2005
147	Premier's Department	Relocating Agencies to Regional Areas	14 December 2005
148	Department of Education and Training	The New Schools Privately Financed Project	8 March 2006
149	Agency Collaboration	Agencies Working Together to Improve Services	22 March 2006
150	Follow-up of 2000 Performance Audit	Fare Evasion on Public Transport	26 April 2006
151	Department of Corrective Services	Prisoner Rehabilitation	24 May 2006
152	Roads and Traffic Authority	The Cross City Tunnel Project	31 May 2006
153	Performance Information	Agency Use of Performance Information to Manage Services	21 June 2006
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158	Department of Education and Training	Educating Primary School Students with Disabilities	6 September 2006
159	NSW Health	Major Infectious Disease Outbreaks: Readiness to Respond	22 November 2006
160	NSW Health	Helping Older People Access a Residential Aged Care Facility	5 December 2006
161	Follow-up of 2003 Performance Audit	The Police Assistance Line	6 December 2006
162	NSW Health	Attracting, Retaining and Managing Nurses in Hospitals	December 2006

^{*} Better Practice Guides

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