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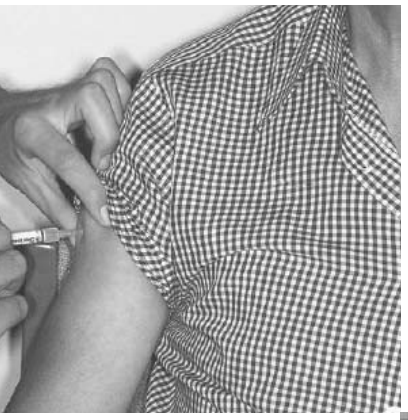

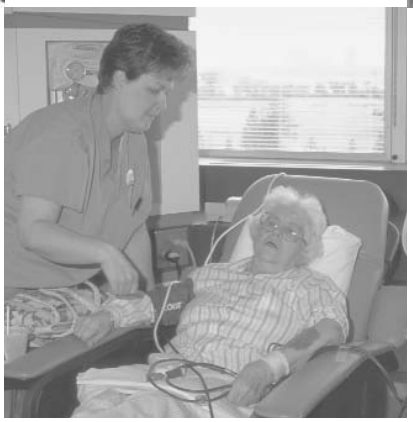


PERFORMANCE EXAMINATION:

A Critical Resource:

Nursing Shortages and the Use of Agency Nurses

Report No. 3
August 2002

AUDITOR GENERAL
for
Western Australia

THE SPEAKER
LEGISLATIVE ASSEMBLY

THE PRESIDENT
LEGISLATIVE COUNCIL

PERFORMANCE EXAMINATION – A Critical Resource: Nursing Shortages and the Use of Agency Nurses

This report has been prepared consequent to an examination conducted under section 80 of the *Financial Administration and Audit Act 1985* for submission to Parliament under the provisions of section 95 of the Act.

Performance examinations are an integral part of the overall Performance Auditing program and seek to provide Parliament with assessments of the effectiveness and efficiency of public sector programs and activities thereby identifying opportunities for improved performance.

The information provided through this approach will, I am sure, assist Parliament in better evaluating agency performance and enhance Parliamentary decision-making to the benefit of all Western Australians.

D D R PEARSON
AUDITOR GENERAL
August 14, 2002

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Introduction

This report takes rather a different approach to my usual reports to Parliament. Typically, a performance examination is commissioned into one aspect or other of public sector efficiency or effectiveness with the report to Parliament focusing on what needs to be done to achieve improved performance. That is, when the matter is reported to Parliament, much of the improvement and change has yet to occur.

Here the situation differs. In 2001, I determined to examine the management of nursing shortages in the public health system with a report to Parliament scheduled for 2002. My Office commenced work on this examination in October 2001 and conducted field work in the period to March 2002. At the same time, a range of fundamental reforms to the public health system also commenced. Many of these go wider than the immediate issue of managing nursing shortages, but undoubtedly the structure of the public health system today is different to the system that existed when my Office commenced this work.

For this reason, I have chosen to table in Parliament my broad assessment of the current position in regards to managing nursing shortages, together with a situational report which I consider of value in identifying the manner in which nursing shortages were managed in the period to March 2002.

I expect the situational report will remain a useful benchmark against which to judge, in later years, the success of these reforms.

Why We Did this Examination

The examination was commissioned in 2001 because of the importance of nurses to the State's public health system and concerns in the community about the reported shortage of nurses and the risk for quality of health care.

While nurses are a vital element in the provision of an effective health care system for the State, a shortage of nurses has been an ongoing feature of public health systems not only in this State but also other States and worldwide as well.

Public health services have coped with the shortages by increasing workloads and overtime for those permanent nurses who remain in the system, recruiting nurses from overseas and relying more heavily on temporary, particularly private agency, nurses. The Department of Health and the health services in recent years have also undertaken various recruitment and promotional campaigns to try to attract and retain nurses.

My interest was therefore in assessing the shortage and the risk for quality of health care, and the strategies being developed and implemented to address these issues.

What We Did

This examination was conducted between October 2001 and March 2002. It reviewed the prevalence of nurse shortages and risks to service delivery and health care in the Western Australian public health system in 2001. It also assessed the use and cost of contracting agency nurses compared with other nursing resource options including overtime, permanent, fixed term and casual nurses.[1]

The examination focused on Registered and Enrolled Nurses. It considered system-wide information and data available from the Department of Health for 2001 and reviewed six public health services from metropolitan, regional and rural Western Australia.

The examination took into account the recent public health system reforms, but did not consider issues such as rostering, decisions on staffing levels and tertiary education as they are subject to recent Industrial Relations Commission decisions or were being considered by Commonwealth Government inquiries.

What We Found

The examination found that over the period audited, the Department of Health did not have the system-wide information available for it to have a clear picture of the extent of the shortages in the State's public health system nor an understanding of the implications of this. Neither did it have a clear understanding of the extent of the use of options such as private agency nurses.

Furthermore, critical information needed for effective State-wide workforce planning either was not available, or had not been analysed, during the period covered by the examination. In particular, data comparing the use and cost of agency nurses with other nurse resourcing options to cover shortages had not been collected and analysed.

Consequently, this examination focused on providing a better understanding of the extent of the shortage of nurses in the State's public health system for the period in question, the extent of use of agency nurses, and the impact on quality of care and costs.

Nurse Shortages

The examination confirmed a shortage of nurses in the Western Australian public health system as evidenced during 2001 by reported vacancies of between 720 and 780 nurses over a total workforce of 8 947 full time equivalent (FTE) nurses. This situation is compounded by high turnover and mitigated by the utilisation of overtime equating to 107 FTE nurses and agency nurses representing 374 FTE staff.

The shortage varies considerably across the public health system and is a particular concern in certain locations and nursing specialities. Moreover, growing demand for nurses exceeds local supply, though there appears to be scope to increase participation rates of nurses not currently working in the public health system, particularly through more flexible and part-time arrangements.

1 Nurses can be employed in permanent positions, on a casual basis, for fixed terms (contracts) or engaged through a contract between health services and nursing agencies (agency nurses).

In view of the shortages, the Department of Health and individual health services have pursued a range of strategies to attract and retain nurses in the public health system. However, the examination found that until recently these had not been well coordinated and had been undertaken without adequate workforce information and planning. Further, there has been little evaluation of the various approaches adopted and accordingly their effectiveness was not known.

Agency Nurses

- Extent of Use

  In 2001, agency nurses, who are mostly Level 1 Registered Nurses (RNs), on average represented eight per cent (or 374 FTEs) of the State's public health system Level 1 RNs. However, the extent of use varied considerably between health services, for particular times of the day, week and year, and for particular wards and nursing specialties. For the six health services examined, the proportion of agency nurses ranged from three per cent to 38 per cent of Level 1 RNs in 2001.

- Quality of Care

  The results of this examination raise some concerns about the impact of greater use of agency nurses on the quality of patient care.

  While agency nurses make an important contribution to patient care, enabling health services to maintain services by covering for staffing shortages, not all of the health services examined assure themselves that nursing agencies undertake pre-employment checks on agency nurses in order to maintain quality of patient care.

  In addition, none of the health services examined provide orientation to all agency nurses equivalent to that provided to other nurses or had formal systems for monitoring, appraising and providing feedback on the performance of agency nurses.

  The limited orientation, in many cases, and lack of pre-employment checks of agency nurses by health services is putting service delivery and the quality of heath care at risk, particularly in those situations where the agency nurses represent a significant proportion of staffing.

- Financial Evaluation of Using Agency Nurses

  Neither the Department of Health nor the health services examined had undertaken adequate financial evaluations of the use of agency nurses compared with other options such as overtime or the use of permanent, fixed term and casual staff. Consequently, an evaluation of the cost of agency nurses compared with the other options was undertaken as part of the examination.

  The examination showed that in 2001, agency nurses cost 31 per cent more per hour worked than Level 1 RN employees; cost 17 per cent more than overtime, which is also used to meet shortages; and were 53 per cent more expensive than fixed term nurses.

- Contracting of Agency Nurses

  The examination disclosed that hiring of agency nurses is undertaken frequently, sometimes daily, by health services with each hiring becoming a separate individual contract.

  It was also found that hospitals and other employing units within the health services examined, contract for agency nursing services in isolation from each other. Moreover, health services do not undertake market testing. They are price takers and accept contracts containing terms and conditions that are administratively inefficient and which put health services at unnecessary risk of inadvertently breaching a contract.

Health System Reforms

During the course of this examination, the Department of Health has initiated a range of significant reforms to the State's public health system arising primarily out of the report of the Health Administrative Review Committee (the HARC report), published in June 2001.

Over this time, the reforms have been focused on developing a more coordinated health system by removing the metropolitan and country health boards and replacing them with four metropolitan health areas and seven country health areas (with associated advisory councils) which are responsible to the Department of Health.

The shift towards greater coordination has also been extended to nursing with the establishment of the Nursing Issues Management Group (NIMG)[2] in March 2002. Towards the end of this examination, the Department advised that the NIMG is now:

- collecting more centralised nursing workforce information;
- developing a generic contract for the procurement of agency nursing services; and
- working towards the better coordination of the recruitment and attraction of nurses to the public health system. To date this has involved the launching of "Nurse-Link" to attract 400 nurses back into the health system, providing a central contact point for nurses looking for work in the public health system, increasing the numbers of scholarships and refurbishing the Department's nursing website.

An important part of the initiatives to attract more nurses to the public health system was the new Enterprise Bargaining Agreement (EBA) registered in August 2001. The new EBA included a range of improved conditions, better career paths, and a 13.5 per cent pay increase to be implemented over three years.

2 Co-chaired by the two deputy Directors General of Health with representation from the metropolitan health areas, country health services and head office staff.

Assessment of Reforms and Key Recommendations

The above reforms are the sorts of initiatives that an examination report would be likely to recommend if they were not already in the process of implementation.

However, it is too early yet to judge whether they will succeed. As the HARC report itself commented, *"The Western Australian Government Health System, like most other health systems of its nature, has undergone a state of almost continuous change and reorganisation during the past decade and more."*[3] Moreover, the reforms implemented so far have been largely at the broad structural level. In terms of nursing, the NIMG has begun to introduce more centralised planning, recruitment, and contracting, but these plans still have to be fully implemented and then left to operate for a period before their success, or otherwise, can be assessed.

I have expressed concern in previous examinations of some other aspects of the health system about the Department launching high level policies and strategies without effective implementation plans and internal evaluation strategies by which success can be measured.

The challenge for the Department, therefore, will be to convert these high level strategies into implementation plans which set clear objectives, assign clear accountabilities, and establish appropriate systems to enable it to monitor and evaluate the reforms and make refinements progressively as the need arises.

The recommendations in this report provide a firm basis for the Department to implement its reforms and a benchmark on which to evaluate the reforms. As is my usual practice with performance examinations, I intend to assess the effectiveness of the Department's implementation of its reforms in two to three years time.

While, at the high level, the Department has already commenced work on these reforms, what is needed now is a sustained effort to ensure the initiatives flow through to changes at all levels of the management of nursing shortages in the public health system.

In this regard, the key recommendations of the report are that the Department of Health should:

- **To help address nurse shortages:**
  - undertake purposeful workforce planning (including implementing current plans to collect and analyse relevant data), plan and evaluate strategies to attract and retain nurses and develop indicators to monitor the impacts of shortages on quality of care.

3 Report of the Health Administrative Review Committee, June 2001, page 3.

- **To ensure that quality of care is maintained while contracting agency nurses:**
  - develop a framework for undertaking pre-engagement checks on agency nurses and ensuring that they receive appropriate orientation and feedback on performance; and
  - monitor and evaluate the effectiveness of the framework.
- **To ensure value for money in contracting agency nurses:**
  - progress the proposed 'generic contract';
  - ensure that financial evaluations are undertaken of the use of agency nurses; and
  - monitor the cost and effective use of agency nurses compared with other options.

Background and Examination Approach

Nurses are the largest component of the public health system workforce. They are central to the operation of any hospital, or health service, and in the provision of quality care on a 24-hour basis to patients. Yet a shortage of nurses has been an ongoing feature of the national and Western Australian public health systems for many years. It has resulted in increased workloads for nurses in the Western Australian public health system and greater reliance on options such as contracting agency nurses and greater use of overtime.

What is Nursing

A nurse is a person who is registered with the Nurses Board of Western Australia and is licensed to practice nursing in accordance with the *Nurses Act 1992*.

There are two categories of nurses:

- **Registered Nurse (RN)** – a registered nurse is a person whose qualifications and experience have been approved by the Nurses Board of Western Australia as capable of practising independently. The registered nurse is accountable and responsible for the provision of nursing and for delegating decisions relating to aspects of care.
- **Enrolled Nurse (EN)** – an enrolled nurse is a person whose qualifications and experience have been approved by the Nurses Board of Western Australia as capable of practising nursing only under the direction and supervision of a Registered Nurse. Enrolled nurses are individually responsible for their own actions.

Changing Nature of Nursing

While nursing continues to be primarily concerned with the care of patients in hospitals, the focus and nature of nursing has changed considerably in recent years.

The rapid advances in technology (including for example, electronic transfusion and computer monitoring machines) and the wider range of drugs available for patient care have required nurses to become more skilled. Moreover, a greater proportion of patients in hospitals these days are seriously ill, requiring more intensive nursing care. In addition, while hospitals remain the main places of employment, nurses now work in a variety of health settings including:

- community and home-based services such as doctor's surgeries, community health centres, community development programs, youth and women's shelters, school and university clinics;
- nursing homes and aged care facilities;
- health-focused services such as wellness clinics and fitness programs;
- clinical support and information services such as public health programs and public administration;

- specialist employers including the defence forces, nursing agencies and international aid agencies; and
- educational institutions and government advisory authorities.

Many nurses who work in rural and remote locations of the State often work alone without medical support and are expected to routinely provide a wider range of services than nurses in metropolitan areas or large country towns.

Nursing Shortages

A shortfall between the numbers of skilled and experienced nurses required by the health system and those either employed, or seeking work, in the system has been examined and documented in a number of Australian studies since the late 1970s. These have suggested that the shortfalls have partly resulted from nurses leaving the profession because of child care responsibilities (and the lack of part-time jobs and day care centre facilities), the span of hours required to be worked in hospitals, and a number of other reasons associated with management practices in hospitals.

Other studies have suggested that part of the problem has been caused by rising demand for skilled and experienced nurses as a result of factors such as increasing technological complexity and the more intensive care required for the bulk of patients in hospitals these days.

The studies suggest that the shortage covers almost all areas of specialisation in both public and private health services. Some areas such as mental health and (the mainly) private sector aged care services find it particularly difficult to recruit and retain staff.

Use of Agency Nurses

The shortages of permanent nurses have meant that health services have had to increasingly use other nursing resource options including overtime, fixed term,[4] casual and agency nurses.

The greater use of agency nurses has raised concerns about perceived higher costs and the quality of nursing care provided to patients because they may be unfamiliar with the health facility and other staff, the patients they are caring for, or with local procedures and practices.

Examination Focus and Approach

This examination has reviewed the:

- prevalence of nurse shortages within the Western Australian public health system including the effects and risks of shortages on service delivery and health care; and
- use of agency nurses by health services to help address the shortages in the context of other nurse resourcing options such as the use of overtime, permanent, fixed term and casual nurses.

4 Fixed term contracts are also used to employ nurses in their graduate year at a hospital and to relieve permanent staff taking extended leave.

It has not considered issues such as rostering, decisions on staffing levels (for example, nurse to patient ratios), and tertiary education. These issues are subject to recent Industrial Relations Commission decisions or are the subject of Commonwealth Government inquiries.

The examination focused on:

- registered nurses (ie RNs and ENs). It excludes personal care aides and nursing assistants; and
- nurses in the public health system, who primarily work in public hospitals, community and mental health nursing services. Other types of health facilities, such as nursing homes, aged care hostels, psychiatric hostels and day surgeries, are almost entirely operated by private providers and are not within the scope of the performance examination.

The examination considered system-wide information and data available from the Department of Health for 2001. It also reviewed six public health services, which represent a cross-section of nursing in metropolitan, regional, and rural Western Australia between October 2001 and March 2002. The health services examined were:

- Sir Charles Gairdner Hospital;
- Swan Health Service;
- Northern Goldfields (Kalgoorlie) Health Service;
- Upper Great Southern (Narrogin) Health Service;
- Kimberley (Derby) Health Service; and
- Gascoyne (Carnarvon) Health Service.

The approach included:

- obtaining financial and human resource records from the Department of Health and each of the health services examined to assess the numbers of nurses employed and the costs of employed nurses compared with agency nurses;
- development of a methodology (based on the Department of Treasury and Finance Costing Guidelines[5]) to compare the cost of employed nurses with agency nurses;
- examination of the records of the Department of Health and each of the health services reviewed to identify the relative roles and responsibilities of the Department and the health services, strategies for managing nurses, and management practices at the health services;
- interviews with nursing, financial and management staff at each of the health services;

5 Department of Treasury and Finance (2001) *Costing and Pricing Government Outputs*, Perth.

- discussion with representatives of private sector hospitals and agencies; and
- review of key issues with an expert nursing advisory group.

During the course of this review the Department has introduced reforms including restructuring the public health system and new strategies for the coordination of nursing issues through a Nursing Issues Management Group. While these are noted, the reforms are at too early a stage for evaluation in this examination.

Nursing Shortages

- *Strategies to attract and retain nurses in the public health system during the period covered by this examination generally had not been well coordinated and had been undertaken without adequate workforce information and planning. In addition, critical information needed for effective State-wide workforce planning was either not available or had not been analysed.*
- *The Department of Health has advised that it is putting in place new structures to coordinate the collection and analysis of nursing workforce information and strategies to attract and retain more nurses in the public health system.*
- *There is a shortage of nurses in the public health system as evidenced during 2001 by reported vacancies of between 720 and 780 nurses over a total workforce of 8 947 full-time equivalent (FTE) nurses. This situation is compounded by high turnover and mitigated by utilisation of overtime equating to 107 FTE nurses and agency nurses representing 374 FTE staff.*
- *Growing demand for nurses exceeds local supply, but there appears to be scope to increase participation rates of nurses not currently working in the public health system, particularly through more flexible and part-time arrangements.*

Introduction

The public health system is the single largest employer of nurses in Western Australia with 8 947 full-time equivalent (FTE) nurses employed and contracted in 2001.

The nurses were directly employed by the 35 health services forming the public health system in 2001 with day to day nurse resourcing decisions and recruitment further devolved according to the level of autonomy within each health service, to more than 84 hospitals and associated mental and community health facilities across the State.

The Department of Health also had a role in managing nursing resources through its Workforce Planning and Development Branch, undertaking:

> *"...a range of workforce monitoring, planning and forecasting activities to support the workforce planning activities of the WA public health industry."*[6]

The Health Administrative Review Committee (HARC) recommended in June 2001 that a new structure be established, based on a more unified public health system. Structural change is currently underway with the 35 health services being re-structured into seven regional management areas and four metropolitan based health areas. The changes also include the establishment of a Nursing Issues Management Group (NIMG)[7] in March 2002 to better manage nursing resources across the public health system.

6 Department of Health (2001) *Annual Report 2000-2001*, Perth.

7 Co-chaired by the two Deputy Directors General of Health with representation from the metropolitan health areas, country health services and head office staff.

Strategies to Attract and Retain Nurses in the Public Health System

A range of strategies has been used over the years to attract and retain nurses in the public health system.

Strategies have been focused primarily on recruiting new nurses and attracting existing nurses back into the workforce. Moreover, while there have been some system-wide campaigns by the Department of Health, the approaches generally have been undertaken by individual health services, hospitals and other employing units with little coordination across the public health system.

In addition, these initiatives have been undertaken in the absence of adequate workforce information and planning with generally little evaluation of the various approaches, either by the Department of Health or the individual health services, to determine which are the more effective approaches for ongoing use.

What the Examination Found

Individual Health Service Measures

The examination observed some innovative approaches being used by some of the health services examined including:

- a local recruitment and promotion program at Swan Health Service which resulted in an additional 22 nurses being recruited;
- 21 private and public health services combining into a single consortium to recruit nurses; and
- a one-year graduate transition program offered by Derby Health Service.

This uncoordinated approach to recruitment was costly for individual health services. For example, Sir Charles Gairdner Hospital spent almost $400 000 (or around $1 400 per nurse recruited) on recruitment of nurses in 2001. Around 70 per cent of this was spent on attracting 77 overseas nurses, at an average cost of $3 600 per FTE to recruit, compared with $525 per FTE from other sources such as graduates, casuals and re-registration (refresher programs).[8]

While Sir Charles Gairdner Hospital found recruiting and employing overseas nurses better value for money than the alternative of contracting agency nurses, this does provide some indication of the relative costs of recruitment for individual health services and such information should be collected and analysed routinely for workforce planning.

8 There will be additional training costs for graduates compared with fully trained and experienced overseas nurses.

System-wide Strategies

While strategies for retaining nurses had been left primarily to individual health services, the Department of Health had also undertaken some system-wide campaigns for attracting nurses into the public health system including:

- broad promotional campaigns such as:
  - the "We need more nurses" campaign – this was run in April 2001 and used a nurse recruitment specialist to advise on work and training options. The Department of Health has advised that it received 96 responses from the campaign of which 28 were referred to employers and 29 for re-registration programs; and
  - the "Are you good enough to be a nurse?" campaign – this promotion, run since 1999, is aimed at encouraging high school students into nursing careers. The campaign has contributed to increased applications for nursing places at universities;
- funded scholarships to attract students into tertiary programs;
- refresher and re-registration courses; and
- packages to attract and retain nurses in the Northwest of the State.

The Department of Health also provided recruitment advertising aids to health services and has undertaken research to better understand the issues causing nurses to leave the system and discouraging students from becoming nurses.

New Initiatives

The Department of Health has advised of a range of new initiatives that have been announced and, in some cases, put in place since the examination commenced. The initiatives include:

- a new Enterprise Bargaining Agreement (2001) which has begun to address at a 'broader level' some of the reasons identified by Department of Health research for why many nurses leave nursing. It includes measures such as:
  - a 13.5 per cent wage increase over three years;
  - new nurse positions arising from a review of nurse workloads;
  - a new senior nurse classification;
  - changes to a range of allowances such as night shift penalties, bonus payments for relevant qualifications, paid parental leave, on-call allowances, and additional increments;
  - placing a duty on employers to ensure that nurses are not required to consistently work with an unfair and unreasonable workload; and
  - establishing a Board of Reference to handle grievances that have not been resolved at other levels;

- Nurse-Link, which was launched in May 2002 to promote and manage nurse recruitment including funding refresher and re-registration courses for Western Australian nurses. Later phases are to include national and overseas recruitment of nurses. It incorporates greater coordination of nursing recruitment through establishment of a Nursing Recruitment Specialist and a refurbished website to attract nurses from interstate and overseas; and
- an increase in the overall number of nursing scholarships from 168 in 2001 to 224 in 2002.

Workforce Planning and Information

Effective workforce planning is important in managing scarce nursing resources. It requires the systematic collection and analysis of workforce information including the:

- profile of nursing (number and level of nurses employed, vacancies and turnover);
- nurse supply and demand information;
- identifying the reasons for difficulties in recruiting and retaining nurses; and
- use and cost of nursing options including overtime, permanent, fixed term, casual and agency nurses.

What the Examination Found

The examination found at the time of the review that most of the critical information needed for effective workforce planning was not readily available to the Department of Health and nursing management of some health services. For example:

- the number and level of vacancies, turnover of nurses, and scope for increasing participation rates, was not readily available;
- data on the use and cost of nursing resource options to help cover nursing shortages (for example, overtime, fixed term, casual and agency nurses) was also not readily available; and
- surveys completed and returned by nurses for 2000 and 2001 that could have provided important workforce intelligence had been collected but not analysed by the Department of Health's Workforce Planning and Development Branch.[9]

New Initiatives

The Department of Health has advised that through the Nursing Issues Management Group it:

- has commenced developing workforce indicators for the number of nurses employed and contracted from agencies, and plans to develop indicators for vacancies, turnover, absenteeism, agency and casual staff usage, staff mix and full-time to part-time nursing ratios;
- plans to establish a streamlined data collection process to gather workforce information on a monthly basis; and
- is developing a better methodology for measuring the nurse shortages.

9 A national process has been agreed by the Australian Health Ministers' Advisory Council to ensure that nursing workforce information is collected on a consistent basis across Australia.

Shortages

All six health services examined advised that they had experienced difficulties in recruiting and retaining nurses during 2001. Figure 1 shows the most significant reasons nominated by senior nursing managers for the difficulties in recruiting and retaining nurses.

Reasons for difficulties in recruiting and retaining nurses	Number of hospitals rating each reason as of low, moderate and major significance			Does not apply/no answer
	Low	Moderate	Major	
Inadequate supply of experienced nurses to recruit		1	5	
Increased competition from other nurse employers[1]	1	1	4	
Inadequate supply of graduate nurses to recruit		1	3	2
Nurse dissatisfaction with accommodation	1	1	3	1

Figure 1: Reasons for difficulties in recruiting and retaining nurses.

Shortages of nurses make recruiting and retaining nurses difficult.

Note:

1. Includes competition from private and public sector employers.

Source: OAG

Other factors including nurse dissatisfaction with pay and work conditions were also recognised as contributing to the difficulties. In addition, social and geographical isolation are major regional issues.

Recruiting for some nursing specialities is more difficult than others. Shortages have been experienced for at least three years in most Australian States for Registered Nurses in operating theatre, critical care, emergency, midwives and mental health occupations. In Western Australia, since 2000, shortages have been experienced in all categories.[10]

The extent of the shortage in the Western Australian public health system is unclear and difficult to measure. A Department of Health survey of health services in 2001 reported vacancies of between 720 and 780 nurses. However, vacancies alone do not tell the whole story. Positions may be filled temporarily or data may be collected at an atypical point in time, thus underestimating or inflating actual nurse shortages.

The examination found that vacancies at the hospitals examined vary according to seasonal demand. For example, at Sir Charles Gairdner Hospital, demand for nurses rises during winter. In rural areas, demand rises during holidays and in particular during early summer.

10 Department of Employment, Workplace Relations and Small Business: (1999, 2000, 2001) *National and State Skills Shortage Lists*, Canberra.

The examination found vacancies and turnover also differ according to the stability of population and the attractiveness of locations. For example, Figure 2 shows annual turnover ranging from 19 per cent at Sir Charles Gairdner Hospital to 125 per cent in the Kimberley Health Service in 2001.

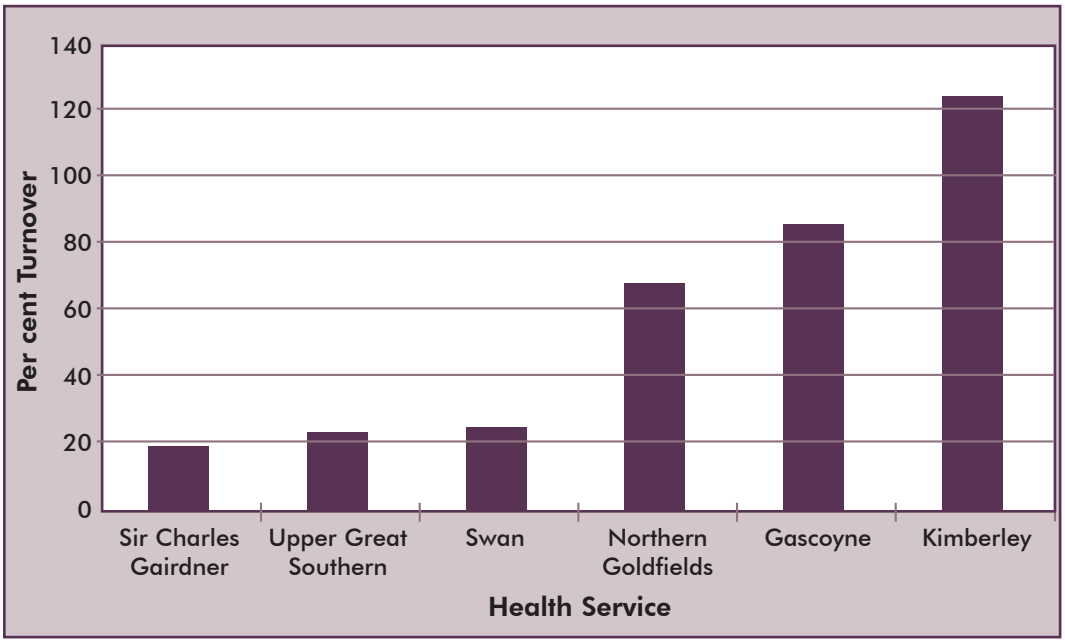

Figure 2: Turnover of nurses in 2001.

Nurse turnover is significantly greater in the eastern and northern regions of Western Australia.

Source: OAG analysis of Minimum Obligatory Information Reporting data

Vacancies and turnover are not the only measure of shortage. The number of agency nurses contracted and the amount of overtime utilised can also be used in conjunction with vacancies to better gauge shortages. However, the examination found that for four of the health services examined and for the Department of Health these indicators are either not developed or accurate data is generally not available.

The data for these indicators, however, was available at Sir Charles Gairdner Hospital and Kalgoorlie Hospital. Nursing managers at both hospitals routinely monitor vacancies, turnover, overtime and utilisation of agency nurses to manage immediate and near future workforce needs.

Kalgoorlie Hospital experienced an average monthly shortage of 36 FTE nurses (21 per cent of establishment) and resignations of some 63 FTE nurses (37 per cent of the average workforce) in 2001. Vacancies would have been higher and more difficult to manage if agency nurses had not been contracted. Agency nurse cover at Kalgoorlie ranged from a low of three per cent (3.6 FTEs) of nurses employed and contracted to a high of 25 per cent (21 FTEs) per month during 2001.

Using public health system financial records, the examination estimated that agency nurse cover for the whole public health system was 4.2 per cent (374 FTEs) and that shortages were also partly covered by nurses working 177 000 hours of overtime (107 FTEs) in 2001. However, it is not known how many agency nurses filled (or how much overtime represented) vacancies and how many represented additional demand for services or temporary cover for planned and unplanned leave.

Supply Profile

Managers need to profile the supply of nurses to better deploy existing nursing resources and target recruitment strategies. Key information includes the number of nurses available for employment, what scope there is to increase participation in the public health system and the number of new nurses available for employment in Western Australia.

Nurses Available for Employment in Western Australia

Since 1996 there has been growth averaging 340 nurses per year in the number of nurses registered to work meaning that over 25 600 nurses are now eligible to work in Western Australia. Half of the growth arose from nurses seeking to register for the first time and half sought restoration of registration after an absence from the Western Australian nursing workforce.

However, the number of nurses registered to work does not mean all are currently working in nursing.[11] The Australian Bureau of Statistics provides an indicator of the number actually working. The Bureau estimates some 19 000 people were employed part-time and full-time in nursing in Western Australia during 2001, a rise of 1 000 from 1996.

The examination estimated from Department of Health payroll and creditor data that the public health system's share of the nurses employed in Western Australia in 2001 exceeded 13 000 persons. This comprised 8 947 full-time equivalent (FTE) nurses including 374 FTE agency nurses.

New Nurses

The main source of new nurses is those completing education in Western Australia.[12] Some 550 students are estimated to have completed nursing education in 2001, an increase of 12 per cent on 2000. However, the number of students completing education does not currently meet demand. Western Australian health services have traditionally relied on nurses from eastern States and overseas (mainly Great Britain) but increased competition from employers in those places to meet their own shortages is currently adding to the difficulties in filling vacancies.

11 The *Nurses Act 1992* does not specify the length of practice required to maintain registration, as it will be different for every person. Nurses are required to be able to state that they are confident and competent in performing their duties. Nurses who have not practised nursing in five years are considered to be out of practice and are required to undertake a re-registration program to be registered.

12 Commonwealth Government funding is a significant factor in determining the number of tertiary undergraduate nursing places in Western Australia.

Increasing the Number of Full-Time Nurses

Another source of nurses is to encourage those currently not working or working part-time to move to full-time work. The Department of Health's Report of the *West Australian Study of Nursing and Midwifery: New Vision New Direction 2001* concludes that the low participation of nurses needs to be addressed as a matter of urgency.

While the scope for this is not clear, as an indication, the examination found that part-time work for nurses in the Western Australian public health system increased from 40 per cent of gross wages in 1996 to 45 per cent in 2001.

Demand Profile

Public health managers need reliable and timely data on nursing demand across the public and private sectors to plan cost-effective strategies to manage nursing resources. Two key indicators of potential future demand for nurses include job growth and the ageing workforce.

Western Australia has had an annual job growth rate of 1.5 per cent (over 14 years to 2001) for Registered Nurses.[13] Jobs for Registered Nurses are expected to grow by 1 400 over the next five years (2001 to 2006) for the public and private system.[14] Within the public health system, initiatives announced in 2001 seek to add 400 new nursing positions to the Government workforce.

Another factor contributing to increased demand is the ageing workforce and the likely increase in vacancies from retirements. The average age of nurses in Western Australia has risen from 37 years in 1990 to 42 years in 2000.

Nationally, the proportion of all employed nurses aged 45 years and over increased by 17 per cent and employed nurses in the under 34 age group decreased from 54 per cent to 30 per cent between 1987 and 2001. Many nurses retire at around 55 years, so an increase in the 45-54 age group and the decrease in the under 34 age group suggests that the ageing of the nursing workforce will continue for some years.

Figure 3 shows that 11.5 per cent (nearly 1 000 FTEs) of nurses in the Western Australian public health system are 55 years and over.

13 Chandra Shah & Gerald Burke (2001) *National Review of Nursing Education: Job Growth and Replacement Needs in Nursing Occupations*, Commonwealth Department of Education Science and Training, Canberra. There was a slight decline (-0.2 per cent) for Enrolled Nurses. A projection for Enrolled Nurses is not available for Western Australia but a decline is expected nationally.

14 Department of Training (2001) *WA Employment Trends & Prospects*, Perth.

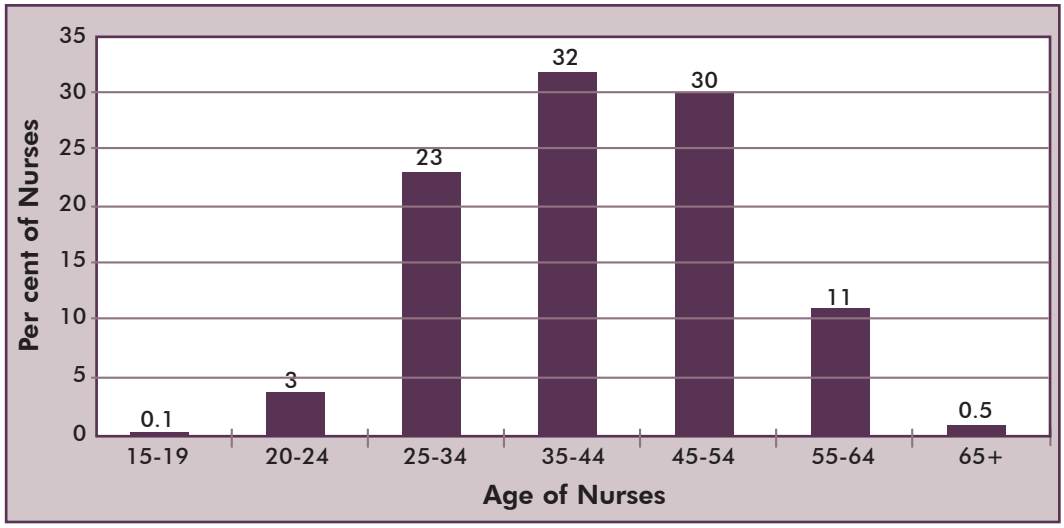

Figure 3: Age of nurses in the public health system in 2001.

Over 40 per cent of nurses are 45 years or older.

Source: OAG analysis of Minimum Obligatory Information Reporting data

In addition, the Public Sector Management (2001) Retirement Intentions Survey of employees 45 years and over identified that 22 per cent of Western Australian public health system nurses intended to retire within five years and six per cent in under two years. This means some 765 FTE nurses may leave the public health system within five years.

Risks for Service Delivery and Health Care

While a priority for management and nurses at each of the six health services is to maintain service delivery and quality of care, nurse shortages have affected service delivery. For example, nurse shortages contributed to changes to services in 2001 and included:

- reduced operating hours were temporarily introduced at Laverton;
- the number of potential patients exceeding supply of dialysis services at Kalgoorlie Hospital; and
- some patients being transferred from the permanent care ward to the general ward at Carnarvon Hospital.

The shortages can also contribute to increased stress and further losses of staff. Unless filled quickly, vacancies invariably lead to increased workload and/or longer hours for nurses. Where temporary staff is hired, the permanent nurses are also called upon to provide additional supervision and take up the administrative load not undertaken by short term and casual nurses. These issues contribute to difficulties in attracting and retaining nurses in full-time permanent work.

The least well known effect of shortages is on quality of nursing health care. Recent studies emerging from the United States and Great Britain suggest that nursing shortages and the increased use of temporary nurses put quality of care at risk[15]. Potential indicators include:

- patient outcomes such as increased incidents of pressure ulcers, patient falls, urinary tract and intravenous site infection, pneumonia and medication errors; and
- quality system measures such as the number of unregistered nurses and incidents of temporary nurses not receiving orientation.

The Department of Health advises that accredited hospitals collect Australian Council of Healthcare Standards indicators, such as infection rates and patient incidents, and that there is a focus on the development of 'whole-of-patient episode' indicators.

However, the Department of Health and the health services examined were not specifically monitoring the effect shortages were having on quality of nursing health care. Nurse managers interviewed expressed an interest in developing monitoring to more clearly flag risks and outcomes caused by nurse shortages. They also advised that adverse incident monitoring systems being developed in this State might be suitable for tracking the effects of nurse shortages.

Recommendations

The Department of Health should:

- **undertake purposeful workforce planning for nurses including implementing current plans to collect and analyse relevant data (including number of nurses employed, vacancies, turnover and the use and cost of nursing resource options to cover the shortages) using a standard methodology on an ongoing basis;**
- **use this information to plan and evaluate strategies to attract and retain nurses; and**
- **develop indicators to monitor the impact of nurse shortages on service delivery and quality of care.**

15 Office of Health Care Access, State of Connecticut (2001) *The Health of Connecticut's Hospitals* and (2000) *Nurse-to-Patient Ratio Study: A Report On The Current Nursing Environment in Connecticut Hospitals*, Hartford; and United Kingdom Audit Commission (2001) *Brief Encounters: Getting The Best From Temporary Nursing Staff*, London.

Contracting Agency Nurses – Quality of Care

- *In 2001, the number of agency nurses used in the State's public health system represented eight per cent of Level 1 Registered Nurses (RNs) employed by the system.*
- *For the six health services examined, the proportion of agency nurses ranged from three per cent to 38 per cent of Level 1 RNs in 2001.*
- *Agency nurses make an important contribution to patient care enabling health services to maintain services by covering for staffing shortages. However, not all of the health services examined assure themselves that nursing agencies undertake pre-employment checks on agency nurses in order to maintain quality of patient care.*
- *None of the health services examined provide orientation to all agency nurses equivalent to that provided to other temporary nurses or had formal systems for monitoring, appraising and providing feedback on the performance of agency nurses.*
- *The limited orientation, in many cases, and lack of pre-employment checks of agency nurses by health services is putting service delivery and the quality of heath care at risk, particularly where agency nurses represent a significant proportion of permanent nurses.*

Introduction

Health services need sufficient nurses to ensure that patient care can be provided safely and effectively. But shortfalls do arise, when positions are vacant, when permanent nurses are off sick or on leave, or when there is a peak in demand.

Managers may then have to arrange for nurses to stay on duty at the end of their shift, or for others to come in and provide temporary cover, often at short notice. These nurses are usually from an in-house reserve (casual nurses) or from a nursing agency ('agency' nurses). Casual, fixed term, agency and nurses performing overtime are an important part of the nursing workforce and they deliver a large proportion of direct patient care. For some health services, agency nurses are an essential resource to maintaining service delivery.

Nursing managers expressed concerns to the examination about the effects of using large numbers of agency nurses on quality of nursing care and costs. Data was not available to indicate directly whether quality of nursing care is being affected. However, the examination was able to assess the extent to which health services have systems in place to ensure agency nurses are qualified, experienced, fit and orientated for the roles they are asked to perform.

Use of Agency Nurses

In 2001, agency nurses represented eight per cent (374 FTEs) of the State's public health system Level 1 Registered Nurses (RNs).

However, the use of agency nurses in meeting nursing demand varies considerably between health services. Figure 4 shows that the proportion of agency nurses contracted by the health services examined ranged from three per cent (four FTEs) in the Swan Health Service to 38 per cent (39 FTEs) in the Northern Goldfields Health Service in 2001.

Health Services	Agency Nurses Per cent of nurses used by health services
Swan	3
State	**8**
Sir Charles Gairdner	9
Upper Great Southern	15
Kimberley	17
Gascoyne	23
Northern Goldfields	38

Figure 4: Agency nurses as a proportion of Level 1 RNs in 2001.

The proportion of agency nurses to employed nurses varies significantly between the health services.

Source: OAG analysis of public health system financial records

Most agency nurses engaged are Level 1 RNs. Moreover, Level 1 RNs represent 50 per cent of the State public health system's nurses and are the 'face of nursing' directly providing care for hospital patients. However, nursing services are also provided by Enrolled Nurses (15 per cent) and Level 2 RNs (27 per cent). Registered Nurses at Level 3 and above (eight per cent) usually have supervisory and management roles (for example nurse managers and directors of nursing).

Some 5.3 per cent per cent ($26.3 million) of expenditure by public health services in Western Australia on all nurses ($497.8 million) in 2001 was on agency nurses. Of the six health services examined, expenditure on agency nurses as a proportion of total nursing expenditure varied from 1.4 per cent ($0.26m) at Swan Health Service to 21.8 per cent ($2.8m) at Northern Goldfields Health Service in 2001.

Assuring Quality of Care when Contracting Agency Nurses

The circumstances in which agency nurses are booked and carry out their duties can be less than ideal. When agency nurses are contracted, they may be unfamiliar with their surroundings, the patients they are caring for, or with local procedures and practices.

Orientation may be inadequate and agency staff may have little time to get accustomed to the area they are working in. These factors increase the risks of something going wrong and the likelihood of patients receiving poorer quality of care than they would otherwise get.

To minimise the risks to the quality of patient care and to promote the best standards, health services need to have effective systems in place to ensure that all temporary staff:

- are appropriately qualified, experienced and fit for the roles they are asked to perform;
- receive adequate orientation; and
- receive regular, timely and objective feedback, so that any problems with their performance are recognised at an early stage and are dealt with promptly.

The examination found that while the six health services examined required their hospitals, community, mental health and other services to have written policies and procedures for employing prospective nurses they had no similar requirement specifically for hiring agency nurses. Nevertheless, health service managers advised of the unwritten policies and procedures they had adopted.

The examination found three of the major hospitals examined had issued documents reflecting some aspects of the policies adopted. These documents included:

- a brief outline of the procedure for hiring agency nurses at Derby Hospital;
- conditions for agency nurse travel and hours of work at Kalgoorlie Hospital; and
- two documents for nurse managers at Sir Charles Gairdner Hospital – a 1995 document outlining the Nursing Agency Invoice Management Process and a 1997 Memorandum from Human Resource Services informing nurse managers that before an agency can be added to the preferred list, *"Human Resources will determine that agencies meet legal requirements such as licensing, vicarious liability, workers compensation etc and that the agency's fees are appropriately structured."*

Engagement Checks

It is essential that proper checks be made to ensure that all prospective nurses are:

- registered with the Nurses Board of Western Australia;
- competent to perform the duties that the job may require;

- qualified to undertake assigned duties;
- checked against police records – especially where nurses may have significant unsupervised access to children and vulnerable adults; and
- fit for duty.

Failure to undertake these checks puts patients and the health services themselves at risk.

Some nursing managers advised that it is impractical and unrealistic for health services to perform engagement checks on agency nurses; this should be done by the agencies. However, health services have a duty of care for their patients and cannot assume that agencies have checked the registration details of the nurses provided, even if this is specified in their terms and conditions. They should assure themselves, systematically at least, that agencies have made these checks.

The examination found that engagement checks on registration, competency, qualifications, and references, valid work permits and fitness for duty (police and MRSA infectious disease clearance certificate) are not systematically undertaken by hospitals. All hospitals examined rely to some extent on agencies to complete these checks.

Checking Registration

The *Nurses Act 1992* provides for the regulation of the practice of nursing and the registration of nurses. Only a person who is registered with the Nurses Board of Western Australia as an Enrolled Nurse or a Registered Nurse may practise nursing.

Employers and the nurses themselves are responsible for ensuring registration is current and that nurses are appropriately qualified to work in the area to which they are assigned. For example, midwives and mental health nurses need appropriate qualifications to be registered to work in these speciality areas.

The Department of Health and the six health services examined require checks to be made to ensure employee nurse registrations are current and whether nurses have had conditions placed on their practice following a disciplinary decision by the Nurses Board of Western Australia.

The examination found three of the six hospitals examined obtain copies of registration for nurses contracted from the agencies. The other hospitals rely on agencies ensuring that nurses are registered.

Checking Competency, Qualifications and References

Health services are accountable, through a clinical governance framework, for ensuring that the clinical care they provide is current and effective, and that nursing staff are up to date in their practices. They also have a responsibility to protect patients from incompetent nurses and to take action when the standards of care fall short of those expected. If nurses are not competent, they can actually increase the workload of staff on the ward.

Nurse managers advised they sometimes tell the agency that they did not want particular individuals to be booked for shifts in their area again. While this approach may be understandable in the context of nurse workloads, it is not helpful to the nurse (who may be unaware of the problem), to the agency (which continues to place them), or to the public health system (if the nurse is moved elsewhere). It also runs counter to the provisions of the Nurses Board of Western Australia Nurses Code of Practice 2000. The Code is mandatory and makes it clear that nurses should avoid and report below standard nursing care and that nurses should work within their competence. The following three provisions of the Code are particularly relevant:

- " A nurse should ensure that the nurse's competence is commensurate with the practice requirements for the nurse's current nursing role."
- " A nurse should not undertake the provision of nursing services beyond the nurse's competence."
- "When delegating tasks to other carers, a nurse should ensure that the carers are competent for the delegated tasks".

The examination found that three of the hospitals examined rely on agencies to ensure nurses are competent and three assess information provided by agencies. All six hospitals require nurse supervisors to monitor on-the-job competency for agency and employed nurses.

In addition all six hospitals rely on agencies to check qualifications and references provided by nurses they supply to health services. Only three of the six hospitals advised they do in fact check qualification documents provided by the agencies.

Checking Police Clearances

Employers have a duty of care to prevent unsuitable persons from having unsupervised access to children and other vulnerable people. A Department of Health policy requires police checks to be sought for all staff.

The examination found all health services expected agencies to obtain police clearances but there was no system in place to ensure that this has been done. Only two of the six hospitals checked clearances provided by agencies.

Checking Fitness for Duty

Hospitals and the nurses themselves have a responsibility to ensure that all nurses – including agency nurses – are fit for duty. This includes ensuring that they do not pose a risk to patients, themselves or colleagues through infection, injury, ill health or excessively long working hours.

It is important that hospitals detect problems such as existing back injuries and make sure that prospective staff do not have a history of illness that would pose a risk to patients or other staff through contagious diseases (for example Tuberculosis, Hepatitis B) or from Methicillin-resistant Staphylococcus Aureus (MRSA). The Department of Health requires that nurses be screened for MRSA.

The examination found that hospitals expected agencies to ensure that nurses have been screened for MRSA. Only Carnarvon Hospital specifically checked that agency nurses had a current certificate of clearance.

Orientation of Nurses

Any nurse, however well qualified or experienced, is likely to perform below their best in an unfamiliar setting. Orientation is the key to overcoming that lack of familiarity and reducing the risk to quality of care. By ensuring that orientation is appropriate and effective, health services enable agency nurses to rely less on permanent staff for guidance and make them more able and more likely to comply with local policies and procedures.

The examination was advised that orientation given to most agency nurses is less than that provided to, for example, casual nurses. Employed nurses receive, as a minimum, two days of structured orientation. Agency nurses receive as little as one hour of on the job orientation at some hospitals and are expected to call upon permanent nurses for assistance. The risk is that as the number of agency nurses on any one shift increases, the number of permanent nurses available to provide assistance and supervision declines.

As a result, orientation may be inadequate, giving nurses too little time to get accustomed to the workings of the hospital. This puts quality of care at risk because nurses need to be familiar with the patients under their care, with local procedures, practices and equipment, with their surroundings and their colleagues. The duty of patient care rests with the health services and they should be able to demonstrate that they have taken reasonable steps to ensuring agency nurses are adequately orientated.

Performance Appraisals

That agency nurses may work a variety of hours, sometimes across several different settings, makes consistency and continuity of performance review and assessment of development needs difficult. The examination found that only Kalgoorlie Hospital included agency nurses in their performance appraisal process for all nurses. The other Hospitals provide feedback on an ad hoc basis or when asked by agencies.

The absence of formal systems for monitoring and appraising the performance of agency nurses places patients at risk if poor performance is not identified and measures are not taken to ensure an optimum level of care is provided.

Recommendations

The Department of Health should:

- **develop a framework for:**
  - checking competency, qualifications and references of agency nurses they contract;
  - assuring that pre-engagement checks are undertaken on, as a minimum, registration, police clearance and MRSA screening for agency nurses at least equivalent to that used for recruiting employees and maintain adequate documentation to confirm that the checks have been undertaken;
  - ensuring all agency nurses receive sufficient orientation at least equivalent to the minimum necessary for casual and fixed term nurses and where that is not possible ensure that agency nurses do not represent a large proportion of the nursing workforce;
  - working with agencies to ensure agency nurses receive systematic performance feedback; and
- **monitor and evaluate the effectiveness of the framework.**

Contracting Agency Nurses – Keeping Costs Under Control

- *Neither the Department of Health nor the health services examined had undertaken adequate financial evaluations of the use of agency nurses compared with other options such as overtime or the use of permanent, fixed term and casual staff.*
- *The examination found significant differences in the cost of the options. For example in 2001, agency nurses cost 31 per cent more per hour worked than Level 1 RN employees; cost 17 per cent more than overtime, which is also used to meet shortages; and were 53 per cent more expensive than fixed term nurses.*
- *A review of contracting processes disclosed that hospitals and other employing units within the health services examined hire agency nurses frequently, sometimes daily, with each hiring becoming a separate individual contract, and that they do so in isolation from one another.*
- *The examination also found that health services do not undertake market testing. They are price takers and accept contracts containing terms and conditions that are administratively inefficient and which put health services at unnecessary risk of inadvertently breaching a contract.*

Introduction

Health services can minimise their use of, and expenditure on, agency nursing staff by flexibly deploying the appropriate number and mix of permanent, fixed term and casual staff. In practice, this is far from easy to achieve. However, it is essential that health services:

- undertake financial evaluations to compare the cost of agency and other nurse resourcing options; and
- enhance contracting practices.

It is also important that expenditure on nurse resourcing options be monitored by the Department of Health to identify budgetary impacts.

Financial Evaluation of Nurse Resourcing Options

While proper assessment by health services of nurse resourcing options (the use of overtime, permanent, fixed term, casual and agency nurses) needs to take into account issues such as service delivery and quality of health care, it also needs to consider the costs of the various options.

None of the health services examined, nor the Department of Health, currently undertakes financial evaluations of the use of agency nurses compared with other options such as overtime or the use of permanent, fixed term and casual staff. A financial evaluation can make clear the costs of each nursing resource option and the value for money in contracting agency nurses. Financial evaluations also assist managers to better understand the financial implications of contracts and can improve transparency and objectivity in decision-making.

Consequently, to provide an assessment of costs, the examination developed a model (based on the Department of Treasury and *Finance Costing and Pricing Government Outputs* guidelines) to derive costs per actual hours worked, and by full-time equivalent (FTE) nurses, based on payroll for employees and creditor payments for agency nurses. The examination probed the cost of employed nurses and identified three main payroll employment categories: permanent nurses (employed for an indefinite time), fixed term and casual nurses. Each category attracts different rates of pay and conditions. Any significant shift from one employment type to another, therefore, has cost implications.

Overtime was treated in the model as though it was a separate employment category to better compare the options used to address shortages and because:

- measuring the cost of a permanent employee including their overtime hours overstates the cost of employing full-time employees in the absence of a need for overtime. Overtime costs more than that paid for standard FTE hours; and
- overtime hours can understate the extent of the nurse shortage when measured by FTEs as defined in this report because overtime does not generally attract leave entitlements.

However, it is acknowledged that the scope for using overtime is constrained by the need to ensure that nurses are not working unacceptably long periods of time and, as a consequence, overtime must only play a limited role in covering for nursing shortages.

Cost of Agency and Employed Nurses

Figure 5 shows that for the State, agency nurses cost 31 per cent more per hour worked than Level 1 RN employees. The difference for the six health services examined ranged from 42 per cent at Upper Great Southern Health Service to 12 per cent at Swan Health Service.

Health Service	Level 1 RNs $/hour worked[1]	Agency Nurses $/hour worked[2]	Cost Difference Per cent
Swan	33.96	38.15	12
Sir Charles Gairdner	32.79	40.59	24
Gascoyne	35.42	45.84	29
State[3]	**32.30**	**42.27**	**31**
Kimberley	35.20	47.54	35
Northern Goldfields	32.23	43.51	35
Upper Great Southern	34.00	48.14	42

Figure 5: Cost per hour worked for employed and contracted agency nurses.

The cost of agency nurses compared to level 1 RNs differs significantly between health services.

Notes:

1. *Employee costs include all payments to nurses (including wages, leave entitlements taken, penalties and loadings, allowances, laundry, on-call payments), workers compensation and superannuation charges based on Department of Treasury and Finance 'Costing and Pricing Government Outputs' guidelines. The cost of employed nurses incurred in 2001 will be slightly understated for health services that accrued leave liability faster than it was expended.*
2. *Most agency nurses are Level 1 RNs. Agency nurse costs include all payments, accommodation charges that may have been deducted and travel costs. Goods and Services Tax charges were excluded as these can be recouped by the health services.*
3. *Nursing costs for the State were calculated from whole of public health system data.*

Source: OAG analysis of public health system financial records

The diversity in the costs per hour worked for employed and agency nurses is partly a result of the cost differences between permanent, fixed term, casual, and agency nurses and partly because of location (employment costs and expenses are higher outside the city). Other factors such as workload, skill mix and experience of the nurses employed also affect cost for each employment type and location.

Differences in Cost between Employment Types

Figure 6 shows the average cost per hour worked and the number of FTEs for each employment type State-wide. It indicates that all types of employed nurses are cheaper than agency nurses with fixed term and casual nurses being the least expensive.

The value of the overtime worked represents 107 FTEs (1.2 per cent of all FTEs) and is less costly than agency nurses but is $2.05 more costly per hour worked than permanent nurses working standard hours; and $8.45 more per hour worked than fixed term nurses.

State Health System	Employee Nurse Fixed Term	Employee Nurse Casual	Employee Nurse Permanent	Employee Nurse Overtime[1]	Employee Nurse Average	Agency Nurse Average
Cost per hour worked	$27.71	$32.52	$34.11	$36.16	$33.26	$42.27
Full-time equivalent nurses	974	699	6 793	107	8 573	374

Figure 6: Cost per hour worked employment type in 2001.

The cost per hour worked differs between employment types.

Note:

1. The scope for using overtime to address shortages is constrained by the need to ensure nurses are not working unacceptably long periods of time.

Source: OAG analysis of public health system financial records

The evaluation indicated that these cost differences are also reflected at four of the six health services examined.

For the six health services examined, the use of overtime ranges from just 0.7 per cent (seven FTEs) of total nurses employed at Sir Charles Gairdner Hospital to 3.5 per cent (three FTEs) at the Gascoyne Health Service. However, the overtime costs for the Gascoyne and some other health services are less than for permanent nurses. This is because overtime performed by nurses on lower salaries can be less expensive than if more senior nurses undertook the work. When the overtime is done can also make a difference. Overtime can cost time and a half or double or triple time depending on when it is performed.

Cost of Agency Nursing in Rural and Metropolitan Areas

As indicated in Figure 7, agency nurses cost rural health services 12 per cent ($4.95) more per hour worked than for metropolitan health services.

	Agency Nurses Cost of Hours Worked
Rural Health Services	$46.13
Metropolitan Health Services	$41.18

Figure 7: Rural and metropolitan agency nursing costs.

Agency nurses cost proportionally more in rural areas than employed nurses.

Source: OAG analysis of public health system financial records

The difference in costs between rural and metropolitan health services reflects the effect of higher award rates for northwest nurses and variation in the rates charged by agencies. For example:

- allowances are payable to nurses working in the north and east of the State. Allowances can be worth up to eight weeks of base pay (over $6 000 for senior Level 1 Registered Nurses) after two years service; and
- one agency's schedule of fees to Sir Charles Gairdner Hospital is between five per cent and seven per cent cheaper than for Carnarvon Hospital depending on the time of the shift for a senior Level 1 Registered Nurse.

Increasing Cost of Agency Nurses Per Hour Worked

Costs for some health services will have also been affected by the timing of their contracting. Figure 8 shows that the monthly average hourly cost of using agency nurses increased steadily throughout 2001 by a total of 29 per cent, although State expenditure on agency nurses fluctuated for health services. This suggests that health services contracting in December 2001 would have paid over $10 more per hour worked than for a similar amount of service contracted in January 2001. The reasons for the increase in the cost per hour worked are not clear but factors contributing to higher costs might include using agency nurses on night and weekend shifts where higher charges apply, hiring specialist nurses that attract higher charges and increased charges.

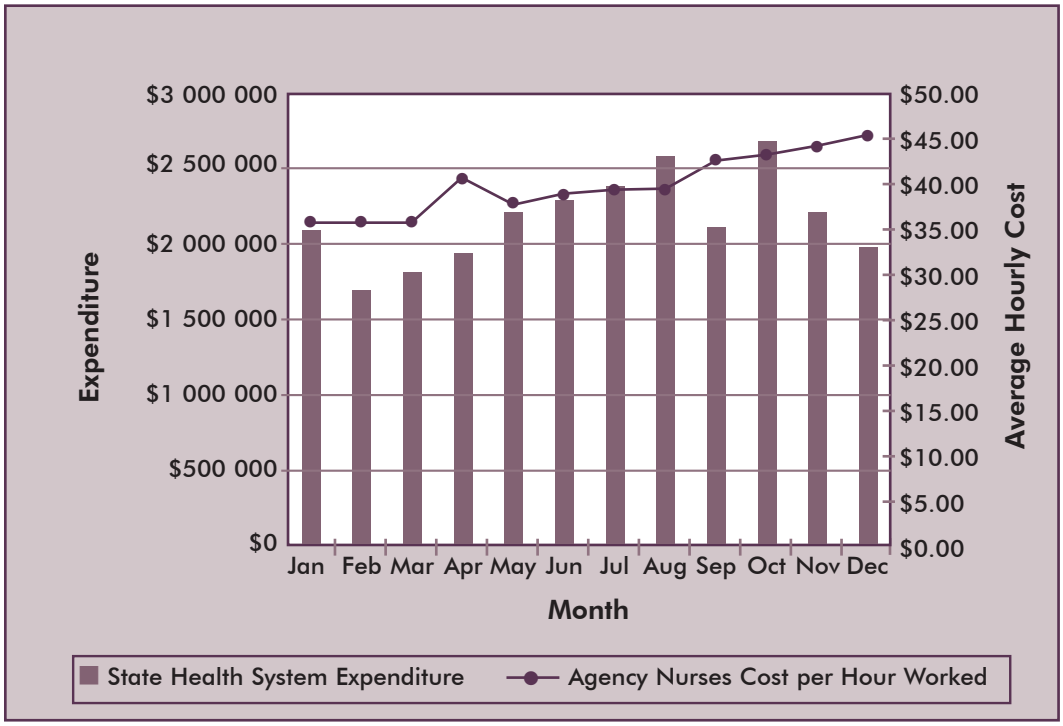

Figure 8: Use and cost of agency nurses in 2001.

Reduced demand by public health services for agency nurses in late 2001 did not reduce costs per hour worked.

Source: OAG analysis of public health system financial records

Contracting Process

The examination found considerable diversity in the ways health services organise agency nursing cover including:

- nurse managers that make bookings directly with agencies independently of other bookings within a health service – none of the six health services examined coordinates agency bookings at the health service level;
- central nurse resourcing officers who book agency staff on behalf of nurse managers in their hospital, mental or community health service;
- ad hoc bookings of agency nurses on a shift-by-shift basis;
- corporate bookings of agency nurses creating a daily pool for nurse managers to draw on; and
- bookings of agency nurses for several weeks or months.

This diversity, although developed to address local needs, makes it particularly difficult to evaluate what works well for a particular health service. What was clear from the examination is that health services do not undertake market testing and are "price takers". That is, they accept the terms and conditions of the contract on offer. The usual practice is for nurse managers to telephone nursing agencies with their requirements. The nursing agencies confirm availability of nurses, cost and details of employment by facsimile or e-mail. Nurse managers often have to telephone sometimes three or four agencies to obtain the nurses required. Each health service examined contracted from more than 10 agencies in 2001.

Traditionally, hospitals and other employing units within health services contract for agency nursing services in isolation. Some hospitals make corporate bookings but also permit individual nurse managers to make and if necessary cancel bookings. Some nursing agencies advised that uncoordinated bookings and last minute cancellations by some hospitals increase administrative costs to them (ultimately passed on to hospitals in higher fees) and discourage nurses from seeking work at these hospitals.

At Sir Charles Gairdner Hospital, although corporate bookings are made, some hiring is further devolved to nurse managers of wards. Hiring is undertaken on a daily basis at Sir Charles Gairdner Hospital and on a weekly or monthly basis in the rural health services. Sir Charles Gairdner Hospital makes daily bookings to manage peaks in demand and cover nurses taking unexpected leave.

Frequent orders with many suppliers increase the administrative costs of a health service and can fragment their purchasing power. For four of the six health services examined, ordering agency nurses and administering accounts was a growing activity for nurse managers in 2001. In response, Kalgoorlie and Sir Charles Gairdner Hospitals allocated nurse management resources to support purchasing from nursing agencies.

Of the six health services examined, Sir Charles Gairdner Hospital purchased the most nursing agency services. The Hospital contracted 57 FTEs at a total cost of $3.9m in 2001 (seven per cent of total nursing expenditure for the Hospital). The Hospital placed orders on a daily and weekly basis and accepted weekly invoices from up to 16 agencies during 2001.

State-wide, public health services contract from 30 agencies with 36 per cent of services contracted from one supplier and 15 per cent from another.

Terms and Conditions

State Supply Commission policies require public authorities to adopt a value for money approach when purchasing goods and services. Consistent with this, it is important that health services:

- be directly involved in the selection of terms and conditions of contracts and do not simply accept those which are presented by the contractor; and
- should select conditions of contract that are appropriate to the requirements of the purchase and fair to all parties concerned.[16]

16 Based on the findings and recommendations for better contracting in *Lease now – pay later? The Leasing of Office and Other Equipment* (Report No. 3, Office of the Auditor General – June 1999), Perth.

All of the health services examined had been involved in at least requiring special conditions of contract specific to their requirements such as the contract period, reimbursement for travel and accommodation and special skills. However, they accepted a wide range of general terms and conditions from nursing agencies.

The examination reviewed 12 different sets of terms and conditions that have been accepted by health services for one or more purchases each, all of which contain items that increase the administrative load or which put health services at unnecessary risk of inadvertently breaching a contract. Examples include the following:

- Invoice terms of seven, 14, 21 and 30 days were identified. In addition, in one example a schedule of fees stating payment terms of 14 days contradicted the accompanying terms and conditions that stated payment terms of seven days. Standardising payment terms reduces administration costs and makes for greater consistency in management of agency nurses.
- Fees subject to change without notice. Health services should ensure that fees are not increased without notice during a contract.
- Conditions and fees apply for cancellation of orders within time-frames that vary considerably between nursing agencies. Examples include:
  - a fee of four hours to be paid if on arrival the nurse is not wanted and a fee of two hours if cancellation occurs within one hour of the designated time of commencement by the nurse;
  - a fee of 25 per cent or two hours fee, whichever is greater, to be paid if the engagement is cancelled within two hours of the designated time of commencement by the nurse;
  - the agency reserves the right to claim money spent on any advertising together with a cancellation fee of 25 per cent of the total fee which would have been payable had the engagement not been cancelled; and
  - where there is less than one week's notice of cancellation, the rates are charged in full as if the nurse had completed the shift.

Future Contracting

Neither the Department of Health nor the health services examined has issued policies and procedures for contracting agency nurses. However, the examination was advised by the Department that a 'generic contract' is being developed to obtain agency nurses for the public health system. Developing a standard contract offers the opportunity to:

- reduce administrative costs by introducing a streamlined buying approach;
- enhance accountability by obtaining agreed commercially balanced terms and conditions; and
- enhance quality by defining responsibility for monitoring of pre-engagement checks.

Recommendations

The Department of Health should:

- **progress the proposed 'generic contract' to:**
  - better coordinate market testing of nursing agencies;
  - ensure that opportunities to streamline the booking of agency nurses are pursued; and
  - ensure that the contract terms and conditions are appropriate for the public health system;
- **ensure that financial evaluations are undertaken of the use of agency nurses compared with other options such as overtime and the use of permanent, fixed term and casual staff;**
- **monitor the cost of the various nurse resourcing options; and**
- **monitor the effective use of agency nurses.**

Previous Reports of the Auditor General

1997	
On Display – Public Exhibitions at: The Perth Zoo, The WA Museum and the Art Gallery of WA	April 9, 1997
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