Auditor-General's Report

Performance Audit

e-government

Electronic Procurement of Hospital Supplies

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Foreword

The Internet and related technologies are transforming the world we live in. They are a growing influence on the way individuals, not-for-profit bodies, businesses and governments communicate and operate.

E-government is about capturing the benefits of these technologies to improve the efficiency and effectiveness of government services.

The NSW Government has targeted e-government as a key reform strategy. Because of the extent of its potential opportunities - and risks - I have adopted e-government as a theme for a series of performance audits. This report on *Electronic Procurement of Hospital Supplies* is the latest in that series.

Electronic procurement is a key plank of e-government. It uses web-based technologies and communication to connect buyers and sellers, and offers the potential for significant savings.

Expenditure on goods and services is typically the second largest expenditure item, after employee related costs, for most government agencies. NSW Health spends more than $1½ billion each year on procuring goods and services.

Achieving full value from e-procurement is a substantial challenge. Structures will have to change, as will attitudes. This will require strong executive vision, commitment and leadership, efficient and effective processes, quality management information and sound infrastructure.

While this report deals with e-procurement in NSW Health, many of its comments, observations and recommendations will apply to other agencies.

R J Sendt
Auditor-General
September 2002

Executive Summary

Executive Summary

NSW Health spent more than $1.5 billion on goods and services in 2000-01. This is a massive business.

The audit provides a strategic assessment of how well the NSW public health system uses electronic procurement (e-procurement) in managing hospital supplies.

NSW Health's Supply Chain Reform Strategy (SCRS) provides the strategic framework for reform of the supply chain in the NSW public health system. Electronic procurement is a key feature of this strategy.

NSW Health's Peak Purchasing Council (PPC) expects implementation of the SCRS to lead to a better practice supply chain model by late 2003 and to deliver between $60 and $80 million in savings.

Audit Opinion

Reform of procurement in the NSW public health system is a huge, complex and difficult task.

Much thought has been given to this reform. An immense amount of planning and preparatory work is required, and is apparent. An ambitious Supply Chain Reform Strategy has been developed which presents a clear vision and a coherent plan for comprehensive reform. Much has been achieved in raising awareness, creating momentum and increasing the focus on reform across the NSW public health system.

Inevitably, there are lags before plans produce results. And significant aspects of reform are not wholly controlled by NSW Health. For example, the establishment of the Government e-marketplace. However, even allowing for these factors, some important building blocks for procurement in the NSW public health system require urgent attention.

In our opinion, at this time, the NSW public health system is making only limited progress towards achieving the economies in purchasing that its size and market dominance could deliver. While millions of dollars in savings are potentially available, much needs to be done to realise this. It is critical that all those involved, at all levels, ensure that reform is given priority, and driven through to fruition.

The Department has a number of initiatives underway to advance the Reform Strategy. Some of the more important initiatives are languishing, such as the development of a product catalogue, a standards framework and an integrated materials management system.

Health-specific State Contracts (arranged through NSW Supply) have some serious implementation and management issues to be addressed by NSW Health. Issues such as lengthy delays in establishing contracts and limited performance monitoring impede the achievement of greater efficiency and economy.

At the strategic level, whilst leading change from the centre is a vital aspect of reform, the public health system is vast and typified by local variations. Some parts of the system could be making changes now, but are being held back. Any delay in implementing reforms wastes substantial public resources.

Area Health Services (AHSs) need to be required, and permitted, to assume greater responsibility and accountability for implementing procurement reforms, within statewide policy directions. The Department and AHSs will need to work together cooperatively, as will hospitals within AHSs, and AHSs with one another. There may be structural and attitudinal impediments to be overcome to achieve this, but it is critical to achieving change in an acceptable timeframe.

At the operational level, the most urgent and fundamental problem is the lack of valid, timely and relevant information on most aspects of procurement. For instance, data on aggregate purchasing and the total cost of procurement.

Technology limitations at the hospital level are also key factors hindering progress in e-procurement. For example, computer system capability and linkage issues, lack of automation and standardisation of processes, and the fragmentation of IT systems make information exchange difficult and may delay use of the Government e-marketplace. The Department should foster reforms in corporate information systems to mitigate these concerns.

Some quite simple aspects of procurement also need urgent attention, such as missing out on prompt payment discounts.

Findings

We found:

- information required to manage the supply chain effectively is not sufficiently defined or readily available
- current accountability mechanisms are not driving performance effectively
- the public health system is unable to measure procurement costs and benefits realised
- reform strategies need better to reflect some of the practical realities and impediments involved with implementation, and to gain better local level commitment
- limited current capability to integrate IT systems, share data and track products across the hospital system
- AHSs have notably different levels of readiness to use e-procurement
- a need for additional incentives for suppliers and AHSs to drive economies in supply chain management
- AHSs need to be assisted and encouraged to leverage better the opportunities for using economies of scale
- AHSs' market dominance being hampered by current health-wide arrangements for implementing reforms
- serious shortcomings in the approach to, and the development, implementation and management of, Health-specific State Contracts
- procurement arrangements at AHS level
  - are relatively unsophisticated, largely paper based and manual
  - have significant ad hoc purchasing, especially of non-stock items
  - lack rationalisation of products, suppliers, orders and invoices
  - have minimal electronic communication between buyers and sellers information systems
  - lack accurate information on total procurement cost
  - lack an inventory management system for non-stock items
  - lack a single coding system to identify and track products
  - lack a catalogue to source products and suppliers.

Recommendations

1. Progress the integration of information system infrastructure, development of a common language, and automation and standardisation of key processes.

To this end, we suggest that:

The Department

- fast track the development of a standards framework for information, systems and products and mandate this across the public health system
- provide guidance to AHSs in implementing these standards and a generic plan for implementing the reforms
- audit the current IT capabilities of each AHS to set improvement targets for both implementation of standards and key processes
- ensure new IT systems reflect user needs, are monitored and have regard to interoperability, systems integration and benefits.

Areas Health Services

- develop a comprehensive plan for implementing reforms based on a review of current procurement arrangements, including information systems infrastructure and adoption of the generic plan
- articulate a clear position to all staff on changes, benefits and costs
- ensure implementation of new IT systems involves education, consultation and performance auditing.

2. Provide tools to source, track, identify and manage products across the public hospital system.

To this end, we suggest that:

The Department/PPC

- articulate a clear position and a comprehensive plan outlining generic processes and benefits from the adoption of the Government e-marketplace and report progress of all AHSs in implementing the plan as a benchmark tool
- accelerate the implementation of a unique product identification protocol across the public health system
- provide a model for an integrated materials management system for AHSs to use.

Area Health Services

- establish the range of purchases made within the AHS and develop, as a priority, product information which covers both stock and non-stock items and all user areas
- develop a uniform materials management system that links to the e-marketplace and all relevant information systems and covers all products and user areas
- set up effective business processes to properly maintain product information relevant to local procurement.

3. Place greater emphasis on identifying information needs.

To this end, we suggest that:

The Department/PPC/AHSs

- determine information needs for whole-of-Health, AHS, hospital and business unit levels
- put in place information systems to capture relevant and accurate information and enable aggregation of procurement data in a consistent and timely manner.

4. Strengthen accountability mechanisms and develop a more comprehensive, rigorous and systematic approach to performance management.

To this end, we suggest that:

The Department/PPC

- develop key performance indicators (KPIs) for monitoring progress with the implementation of the SCRS
- devise a method for measuring benefits from the reform program.

Area Health Services

- manage procurement strategically by ensuring procurement models link with, and reflect, clinical models
- build capacity to measure procurement costs and benefits realised.

5. Enhance understanding of systems, processes and AHSs' readiness to undertake the more substantial reforms.

To this end, we suggest that:

The Department/PPC/AHSs

- undertake an assessment of the capability of each AHS to implement e-procurement in order to identify key impediments and resource requirements.

6. Provide more effective mechanisms for sharing better practices and exchanging information to improve collaboration and eliminate duplication of efforts.

To this end, we suggest that:

The Department

- develop and share benchmark data between AHSs (eg a procurement better practice Intranet) and ensure a more proactive consultative program with all supply chain partners.

7. Introduce appropriately flexible arrangements to leverage better the potential purchasing power of AHSs.

To this end, we suggest that:

The Department

- provide greater flexibility to, and work more closely and cooperatively with, AHSs to encourage and assist them to assume greater responsibility and accountability for the competent management of their e-procurement reforms within the existing structure of Health and the Government's 'Smarter Buying' framework.

8. Consider new and different approaches to contracting that focus more on clinical procedures.

To this end, we suggest that:

The Department/PPC/NSW Supply

- consider transferring some of the low cost, high use commodity items from current Health-specific State Contracts to non-contract period agreements
- expand Health-specific State Contracts into newer high cost items, where feasible
- establish an accreditation system for Health industry suppliers which demonstrate consistent quality performance
- move progressively towards a procedure-based approach to contracting within defined clinical specialties
- allow AHSs to combine their purchasing power, for items/clinical procedures specific to their needs and not necessarily the broader system, by letting some contracts on an *Area block* basis using, either, a product or procedure-based approach
- facilitate and monitor implementation programs for each Health-specific State Contract.

9. Strengthen accountability and management arrangements for Health-specific State Contracts.

To this end, we suggest that:

The Department/PPC

- establish a robust system to capture and analyse aggregate purchasing data needed to better inform decision making
- develop relevant KPIs to monitor the performance of contracts, suppliers, NSW Supply, the PPC and AHSs
- develop capacity to measure the extent to which Health-specific State Contracts deliver positive benefits or impose avoidable costs
- clarify the roles and responsibilities of the PPC and NSW Supply relating to performance monitoring of Health-specific State Contracts
- improve the process for exemption from use of Health-specific State Contracts to ensure
  - breaches of contracts are flagged
  - value of exemptions are quantified
  - a speedier assessment process is implemented
  - mechanisms for AHSs to appeal decisions exist
  - medical/legal liability, when exemptions are wrongly refused, is clarified
  - AHSs are informed of progress with their requests.

10. Improve performance in paying creditors to benefit from settlement discounts.

To this end, we suggest that:

The Department

- maintain the current monitoring of outstanding creditors payments
- assess the appropriateness of current system-wide arrangements for payment of creditors to determine if late payments relate to poor financial management, insufficient funds or specific product classes, supplier type or procurement method
- develop a mechanism to maximise prompt payment discounts.

Response from NSW Health Department

Thank you for the report on the Audit Office's performance audit of Electronic Procurement of Hospital Supplies.

Overall the report provides a sound assessment of our progress in supply chain reform and the implementation of electronic procurement. The recommendations are consistent with our reform program with the issues, for the most part, already addressed or in the process of being addressed through either the Supply Chain Reform Strategy, or the e-Marketplace initiative.

The report acknowledges NSW Health's planning and preparatory work in this area but fails to take account of the external constraints such as those caused by the delay in selection of the Whole of Government e-Marketplace. It is nevertheless a useful reminder of the complexity of the exercise, the risks involved and the tasks that must be successfully completed to achieve the desired outcomes.

Comments on the particular recommendations are:

Recommendation 1. Agreed.

The integration of information system infrastructure, development of common language and automation and standardisation of key processes are essential components of Health's e-Marketplace implementation. A considerable amount of work has been undertaken since the Audit Team's review to accelerate reforms and ensure common (best practice) approach is adopted in implementing new e-procurement processes. Expert teams in the areas of e-Marketplace Best Practice, Change Management and Enabling Technology are well advanced in their development of templates that will be tested and refined in the Area Health Service (AHSs) e-Marketplace Lead Sites and subsequently used in the rollout of the e-Marketplace to all AHSs across the state.

Recommendation 2. Agreed.

Sourcing, tracking and management of products across the public hospital system will be facilitated by the Health e-Catalogue currently being developed as part of the whole of government e-Marketplace. The e-catalogue will incorporate a unique product identification field to be linked to barcoding systems to facilitate the automatic receipting of goods through to payment cycle. Work to identify the required materials management functionality and the gaps in the functionality currently provided through NSW Health's two Financial Information Systems (FIS) has been completed and upgrades to include barcoding have been funded.

Recommendation 3. Agreed.

Health's Supply Chain Reform Strategy recognised the information needs to achieve reform objectives. The Strategy addresses this through its Key Performance Indicators (KPI) project and through the development of a system to capture and record supply/clinical costs in Trendstar (clinical costing system) and the Health Information Exchange (data warehouse). Again however, the implementation of such indicators is linked to the e-Catalogue/e-Marketplace solution. These developments will now proceed.

Recommendation 4. Agreed.

Accountability mechanisms will be addressed through the Supply Chain KPI development work currently in train which includes the development of indicators for monitoring progress with the implementation of the Supply Chain Reforms by the PPC.

Recommendation 5. Agreed.

Enhanced understanding of the Supply Chain Reforms will be achieved through the application of Health's Information Technology (IT) implementation methodology which includes an implementation planning study. This detailed assessment of AHSs' capacity together with the project Communications Strategy and the work of the Enabling Technology, Best Practice, e-Catalogue and Change Management Teams, will help address the requirement.

Recommendation 6. Agreed.

The Health Peak Purchasing Council's web site was specifically established to provide an effective mechanism for exchanging information. The site includes a range of information from supply policy and procedures to databases on AHSs supply contracts, product evaluations and supplier performance, which reduces duplication of effort across AHSs.

Addition of benchmark data between AHSs to share better practice information is consistent with the Council's objectives.

Recommendation 7. Agreed.

State Contracts Control Board (SCCB) contracts provide flexible arrangements in that AHSs can tender off the contract panel and gain additional discounts through mechanisms such as guaranteed volume procurement. Recent Health specific SCCB contracts have extended the level of flexibility to enable AHSs to achieve better prices through product/supplier rationalisation, aggregation and guaranteed quantities using their own AHS "spend", combining with Quadrangle partners or with any number of AHSs across the state.

The PPC's Strategic Planning Committee also continues to explore alternative approaches where these are consistent with the Government's Smarter Buying framework and have the potential to deliver better value to NSW Health overall.

Recommendation 8. Agreed.

The issue of new and different approaches to contracting is under constant review.

NSW Health has undertaken to increase the percentage of goods and services purchased through the full range of SCCB contracts from an estimated 35% to 60%, in two years. The Health 2002-03 Procurement Plan provides for the establishment of new SCCB contracts to cover ten separate product groups. The PPC is working with NSW Supply evaluating different approaches to achieve this target, making the most effective use of AHS staff in the various aspects of contract management and product evaluation. The potential of clinical procedure-based contracts are being investigated by the PPC as part of the process.

There are no contractual or policy barriers to AHSs combining their purchasing power to achieve better value and increasingly health specific SCCB contracts are incorporating incentives for doing so. Whilst there is the capacity to establish AHS/s specific contracts, these would continue to include the standard contract conditions extending entitlements to the offer to all AHSs. This condition will remain to ensure that the larger metropolitan AHSs do not achieve price advantages at the expense of their smaller rural counterparts or until there is evidence that the alternate approach delivers improved value overall.

Recommendation 9. Agreed.

Strengthened accountability for Health specific SCCB contracts is being addressed through a number of initiatives. These include review of the performance agreement between NSW Supply and the PPC to strengthen accountability, review of the operation of SCCB contracts, work on a range of KPIs, and the implementation of a common catalogue for Health within the e-Marketplace which will enable the capture of a range of procurement data.

Recommendation 10. Agreed.

The Department will continue to monitor performance in paying creditors, assess the appropriateness of the current system and explore mechanisms to maximise prompt payment discounts.

In summary, the report recognises the difficulties in reforming supply chain in the NSW Public Health system and makes a useful contribution to the process. It is a pity the report does not reflect that many of the progress delays have been caused by external factors, but I am pleased that it recognises the extent of the task being progressed by so many in the Health system to bring about these important reforms.

(signed)

Robyn Kruk
Director-General

Dated: 9 September 2002

1. Introduction

1.1 E-government theme

The Audit Office has targeted e-government as a theme area for ongoing examination with a series of performance audits.

We have produced a major performance audit report on the status of implementing e-government in NSW, and a companion better practice guide.

Other audits related to our e-government theme include:

- user-friendliness of websites
- consolidation of, and access to, NSW Government property data
- sharing of data between agencies in land tax administration
- use of computers in schools for teaching and learning
- implementation of computer aided dispatch systems for Police and Ambulance response
- communication systems integration in bushfire fighting operations.

This audit of *Electronic Procurement of Hospital Supplies* is our latest audit on e-government in NSW. It examines a business-to-business application of e-government in the NSW public health system.

Our ongoing work on e-government can be viewed on our web site at www.audit.nsw.gov.au.

1.2 What is e-procurement?

Electronic procurement refers to the use of web-based technologies and communication to connect buyers and sellers. E-procurement facilitates the process from requisition and approval through to receipt and settlement.

> Electronic procurement is a business tool and enabler that allows businesses to remove inefficiencies from their processes and build better integrated supply chains. It introduces exciting new ways for organisations to communicate internally and externally, conduct business transactions and manage supply chains and alliances.[1]

[1] NSW Government Electronic Procurement Implementation Strategy, July 2001, p.5.

1.3 What is a supply chain?

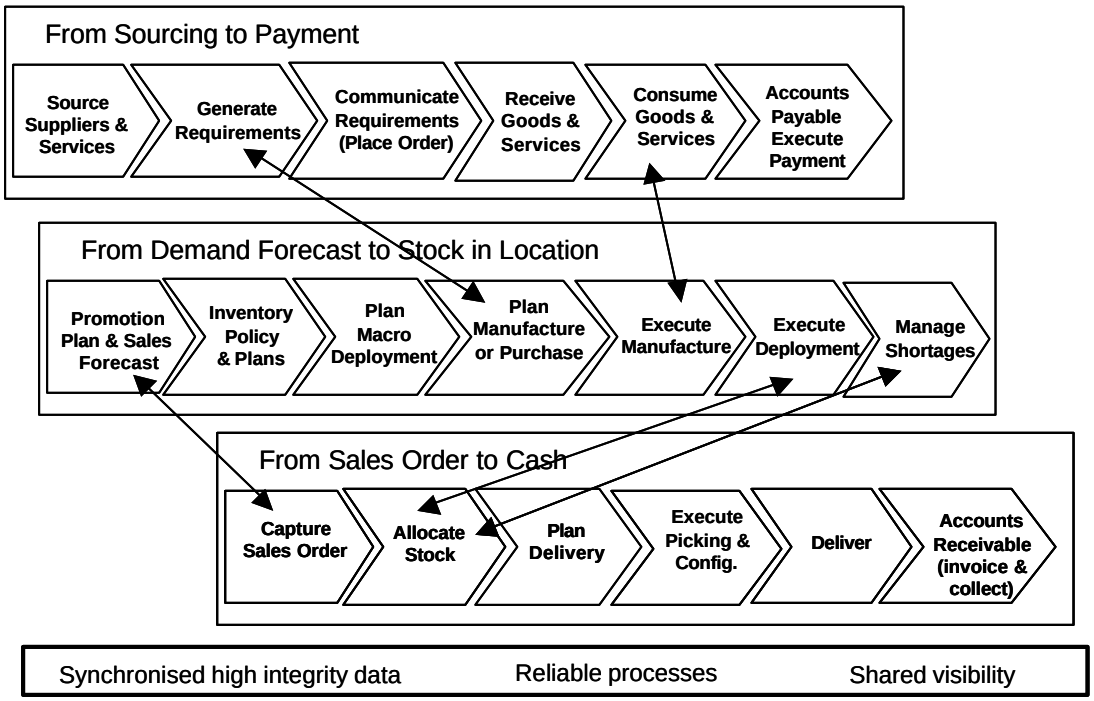
A supply chain covers all supplies and support services required to support the operations of an AHS, including medical and surgical supplies, pharmaceuticals, support services, maintenance services and capital equipment. It covers all product classes, ie consumable, durable and capital. For the purposes of this report, there can be multiple chains operating within this broader chain at an AHS level.

A typical supply chain would include three major processes each comprising a series of sub-processes:[2]

- *sourcing to payment* – covers the purchaser activities from sourcing products to payment of invoices
- *forecast to stock* - is driven by demand and relates to managing volumes and distribution of stock to all network locations (internal and external)
- *order to cash* – relates to supplier processes encompassing order creation, delivery and accounts receivable.

For e-procurement to work effectively, each partner in the supply chain needs to manage and integrate their internal processes, as well as integrate and optimise their processes with the matching processes of their partners. Diagram 1 shows the linkages between trading partners in a supply chain.

Diagram 1: Supply Chain Hi-level Overview



Source: Report on Activities of the National Supply Chain Reform Taskforce, May 2002, p.8.
Note: Arrows indicate linkages.

[2] Report on Activities of the National Supply Chain Reform Task Force, May 2002, p.7.

1.4 How are the responsibilities for procurement organised?

The Department of Health

The Department of Health has overarching responsibility for the performance of the NSW public health system. Key responsibilities include:

- funding the public health system in NSW
- developing statewide policy and strategic directions, system-wide planning, performance monitoring and the management of health issues
- regulating private hospitals, nursing homes, and public and environmental health.

Area Health Services (AHSs)

Health services in NSW are delivered through 17 AHSs – 8 rural and 9 metropolitan - and the Children's Hospital at Westmead. Corrective Health Services and Ambulance Services are also part of the NSW public health system, but were not within the scope of the audit.

The role of AHSs is to promote, protect and maintain public health and to provide health services to the residents of NSW.

AHSs are subject to the control and direction of the Minister for Health in the performance of their duty and functions relating to local health services. AHSs participate in the Government procurement reform program voluntarily or if directed by the Minister.

NSW Health Peak Purchasing Council

The Peak Purchasing Council (PPC) was established in April 1993. The Council's role is to manage the total cost of the healthcare supply chain for NSW Health and to provide advice and support to the AHSs on procurement, contracting and logistics.

The PPC reports directly to the Director-General of the Department of Health and the Chief Executive Forum of NSW Health. It is jointly funded by AHSs, but has no legislative mandate over AHSs.

1.5 Audit objective

The audit provides a strategic assessment of how well the NSW public health system is taking advantage of the opportunities, and managing the risks, associated with e-procurement in the management of hospital supplies.

In particular, the audit:

- assesses the overall efficiency and effectiveness of the management of the hospital supply chain(s)
- identifies key issues that help or hinder the leveraging of the potential of e-procurement and its impact on the management of hospital supplies.

The audit did not examine the management of maintenance and specialist services, capital acquisition and leasing arrangements. Special emphasis was placed on the examination of drugs, medical and surgical supplies.

The audit findings relate only to e-procurement and supply chain management. They do not apply to the delivery of clinical outcomes and should not be interpreted to reflect on the quality of patient care.

The scope and depth of the audit's examinations were extensive, reflecting the size, diversity and complexity of the public health system and the magnitude of procurement issues within that system.

Details of the audit criteria, scope and approach are provided at Appendix 1.

Cost of the audit

The cost of the audit is $329,300. This includes $6,000 for printing the report.

The audit team

The audit team comprised Ai-Binh Phu, Henriette Zeitoun and Stephen Horne.

Ms Judy Paterson, Paterson Consulting Services provided consultancy services to the audit team and participated in significant elements of the audit fieldwork.

Acknowledgements

The Audit Office gratefully acknowledges the cooperation and assistance of:

- the Department of Health
- the Health Peak Purchasing Council
- the Department of Public Works and Services
- South Eastern Sydney Area Health Service
- Hunter Area Health Service
- Northern Sydney Area Health Service
- Central Sydney Area Health Service
- South Western Sydney Area Health Service.

We thank Messrs Keith Chisholm of St Vincent's Hospital, Melbourne, Mark Mitchell of the Seventh Day Adventist Hospital, Wahroonga and Pat Gallagher of Casprel Pty Ltd for their time and insights.

We also thank the many suppliers who participated in the consultation process for their frank views and comments.

The Audit Office valued the assistance of Ms Judy Paterson in the conduct of the visits to hospitals and the expertise and support in ensuring a practical approach to the audit.

2. E-procurement promises major savings

2.1 Potential savings

The use of e-procurement in the Health supply chain offers potential for significant savings. For example:

- the PPC expects between $60 and $80 million in savings from implementation of the SCRS (representing approximately 3% overall improvement)
- the wide variations in the level of expenditure on goods and services as a percentage of total expenditure between AHSs suggest opportunities to reduce costs through a broader application of better practices. Tables 2 and 3 illustrate these variations.

Managing hospital supplies more efficiently, which is a very real prospect with e-procurement, can save millions of dollars.

2.2 High level overview of procurement in Area Health Services

Many supply chains

Managing the supply of goods and services to hospitals is a huge and complex task.

AHSs have several supply chains operating across functions, departments, and business units, including hospital wards, theatres, intensive care units and pharmacies. These chains involve industry sectors such as drugs, medical and surgical consumables, prosthetics, implants, food, grocery, linen, stationery, etc.

Each chain can involve more than a thousand suppliers, ten thousand items and multiple brands of the same product class. Typically, however, 20% of suppliers account for nearly 80% of an AHS's expenditure on goods and services.

How are goods purchased?

AHSs obtain their goods and services through:

- Health-specific State Contracts arranged via the State Contract Control Board (SCCB) – for items required by all AHSs such as needles, syringes, surgeons' gloves, paper towels, etc
- AHS-based contracts – for facility related items, such as specialty burns, heart transplants, advanced children's services etc
- direct negotiations with suppliers.

Type of items and supply

Most items purchased fall into one of the main categories summarised below.

Stock items:

- are common to most user areas
- are covered by State Contracts (approximately 90% of these items)
- represent about 2,000 to 4,000 line items, comprising all product classes, ie consumable, durable and capital
- account for about 25% of an AHS's expenditure on goods and services
- attract a high level of inventory management
- are generally managed through an Imprest[3] system
- are held within the AHS or hospital central stores.

Non-stock items:

- are specific to clinical specialties, eg renal catheters, reagents within radiology etc
- represent over 10,000 different line items
- account for about 65% of an AHS's expenditure on goods and services
- have no inventory management principles applied to them
- are not held in stock within an AHS's central store or individual hospital stores within an AHS
- are falsely termed 'used' as soon as they are transferred to the cost centre
- are a source of significant ad hoc purchasing and potential waste.

Consignment items:

- tend to be specialised, high-cost, high-turnover items that are available in multiple styles and sizes. For examp le, prosthesis and special catheters for cardiology
- suppliers carry the cost of items, as these are not purchased by AHSs until used
- suppliers manage consignment stock, in the majority of cases.

Prime vendor arrangements:

- have an external service provider acting as the 'central store' for an AHS and providing all the inventory tracking and reporting systems
- tend to involve stock items, but can involve non-stock
- are used in a limited way in NSW public hospitals, with the exception of pharmaceuticals
- offer significant one-off and ongoing financial savings through management, IT resources, minimisation of freight charges etc.

[3] Cost centre managers pre-set the maximum stock level to be maintained. This is checked and reordered 1-2 times a week and replenished regularly by the supply department in each AHS.

Devolved budget with multiple cost centres

Cost centres represent a pivotal point in the procurement process. They initiate most of the procurement activities. They order, use products, and re-order non-stock items.

In South Eastern Sydney Area Health Service, for example, there are over 3000 cost centres which can initiate an order. A large proportion of these purchase non-stock items. Absence of appropriate management tools and information makes efforts to consolidate orders and invoices, and to reduce the number of low value invoices, extremely difficult.

Cost of procurement (supply chain)

There is no robust system for capturing and measuring procurement costs at any level of the NSW public health system.

2.3 NSW Government electronic procurement framework

Why is the NSW Government promoting e-procurement?

The NSW Government has a policy to promote e-procurement as part of its broader commitment to the e-government reform agenda.

E-procurement is considered by NSW Health to be an important measure for improving productivity. E-procurement is a key strategy to achieve the 6% wage productivity increases currently being required by the Government.

The *Smarter Buying for Government* strategy provides the framework for procurement reform in NSW. It builds on the strategies and actions in the *NSW Government Procurement Policy*, the *NSW Government Electronic Procurement Implementation Strategy,* and *Construct New South Wales*.

NSW Government Procurement Reform Strategy

The *Smarter Buying for Government* strategy requires agencies to identify their procurement savings potential in consultation with NSW Treasury, with the assistance of the Department of Public Works and Services. The implementation timetable requires agencies:

- in year 1, to establish their savings targets primarily based on greater and better use of aggregation in purchasing
- in year 2 and subsequent years, to revise and expand their targets to include savings from better procurement practices, the benefits of e-procurement and savings from further and higher level aggregation strategies.

All government agencies, including Public Trading Enterprises, but excluding State Owned Corporations, are required to participate in the strategy. State Owned Corporations are encouraged to participate.

2.4 NSW Health electronic procurement framework

The PPC released the Supply Chain Reform Strategy (SCRS) for NSW Health in late 2000.

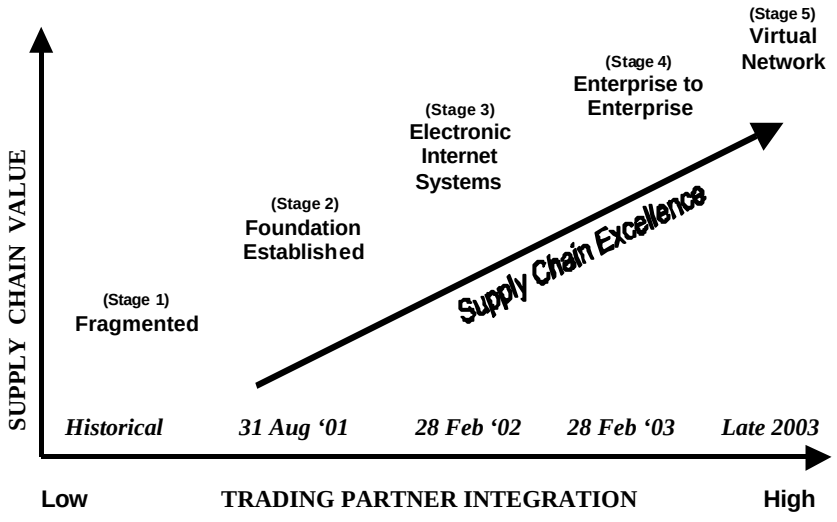
The SCRS contains 55 separate projects grouped into five major categories:

- basic infrastructure and innovation
- electronic catalogue
- procurement practices
- electronic commerce
- support functions.

The SCRS is consistent with the NSW Government Blueprint *Electronic Commerce - taking up the challenge*.

The PPC expects a full transition to a best practice model by late 2003 as the supply chain progresses through five stages. Figure 1 provides an overview of the steps involved and the timeline for their achievement.

Figure 1: Five stages of development to achieve a best practice model



Source: NSW Health Peak Purchasing Council Supply Chain Reform Workshop Aug 2001, page 6

The staged approach was adapted from KPMG's five-stage supply chain model to establish the current stage of development of individual AHSs supply chains, and as a mechanism for AHSs to measure and report progress.

NSW Health estimates that implementation of the SCRS across AHSs is expected to deliver between $60 and $80 million in savings.

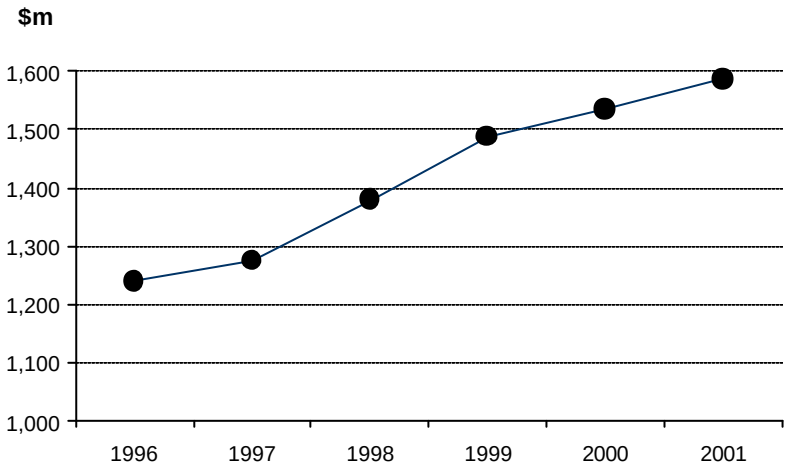
AHSs are required to implement the SCRS and report quarterly to the PPC on progress with implementation. These reforms have been included in the performance contract of each AHS's CEO.

Our audit is aimed at assisting this process by identifying the key issues that help or hinder leveraging the potential of e-procurement and its impact on the management of hospital supplies.

How big is procurement in Health?

Expenditure on goods and services in NSW Health is more than $1.5 billion annually, representing almost a quarter of the Government's total expenditure on goods and services in 2000-01. This expenditure has grown in real terms by $348 million between 1995-96 and 2000-01, a 28% overall growth. Figure 2 shows the trend.

Figure 2: NSW Health – total expenditure on goods & services – adjusted for CPI (excluding visiting medical officers)

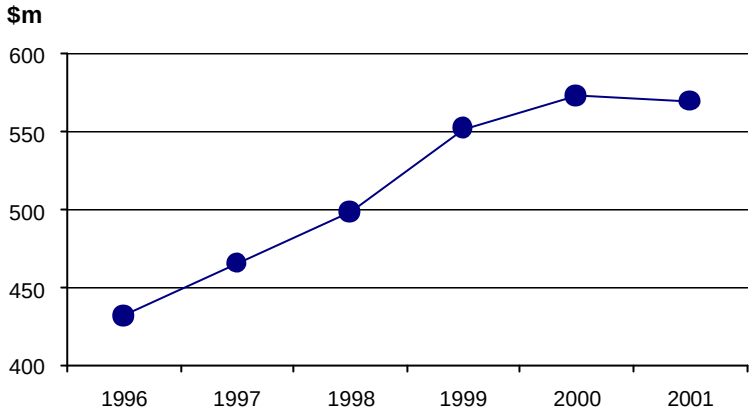


Source: Financial Statements for Years 1996 to 2001; ABS Cat. No. 6401.0

Nearly 40% of this growth is attributable to expenditure on drugs, medical and surgical supplies. AHSs spent approximately $569 million in 2000-01 on drugs, medical and surgical supplies. This expenditure has grown by $138 million in real terms between 1995-96 and 2000-01, a 32% overall growth.

Figure 3 shows a slightly declining trend for these supplies in 2000-01.

Figure 3: NSW Health – total expenditure on drug, medical and surgical supplies – adjusted for CPI



Source: Financial Statements for Years 1996 to 2001; ABS Cat. No. 6401.0

Table 1 provides a breakdown of this expenditure between medical and surgical, and drug supplies.

Table 1: Expenditure on medical, surgical and drug supplies 2000-01

	$m
Medical & surgical supplies	313.3
Drug supplies	256.0
TOTAL	**569.3**

Tables 2 and 3 show that expenditure on goods and services as a percentage of total expenditure:

- was higher overall in rural than in metropolitan AHSs with 28% and 18% respectively (on average)
- was lowest in South Eastern and Western Sydney AHSs (16%) for metropolitan AHSs, and Mid Western and Macquarie AHSs (19%) for rural AHSs
- varied significantly between some AHSs with similar levels of overall spending. This occurred in rural and metropolitan AHSs. To illustrate, compare Central and South Eastern Sydney, Wentworth and the Hunter, Far West and Macquarie.

Table 2: Expenditure on goods & services as a percentage of total expenditure (excluding visiting medical officers)			
Metropolitan Area Health Services - 2000-01			
	Total Expenses	**Goods & Services***	**Per cent**
	$m	**$m**	**%**
South Eastern Sydney	1,038.3	165.4	16
Western Sydney	725.3	118.8	16
Central Sydney	724.1	150.8	21
Northern Sydney	659.1	133.1	20
South Western Sydney	591.0	110.0	19
Hunter	594.4	98.9	17
Illawarra	307.8	55.4	18
Wentworth	261.8	68.2	26
Central Coast	238.4	43.8	18
Children's Hospital at Westmead	185.8	35.2	19
TOTAL	**5,326.3**	**979.6**	**18**

***** Adjusted for patient flows.

Table 3: Expenditure on goods & services as a percentage of total expenditure (excluding visiting medical officers)			
Rural Area Health Services - 2000-01			
	Total Expenses	**Goods & Services***	**Per cent**
	$m	**$m**	**%**
Greater Murray	280.0	86.5	31
Northern Rivers	274.8	71.8	26
Mid North Coast	220.1	75.6	34
Southern	217.0	78.5	36
Mid Western	206.6	39.8	19
New England	190.9	40.0	21
Macquarie	121.5	22.8	19
Far West	84.0	26.5	32
TOTAL	**1,594.9**	**441.6**	**28**

***** Adjusted for patient flows.

We suggest that the Department explore the reasons for the substantial variations between similarly sized AHSs within each group (metropolitan and rural).

3. Not yet enough ‘e’ in e-procurement

3.1 The role of IT in managing the supply chain

Whilst e-procurement can promise significant efficiency gains, the extent these are achieved depends largely on executive commitment and the adequacy of processes, systems, data and infrastructure that support e-procurement.

To get full value from e-procurement requires synchronised high integrity data, reliable processes, integrated systems, and shared visibility of stock and data movement among all the partners in a supply chain.[4]

This chapter examines:

- *business processes and systems* – in terms of the level of system integration and process automation and standardisation to ensure effective data and information exchange
- *standards framework* – for online data and messaging, and product identification and tracking to ensure data integrity, timeliness, relevance, security, rationalisation, standardisation, transparency and interoperability
- *e-marketplace* – as a mechanism for transacting electronically between various partners of the supply chain through the web to maximise efficiency gains.

3.2 Business processes and systems

An effective supply chain requires management of a number of processes involving:[5]

- product sourcing, enquiry and pricing
- purchase requisition, order and authorisation
- receipt and distribution of goods
- inventory management and logistics/tracking
- invoice reconciliation, credits/returns, backorders, accounts receivables and bank/funds transfers
- usage analysis, management reports, demand forecast and planning, and activity based costing
- contracts and suppliers management.

There are several IT systems operating in AHSs, including systems for finance, food, drugs, staff rostering etc.

[4] P Gallagher, former project director of the Project Electronic Commerce and Communication for healthcare (PECC).

[5] Connecting trading partners electronically, Interoperability Directions in the Australian Health Supply Chain, Panama Quest, April 2002, p.19.

The complexity of these processes and systems becomes apparent when considering the multiple supply chains that operate within hospitals.

Deciding what to buy and from whom

A product catalogue is a tool for making informed choices about products and suppliers in an efficient manner. It should provide consistent and accurate information to buyers and sellers.

In 1992, a review by Premier's Department recommended that a catalogue be developed as a priority. This matter has been subject to prolonged consideration, but has not been resolved in 10 years.

In NSW there is no catalogue at AHS or system level that covers all, or even most, of the requirements for goods and services. Staff rely mostly on product listings provided by suppliers or the Department of Public Works and Services (DPWS) database (QICS system) and user guides for items covered by State Contracts. Three AHSs have developed their own catalogues, but these have limited application.

The Department of Health advised, immediately prior to publishing this report, that six AHSs have been selected as lead sites for the proposed e-catalogue/ e-marketplace. These sites are expected to test and implement the e-catalogue, prior to its implementation across the State.

Placing orders online

Generally, AHSs have limited IT capability for online ordering. The majority order from suppliers by facsimile, or phone.

Reconciliation of orders and payment of invoices

Reconciliation of orders with invoices is a very difficult and time consuming task, especially for non-stock items which have no inventory management system. Current reconciliation processes generally rely on manual data entry, which increases the potential for errors, and further delays the payment of invoices.

Identifying and tracking products

In the NSW public health system there is no *single* product identification and coding system used to identify and track each product in a hospital system to ensure patient safety and more efficient materials management.

To illustrate, in the case of medical and surgical products, there are currently three barcoding systems operating in hospitals in NSW:

- one third of products use a European Article Numbering (EAN) system
- one third use the Health Industry Business Communications Council (HIBCC) numbering system
- the rest have no identification/proprietary barcoding.

However, as with the general retail industry, almost 100% of pharmaceuticals and grocery items in the NSW public hospital system utilise EAN.

The Department of Health endorsed the adoption of the EAN as the most suitable single product identification and coding system for NSW Health in April 2000. Significant progress with implementing this directive was not apparent to us.

The Department of Health advised, immediately prior to the publication of this report, that it has agreed recently to give equal preference to EAN and HIBCC, pending the development of an Australian standard.

Automation of processes and integration of IT systems

Automation of processes, integration of IT systems and consolidation of orders and invoices could avoid often cumbersome and tedious manual tasks and improve efficiency.

Examples

Electronic transfer of requisitions from user areas to supply departments and onward to suppliers coupled with electronic reconciliation of invoices with orders could:

- speed the process
- avoid manual tasks
- reduce the risk of mistakes
- improve control over the distribution of stocks.

A materials management system could:

- optimise stock levels
- enable more effective management of stocks
- reduce the number of requisitions by hospital wards.

Consolidation of orders and invoices could:

- reduce the number of transactions and hence cost of processing
- save time chasing up lots of smaller invoices.

The extent of fragmentation of IT systems and automation and standardisation of processes varies across hospitals, AHSs and supply chains. This makes it extremely difficult to obtain timely data and exchange information efficiently.

We observed that two hospitals which are quite close together, but located in two different AHSs, had widely different procurement practices and processes. Differences were also observed in hospitals within the same AHS.

It became a common theme in discussions with clinical and procurement staff in hospitals and AHSs that procurement savings were being lost because of these disparate systems. Staff believed that there is often:

- insufficient consultation undertaken to fully determine user needs at the system development stage
- limited training offered once a system is introduced
- few follow up reviews of system performance
- not enough practical testing beforehand of how systems will interface.

Findings

We generally found that AHSs:

- had fragmented IT systems that operate as stand-alones with limited integration, major interoperability problems and minimal capacity to interface to supplier systems
- had processes which were largely manual, paper based and not standardised within the AHS
- needed an adequate catalogue to assist staff in product sourcing and inquiry. Three AHSs had developed their own catalogues, but these did not cover all goods and services required
- needed consistent, comprehensive and integrated inventory and materials management systems that cover all supply chains and all user areas
- relied heavily on the Oracle financial system to fulfil a materials management function, which it is not able to do effectively in its present form.

This said, however, some AHSs have reduced their reliance on paper and achieved a degree of integration between finance and purchasing and finance and other systems. Some supply chains are more efficient than others, particularly the pharmaceutical supply chain.

> Generally speaking the functionality and performance of pharmacy systems are in reasonable shape. In fact, pharmacy is a role model, a Trojan horse example of what has to be done across the board.
>
> There is an enormous gap between pharmacy supply and management routines and the rest of the 'medical' consumable marketplace.[6]

[6] P Gallagher, Consultant, Casprel Pty Ltd.

Our findings are consistent with comments made in the business case for the Government e-marketplace:

> Fragmented development of silo applications by agencies leads to incompatibilities, duplication and much higher development costs for the NSW Government as a whole.[7]

The SCRS is an attempt to address some of these issues. However, when we discussed it in detail with AHSs, they were often not clear on what needs to be done to:

- bring the differing AHSs IT capabilities to a level where they can all use e-procurement, and whether additional funds will be required and how much
- define which processes could benefit most from automation and standardisation, and what needs to be done to achieve it
- integrate effectively systems and address interoperability problems
- develop integrated materials and inventory management solutions and whether additional funds will be required and how much.

Funding

The Department of Health advised that:

- there will not be an allocation of capital funds to AHSs to implement Supply Chain Reforms
- AHSs will need to invest approximately $20m on computing hardware, telecommunications, systems modifications and interfaces (this is likely to be supported by loans with savings being used in the initial 2-3 years to pay back the loans)
- actual costs cannot be determined until the Government e-marketplace solution is determined and the impact assessed in detail.

3.3 Standards framework

The extent to which systems can exchange data efficiently and effectively largely depends on the existence and the implementation of standards for:

- systems interfacing
- product classification and identification
- product cataloguing.

[7] Business case for the NSW Government electronic marketplace, Department of Public Works and Services., October 2001, p.14.

Findings

We found that:

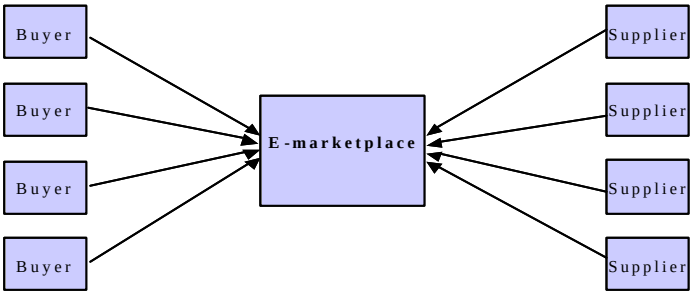
- there was no plan to identify the systems that should be interfaced, the priorities and the timeframe
- interfacing standards have not been developed
- there were no agreed product classification and product identification systems to associate individual products into like groups and uniquely identify products. Standards Australia working groups (IT.14.10.4 and IT.14.10.1) are, however, progressing with the development of product identification standards and messaging guidelines.

3.4 External links – some basic problems are holding back an e-marketplace for Health

The NSW Government approved the development of a single e-marketplace in April 2001 to reform the procurement activities of the public sector through the development of an electronic hub.

An e-marketplace (see Diagram 2) is an on-line environment where accredited buyers and suppliers can transact business, including identification and selection of goods and services and the placement and tracking of orders, invoices and payments.

Diagram 2: Proposed e-marketplace



The development of a Government e-marketplace is a leading edge solution and is consistent with what many governments around the world are tackling. The main benefits include:

- *more efficient procurement* – by providing a common platform for electronic procurement in order to facilitate a re-engineering of existing, mainly manual, processes to improve procurement activities
- *common electronic procurement standards* – by avoiding duplication of systems and processes by agencies and suppliers
- *aggregation of purchasing* – by providing comprehensive information on the NSW Government's total purchasing power to gain greater benefits from aggregation of government purchasing.

DPWS has ownership of the e-marketplace and will take responsibility for:

- relationships with suppliers and agencies
- business requirements of the e-marketplace, including all tendering and contract negotiation
- catalogue specification and approval of catalogue content
- monitoring of supplier performance.

One or more external service providers will support and maintain the hardware, software, systems integration and physical operation of the e-marketplace.

Extensive implementation of the e-marketplace, on a staged basis, was to commence in July 2002.

Health is participating in the Government e-marketplace initiative.

The aim with Health is to bring on to the e-marketplace those items currently on State Contracts (approximately 15% of total expenditure on goods and services) and expand into other Health expenditure areas, which currently occur on an ad hoc basis in AHSs (ie the purchasing of non-stock items).

Delay in the development of an e-catalogue that covers most of the routine requirements of hospitals has been a key barrier to AHSs participation in the Government e-marketplace. The e-catalogue is intended to:[8]

- provide an electronic list of material/products/services information (this is typically a product code, product description, product price and other attributes of the product)
- ensure relevant, accurate and consistent information is available to both buyers and sellers and that everyone is working off a common product list.

A *Health-specific* e-catalogue has been in development for over 12 months as part of the e-marketplace strategy and was to be available from September 2002.

The Department of Public Works and Services advised, immediately prior to publishing this report, that it expects to have a Health e-catalogue operative for piloting by October 2002.

[8] Connecting trading partners electronically, Interoperability Directions in the Australian Health Supply Chain, Panama Quest, April 2002, p.27.

The development of a supply catalogue in Health has been under consideration for 10 years and is not yet fully resolved. Considering this, it is unlikely that a comprehensive, system-wide e-catalogue will be implemented in the near future.

Efforts to date by DPWS and Health have focused on developing an electronic Health catalogue by merging Central Sydney AHS catalogue with the DPWS's QICS database for State contracts. These efforts have ceased as these two catalogues were found to be incompatible. The present focus is on an e-catalogue that would be populated by suppliers.

The Health e-marketplace steering committee has identified, from a whole-of-Health level, the systems that would need to be integrated with the e-marketplace and the e-catalogue at an AHS level. An integration assessment is to be undertaken to decide the models to interface each of these systems.

However, we are concerned that there has been not enough focus on:

- establishing the range of purchases made by AHSs suitable for inclusion on a catalogue
- assessing the readiness of AHSs for the uptake of e-procurement and use of the e-marketplace
- assessing the impact that changes to procurement processes will have on the delivery of direct care and productivity.

The public commitments to a Government e-marketplace and a single Health e-catalogue have discouraged reform at the local level. AHSs do not wish to implement reforms that may be made redundant, or may even be at odds with, these system-wide initiatives.

The approach attempted so far to implement the e-catalogue is languishing. Some basic problems, such as a lack of baseline data, are inhibiting progress. Thought needs to be given to an alternative approach. This could start with a comprehensive collection of data by individual AHSs on the purchases they make over a three month period.

There is also a need to assess the capability of individual AHSs to make effective use of an e-marketplace and identify technology, work practices and other issues which need to be addressed. It is our view that this information is an essential building block in the development of effective e-marketplace and e-catalogue strategies.

Our discussions with the various AHSs visited indicated that there are a number of differences between them and the products they use. It may not be feasible to develop a Health-wide catalogue. Individual catalogues for each AHS or 'AHS blocks', may be a better option to start off with. No judgement can be made without the basic information referred to above.

The development of a catalogue starting at the AHS level should be guided by common standards for:

- unique product identifier
- format and structure
- IT process and messaging.

Adoption of common standards for e-procurement would ensure future interoperability between catalogues and facilitate the transition to a system-wide e-catalogue.

But these standards have not been agreed or developed. For example, Health's decision to adopt the EAN protocols for unique product identification was made in April 2000. To date, the decision has not been implemented and the timeframe for the roll out is still unspecified. The EAN pilot project at Hunter AHS was delayed, pending decisions regarding enhancements to the Oracle financial system.

The Department's recent decision to give equal preference to EAN and HIBCC, pending the development of an Australian standard, may cause further delay.

The development of AHS product information, as a basis for a system wide e-catalogue, will require AHSs to have effective business processes to properly maintain this data. This can be an expensive task in the long term.

While it is acknowledged that implementation of a government e-marketplace is a difficult and lengthy process, there is a real risk that prolonged delays might lead to AHSs pursuing their own solutions if pressured to achieve savings.

> The time to completion, or at least to an operational state, of the Government e-market project could be so long that individual agencies develop their own alternative procurement solutions in the meantime. If, after completion of the project, the central e-marketplace is not well accepted by the government agencies, the venture could end in failure.[9]

Refer to recommendations 1 and 2 following the Executive Summary.

[9] An economic analysis of electronic marketplaces, Report for the UK Office of Government Commerce by Europe Economics, February 2001, p.41.

4. Limited information equals limited performance

This chapter examines procurement related:

- data and information systems
- performance management and accountability tools
- information exchange and sharing of better practices
- national initiatives.

4.1 Data and information systems

Availability of valid, timely and relevant information on procurement related activities is essential for effective planning, management and decision making.

The Department of Health, the PPC, all AHSs and DPWS collect a wide variety of information relating to procurement. Some of this information is relevant, but the great bulk of it may not be.

At whole-of-Health, AHS, hospital and business unit levels, there has been no systematic attempt to:

- define information needs so that only relevant data is collected, and collected only once
- standardise and rationalise data to ensure its consistency and high integrity
- put in place adequate systems to capture, aggregate and analyse data at all levels and down to the item number.

As a result, the type and range of 'information' that is needed to manage procurement in the best way, has not been defined.

The Efficient Health Care Reform Council (EHCR) Report says - "up to 48% of supply chain costs are potentially avoidable". But if Health is to avoid these costs, there is a need to know what the costs are and where they are.

In addition to the price of the product, the total costs of procurement include:

- supplies distribution and management costs (estimated 20 -22%)
- administration/order placement (9-11%)
- inventory management (17-19%).

These costs are not measured.

The current lack of detailed information has led to:

- inability to measure efficiency savings/gains or losses because there is limited valid information on inputs and outputs
- inability to harness fully the purchasing power of Health without aggregate usage information
- potentially significant waste in data collection activities. The marginal cost of collecting each data item is considerable when multiplied by the number of health facilities in NSW that collect information
- limited ability to budget and plan effectively without important information to guide decision making
- changes that could result in cost shifting from one part of the supply chain to another rather than cost savings.

4.2 Performance management and accountability tools

Planning, monitoring and reporting on procurement activities are essential to ensure focus on business goals, efficient use of resources and accountability for performance.

Area Health Service level

All AHSs have strategic and business plans setting broad objectives and targets in an attempt to ensure that:

- resources are used efficiently and effectively to meet business needs and achieve objectives
- there is accountability for performance and transparency of public expenditure.

Expenditure on goods and services is typically the second largest expenditure item, after employee related costs, for most AHSs. It is reasonable to expect that AHSs would have specific plans and monitoring regimes for managing this expenditure strategically, as they usually do, for example, with human resources. Such plans can be valuable to:

- take account of hospitals and business unit plans/needs – adopting a 'bottom up' approach
- ensure AHSs plans align with the whole-of-Health Supply Chain Reform Strategy
- obtain important business information on the efficiency and economy of the procurement function as a basis for targeting and measuring improvement.

We found that generally AHSs did not have specific plans or effective monitoring of the procurement function. Of the five AHSs consulted, only one indicated that a plan was in development.

We also observed that supply chain arrangements make this difficult to achieve given the extent of ad hoc purchasing, the fragmented IT platform and the lack of a cohesive performance management framework.

Whole-of-Health level

The PPC developed the SCRS which sets the strategic framework for reforms of the supply chain in NSW Health. All AHSs are required to implement these reforms and report progress to the PPC on a quarterly basis.

While the objectives of the SCRS represent better practice and are in line with procurement reforms elsewhere, the PPC faces significant challenges in effectively driving the reforms. The SCRS does not:

- represent a true reflection or an accurate measurement of what AHSs can achieve in practice in terms of reforms and savings. The PPC formulated the SCRS and estimated the $60 million savings to be achieved using limited aggregate operational information. It placed heavy reliance on findings of recent industry studies in deriving this estimate without the benefit of a systematic assessment of AHSs capabilities, systems, processes and practices

  > The strategy is consistent with the NSW Government Blueprint "Electronic Commerce – Taking up the Challenge". It is also consistent with the three health supply reports released towards the end of its development [ie Commonwealth Project Electronic Commerce and Communication for Health (PECC), Diagnostic of the Australian Supply Chain to Hospitals (DASH) and e@sia Project Final Report – (An Analysis of e-commerce in Management of Clinical Supply Chain in Acute Care)]. The proposed strategy has been tried and tested by industry leaders such as Coles/Myer, BHP, Boral and Westpac, delivering significant annual benefits.[10]

- give estimates of the contribution of each AHS to expected total savings/efficiency gains
- provide Key Performance Indicators or benchmarks against which AHSs can report performance, or a method to measure, consistently, benefits realised across AHSs
- address the cost implications of implementing the strategy at an AHS level or provide an estimate of the likely return on investment.

We observed that ownership and buy-in of the strategy at the operational level was limited, perhaps in part explained by perceptions of limited local consultation and input.

[10] Correspondence from the Peak Purchasing Council.

Perceptions about the Supply Chain Reform Strategy

We observed that operational level perceptions often reflected concerns such as:

- limited consultation with end users to identify needs and requirements
- lack of assessment of the impact of the strategy on work practices
- lack of a process to determine what end users wanted from an e-catalogue and changes to the Oracle financial system
- frustration with the top-down approach that does not sufficiently recognise the needs of end users.

We reviewed progress reports of 5 AHSs on their implementation of the SCRS. These showed that a large number of initiatives were behind schedule or not yet commenced. Reasons given include:

- inadequate IT systems and processes
- limited resources to tackle the difficult reforms that require major re-engineering and investment
- conflicting SCRS objectives highlighted in the example that follows.

Example

Implementation of one of the SCRS initiatives requiring all AHSs to have a central AHS store is not balanced against the mandate to also have no more than 14 days holding inventory. The impact of this strategy will vary between AHSs and between metropolitan and rural AHSs.

Findings

We found the generic model that the SCRS adopts has several limitations. It is not able to:

- address the extent of genuine differences in AHSs' needs and makes no distinction between rural and metropolitan, large and small AHS, etc. Hence the difficulty in mandating system-wide reforms
- deal with the ad hoc nature of purchasing, the fragmented systems, the lack of consistency of data, and lack of standardisation of processes within and across AHSs
- tackle the differing capability of AHSs to implement reform, especially where significant investment to re-engineer systems and processes may be required
- provide additional funds for AHSs to implement key reforms requiring large investment and significant re-engineering of processes.

4.3 Exchange of information and sharing of better practice

The five AHSs we visited each had pockets of better practice in procurement at AHS, hospital and ward levels that were often initiated by individual efforts. The sharing of these practices within and between AHSs would help transfer knowledge, improve practices, eliminate duplication of efforts and encourage innovation across the public health system.

Findings

We found that AHSs had no effective formal mechanisms to share information and assist collaboration. Staff relied largely on informal channels to exchange information and share better practices within local networks.

Staff with a procurement role at strategic and AHS levels are not always:

- alert to the needs and requirements of end users
- aware of the value for money opportunities which exist
- properly trained or briefed to fulfil this role.

4.4 National initiatives

The National Supply Chain Reform Taskforce is working on developing a framework to help establish consistency in measurement of local level performance. NSW Health participates in this Taskforce which is expected to make recommendations in the first quarter of 2003 on:[11]

- tools to support local implementation of integrated performance measurement systems
- indicative process key performance indicators.

These initiatives should not stop local efforts to ensure there is greater consistency in information and performance measurement.

4.5 Overall conclusion

The lack of information on inputs (resources utilised), outputs achieved (services provided) and consolidated whole-of-Health purchasing does not make it possible to manage resources efficiently and effectively.

It is also difficult for NSW Health to improve the quality, timeliness and effective use of information without effective information management systems.

Expected savings/efficiency gains cannot be fully achieved and the uptake of e-procurement will be delayed if the current information void is not addressed, as a priority, to provide for a sound e-procurement platform.

There is a need to establish more robust performance management controls and systems over the supply chain to ensure greater accountability for and transparency of public expenditure.

Refer to recommendations 3 to 7 following the Executive Summary.

[11] Report on Activities of the National Supply Chain Reform Task Force, May 2002, p.14.

5. Do Health-specific State Contracts save money?

This chapter examines:

- contract development and implementation processes
- approach to Health-specific State Contracts
- exemption from Health-specific State Contracts
- management of Health-specific State Contracts performance
- recent initiatives.

5.1 Contract development and implementation

NSW Supply, a division of the Department of Public Works and Services, administers all State Contracts Control Board (SCCB) contracts. This includes 32 Health-specific State Contracts which typically cover high use, low value items such as needles and gloves.

Area Health Services are required to use State Contracts.

> … The Director-General has determined that the policy and procedures applicable should generally be in accordance with the *Public Sector Management Act 1988*, and the *Public Sector Management (Stores and Services) Regulation 1988.*
>
> If items are available under contracts arranged by the SCCB, they shall be obtained from those sources no matter the source of funds (eg General Funds or SP&T). The contracts are arranged so as to provide the best value for money on a statewide basis and areas/districts are advised that to not purchase from the contract because better prices or conditions exist locally is not a valid justification for deviation from the contracts.[12]

Expenditure on Health-specific State Contracts is estimated at $230 million per annum. This represents approximately 15% of Health's total expenditure on goods and services in 2000-01. It has taken almost a decade to achieve this level of expenditure on Health-specific State Contracts.

The PPC is expected to play a strategic management role in the:

- selection of products (categories, types and items) covered by contracts
- development, communication, implementation and monitoring of contracts.

NSW Supply project-manages the process of contract development and renewal as well as the day-to-day administration of contracts. A service level agreement requires NSW Supply to report monthly to the PPC on the status of each contract.

[12] NSW Health Purchasing and Supply Manual, Chapter 1, 1.1.

NSW Supply charges a 1% management fee direct to suppliers on sales achieved. The rate was set in the early 1990s and is lower than the 2.5% charged for the majority of common use period contracts.

Some products are available in multiple styles, sizes and strength and can be used for variable clinical functions and equipment. As a result, the size of some contracts can be very large, covering several hundred items and involving complex technical issues.

Depending on the complexity of the contract, the contract *development* stage can, in practice, take between 6 and 12 months. This involves:

- selection of products included on contracts; development of tender specifications; and evaluation of products/tenders
- a number of staff with relevant expertise from different AHSs.

Suppliers that we consulted indicated that there is a need to have clearer tender specifications, which are currently determined by representatives of AHSs, to avoid contract re-negotiations, leading to further delays. For this to occur, suppliers may need to have more meaningful involvement in the process.

Once awarded, the *implementation* of a contract in AHSs can take 3 to 16 months before a contract is used. This accounts for the time AHSs need to:

- review, assess and cost the contract
- communicate to staff product related information
- educate staff in the use of new products
- implement logistical changes.

State Contracts are awarded mostly for three years with some extending to five years. The lengthy development and implementation processes can leave little time for the routine use of the contract. As a result, AHSs often request extensions to contracts, leading to further delays.

The following examples illustrate some of the issues staff face with Health-specific State Contracts.

Specific examples raised by staff

Contract A

Items selected were not what the AHS used. This caused problems with standardisation, education etc.

The contract was expected to commence on 1 July 2001, but the AHS did not receive the user guide until 1 August 2001.

Contract B

The product was not validated for use with the AHS equipment. The AHS reported a number of problems with this particular product and eventually sought an exemption from the contract. Eight months later, the request for exemption was still outstanding.

Contract C

There were 12 amendments to this contract and still some unresolved issues.

Our discussions with AHSs visited indicated that:

- contract development and implementation processes placed an increasing burden on already stretched AHS resources
- contracts were becoming more difficult, time consuming and complex
- AHSs can individually attract, in some cases, better prices than State Contracts.

Example of the increasing workload resulting from State Contracts

There are over 30 State Contracts that two people have to review and implement in one AHS examined. Eighteen of these contracts are due for renewal this year. Several others have the 12-month option for extension. The two staff also have to attend to the AHS-specific contracts.

One staff commented, "at some point, the mammoth workload has to be addressed, if we are to achieve full compliance with State Contracts!"

Findings

We found that:

- delays with contract implementation in AHSs related mostly to lack of product suitability for AHSs specific needs/clinical procedures. This indicates that perhaps products included on State Contracts are either not amenable to standardisation, have not been evaluated sufficiently and effectively before contracts are awarded and/or the wrong suppliers were being selected with insufficient input from users at AHS level
- the PPC contract development cycle (pre-contract awarding stage) and the AHSs contract implementation cycle (post-contract awarding stage) were not aligned to allow sufficient time for the use of contracts

- some AHSs can individually attract better prices than from State Contracts by negotiating direct with suppliers
- AHSs staff resented the increased workload associated with new and existing State Contracts
- the uptake of Health-specific State Contracts has been extremely slow and represents only a small proportion of AHSs combined expenditure on goods and services
- AHSs had limited appreciation of the commercial role of NSW Supply and the need for it to recover costs by charging a fee for service (set at 1%)
- resources tied up in the management of Health-specific State Contracts appear to significantly outweigh allocation of resources to the management of the higher expenditure area of non-stock items.

5.2 Approach to Health-specific State Contracts

Awarding Contracts to one supplier or multiple suppliers

Health-specific State Contracts can be awarded to one supplier or multiple suppliers (panel contract). Panel contracts have been the norm for both Health-specific and general SCCB contracts.

Example of a panel contract

The Pharmaceutical contract has 36 contractors supplying a total of 827 items, 733 being awarded to one supplier, 72 to dual suppliers and 22 to multiple suppliers.

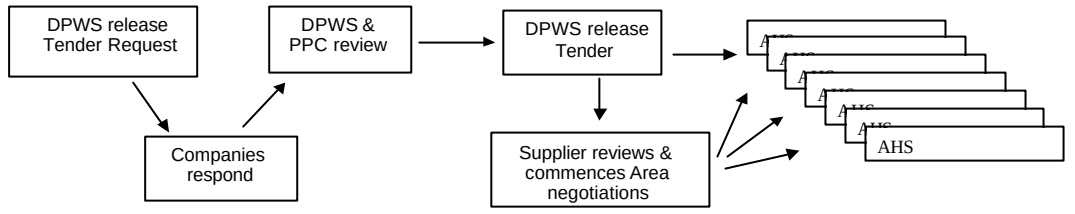
Some of the reasons for the existence of both sole and multiple supplier contracts include:

- items may not be perfect substitutes, eg compatibility with existing equipment, different sizes or types of containers or different strength products are required
- to cater for clinicians choice. Clinicians are accountable for the outcomes of their procedures and consequently request the right of consultation for the "tools of trade". Obtaining their agreement to the use of a single item/supplier can be challenging. This also has significant implications to the application of appropriate risk management strategies
- identically priced items
- continuity of supply where high usage is involved
- bundled offers where acceptance of a higher rate leads to savings across a range of items.

Suppliers that we consulted supported the existence of Health-specific contracts, but sought improvement in a number of areas, including the need for:

- some certainty about likely sales volumes as an incentive to offer the 'best' price. Suppliers believed that bidding on a contract should be to win it and not to be listed as a preferred supplier without any guaranteed business. Current arrangements give suppliers the equivalent to a 'licence to sell' or a 'ticket to the dance'. They still have to negotiate individually with each AHS. Diagram 3 illustrates this issue.

Diagram 3: Tender Request to Negotiations



- a system to accredit suppliers, within certain product categories and contract procedures, which have demonstrated consistent quality performance. This is considered a valid alternative to the current lengthy contract renewal process because it offers a greater incentive for good performance.

Findings

We found that Health-specific State Contracts essentially:

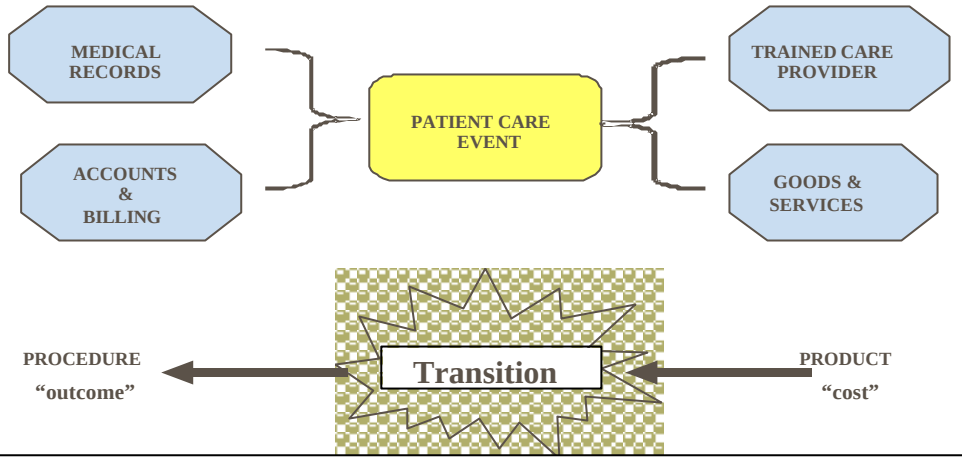
- set the *maximum* price that suppliers can charge, but do not guarantee any business, leaving suppliers little incentive to offer their *best* price
- give no incentive, such as guaranteed repeat business, to suppliers who consistently show good performance.

Product based and price focused approach

Patient treatment includes the delivery of defined procedures. These procedures range from pathology tests and minor dressings through to major surgery and intensive care. They are recorded within medical records and they are billable events.

Currently Health-specific State Contracts are geared towards purchasing by product or item. Products become a component of a procedure to achieve clinical outcomes. The transition from product to procedure is not transparent and rarely tracked in a continual and timely manner. See Diagram 4.

Diagram 4: Transition from Product to Procedure



A procedure-based approach would represent a dynamic shift from the current *product* focused contract process. We found very strong support for change to a procedure-based approach at the hospital clinical level. It is in line with the current trends within Health and the development over recent years of multi product kits used for specific procedures. These kits are easy to cost, track and account for.

NSW Supply advised that a planned review into new contracting approaches might include procedure-based contracting.

Findings

We found that currently:

- the contract development and implementation processes adopted were similar for all products, irrespective of product classification or application variables
- the focus of contracts is on price and product with insufficient attention to procedural suitability
- there would be merit in considering new and different approaches to contracting that focus more on procedures, clinical outcomes and financial management.

5.3 Exemptions from use of Health-specific State Contracts

AHSs can apply for an exemption from use of a State Contract. The PPC can take from one week to several months to assess these requests, depending on the nature and complexity of the issue.

NSW Health advised that:

- most requests for exemption are relatively simple one-off applications and can be finalised relatively quickly
- applications with potentially broader impact attract more extensive investigation
- the dollar value of exemptions granted annually is unquantified, but minimal
- the granting of exemptions is quite restricted with approximately 12 requests received each year, but only 3 to 4 exemptions granted
- very few incidents of purchasing out of contracts, without exemption, were known
- the Department's Audit Branch has not had to investigate any instance of purchasing out of contract for some years.

Findings

While exemption procedures were well defined, we found that assessments could in some cases take months or remain outstanding for extended periods.

> ***Contract D***
>
> An exemption was sought from the PPC in September 2001. The issue was unresolved eight months later.

We found that the:

- exemption process can be lengthy and should be more transparent
- PPC needed a system to alert it to breaches of contracts/contract leakage and to estimate the value of exemptions granted.

5.4 Management of Health-specific State Contracts performance

Timely, relevant and accurate information on prices, and aggregate levels and patterns of use for particular items/product categories is essential for the effective development and implementation of new contracts, and the monitoring and renewal of existing ones.

Findings

We found that:

- information required for contract negotiations was not always collected by AHSs. As a result, the PPC and NSW Supply rely on various sources to collate information, usually existing suppliers and informal networks

  To date, the only avenue has been from supplier reports. These have been broad brush only, ie spend per client per quarter.[13]

[13] Correspondence from the Department of Public Works and Services.

- the PPC needs a more robust method or system for collecting, aggregating and analysing information

  > The NSW public health sector is not in a position to provide aggregated usage information. The situation is also complicated by the number of items that are approved for contract and the problem of direct comparisons between the old and new contract rates. As part of the recommendation to the SCCB of tender outcomes, some comparisons are made between tendered rates and market rates that are available to AHSs.[14]

- the PPC has yet to develop KPIs for the monitoring of suppliers performance, contract performance, contract leakage, and the performance of NSW Supply in administering contracts

- the roles and responsibilities of NSW Supply and the PPC relating to compliance monitoring lacked clarity

- there was no agreed method for measuring benefits realised from State Contracts, at any level, and no clear allocation of this responsibility to either the PPC or NSW Supply

  > It is difficult for NSW Supply to assess savings on contracts, as it does not have access to usage patterns and current pricing across all AHSs. However, anecdotal evidence would indicate that aggregated purchasing does achieve considerable price savings as well as reduced administrative costs for individual AHSs. These savings are achieved despite the fact that there is one FIS rate for the entire State.
  >
  > There is no ongoing system to monitor benefits/savings from contracts.[15]

- suppliers did not always have access to relevant information for the development of bids to enable them to:
  - determine if they can meet the expected demand
  - forward plan production, manufacturing and distribution activities to meet this demand
  - set adequate pricing structures, including profit margins, early settlement discounts and rebate offers that are commensurate with sales volumes.

[14] Correspondence from the Department of Public Works and Services.
[15] Correspondence from the Department of Public Works and Serivces.

Excerpts from a recent State Contract assessment report

The report identifies considerable uncertainty for suppliers. To obtain further price reductions or maintain existing discounts, … recommends that the level of uncertainty be reduced. Contract uncertainty arises from:

- lack of fixed price
- lack of fixed volume
- lack of fixed contract terms
- ability to purchase outside of contract
- lack of forward purchasing estimates.

Identifying the actual cost effect on the NSW Health budget cannot be calculated, as insufficient information is available from the AHSs.

- there is no data to show whether the Director-General's directive to use State Contracts is more economical for the public health system than allowing AHSs to negotiate individually with suppliers.

5.5 Recent initiatives

The PPC and NSW Supply jointly published new guidelines for Health-specific State Contracts in late 2001. These may or may not resolve some of the issues discussed. It is too early to judge.

A National working group is currently developing a standardised national approach to contracting in Health. The group expects to finalise the standard contract template and tender document by the end of 2002.

5.6 Overall conclusion

Given the lack of consolidated whole-of-Health purchasing information, the lack of performance monitoring of contracts and the difficult implementation problems, it is difficult to:

- determine if use of State Contracts is more economical for the public health system (allowing for cross-subsidisation between AHSs) than allowing AHSs to negotiate individually with suppliers
- rule out the possibility that current arrangements favour existing suppliers who have access to relevant information to develop a tender bid and disadvantage new suppliers
- measure the effectiveness of the PPC and NSW Supply in negotiating and attracting 'best' prices
- determine whether State Contracts provide value for money and measure the benefits realised with a degree of accuracy
- use the take up of State Contract as an indication or a measure of effectiveness of Health-specific State Contracts.

Refer to recommendations 8 and 9 following the Executive Summary.

6. Foregone discounts

6.1 Background

Suppliers often offer discounts for early settlement of invoices. The settlement terms can be 7, 14, or 30 days. Major suppliers generally request payment for goods and services within 30 days.

Ability to pay creditors on time is important for a number of reasons, mainly to:

- ensure there are adequate financial controls in managing cash flows
- develop a reputation as a desirable customer and influence the price at which goods are bought
- establish long term strategic partnerships with key suppliers to maximise purchasing power
- ensure small to medium size suppliers with limited cash flows are not disadvantaged
- take advantage of potential savings from effective management of creditors through rebates, early settlement discounts etc.

Government policy

Government agencies are required to pay creditors as per invoice terms. This policy applies to AHSs.

6.2 A history of late payment

AHSs have a track record of late payment of creditors. The problem was widespread across a large number of AHSs, both rural and metropolitan.

In response to complaints from suppliers, the Minister paid out rural AHSs outstanding payments to creditors in June 2000. This provided an opportunity for some rural AHSs to catch up with their payments.

The Department of Health also introduced a monitoring regime whereby AHSs report monthly on the status of their aged accounts against a benchmark of 45 days. This close monitoring aimed to target the Department's intervention when matters start to worsen.

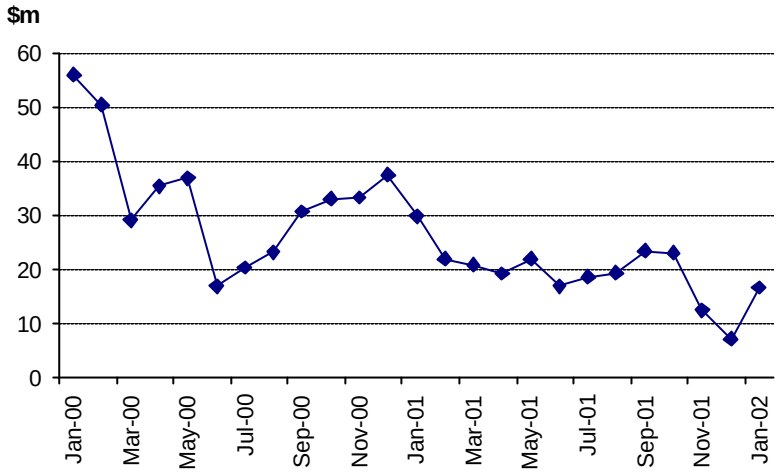
A significant improvement in the situation followed as seen in Figure 4. A small number of AHSs are, however, starting to build up their debts again. This is an ongoing problem in South Eastern Sydney AHS which contributes at least 50% of the total outstanding amounts.

The NSW Auditor-General's Report to Parliament 2000 (Volume 5, page 200) commented that:

> The failure of South East Sydney Area Health Service to pay creditors within trade terms could impact the supply of essential items.

It is still not uncommon for payment to be outstanding over 120 days in some AHSs.

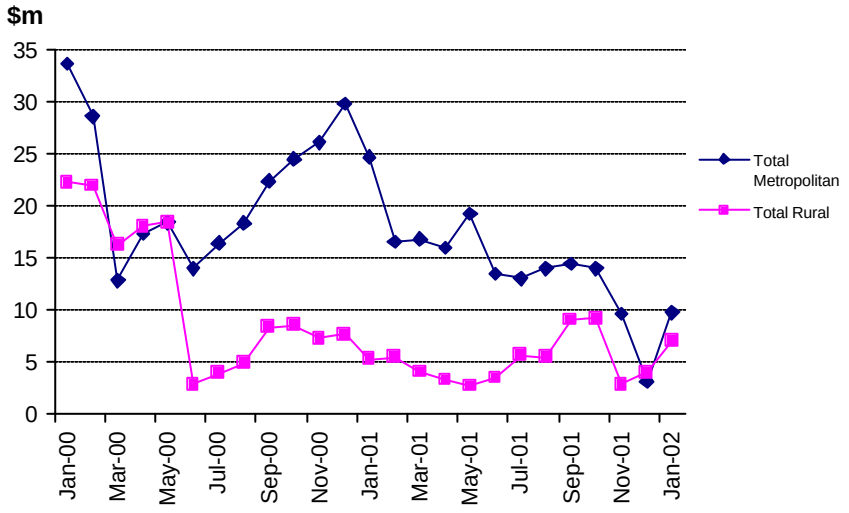
Figure 4: NSW Health Creditors (outstanding >45 days) **Trend Analysis**



Note: Data includes Children's Hospital at Westmead
Source: Finance and Performance Management Committee Reports

The trend for outstanding payments to creditors over 45 days was similar for rural and metropolitan AHSs.

Figure 5: Metropolitan Rural Area Health Services Creditors (outstanding >45 days) **Trend Analysis**



Note: Total Metropolitan includes Children's Hospital at Westmead
Source: Financial Performance Management Committee Reports

NSW Supply received complaints from suppliers about late payment of invoices. NSW Supply raised the issue formally with the PPC. An extract of correspondence from NSW Supply to the PPC follows:[16]

> … there are considerable sums owed by Area Health Services.
>
> I am concerned that as a direct result of this problem:
> - the public health sector may be losing significant discounts for prompt payment
> - contractors may refuse supply
> - there is potential for increased rates in future contracts
> - tenderers will no longer offer settlement discounts for prompt payment
> - contractors may escalate the issue with the SCCB or at a ministerial level.

Some suppliers have indicated to us that they are now declining to offer settlement discounts to AHSs because they don't believe AHSs can take advantage of these discounts. One supplier said:

> There are $1m worth of settlement discounts that no one has taken advantage of. Why should we offer them again?

Examination of a recent evaluation report of a Health-specific State Contract tender valued at $8.5 million reinforced this view.

Comments from an evaluation report of a Health-specific State tender

A recent tender invited discounts on a number of bases:
- discount on settlement
- discount on being the sole supplier of the products
- discount for being the sole supplier to an AHS/hospital
- discount for a standing order
- discount for representing a percentage of the product business.

No tenderer offered discounts on settlement or for standing orders.

Findings

The implications of late payment to creditors include:

- while the problem seems now concentrated in a small number of AHSs, a review to determine whether the underlying causes related to insufficient funds or poor financial management was never undertaken
- the reputation of NSW Health as a desirable customer has been damaged, and this might impact on its ability to influence price and use its purchasing power effectively

[16] Correspondence from the Department of Public Works and Services

- it was not transparent how AHSs prioritised payment to creditors when funds were limited. Evidence suggests that those suppliers that scream the loudest or those with significant market influence get heard and are paid first
- small to medium size suppliers would find it difficult to sustain long periods without cash flows and may be adversely affected by late payment
- suppliers would need to allow for such contingency in their pricing structure leading to higher prices
- some AHSs are losing large sums of money by not taking advantage of offers of early settlement discounts.

6.3 The savings foregone

NSW Health does not have details on the opportunity cost to the system of not paying creditors as per invoice terms. But to illustrate, taking a conservative 1% average settlement discount to the outstanding creditors (>45 days) would have generated savings of over $6 million from January 2000 to January 2002.

A more aggressive estimate, using a 4% average settlement rate, gives $26 million potential savings over two years.

As a consequence, foregone savings could easily be in the range of $3 million to $13 million per annum.

We consider that current practices inhibit the concept of total supply chain reforms and are not consistent with best practice approaches. The problem has existed for a long time and warrants a thorough assessment of the underlying causes. This would ensure a more proactive and targeted intervention strategy to avoid the significant:

- productivity losses associated with AHSs playing catch up every month
- loss in savings from not taking advantage of early settlement discounts, higher prices and penalties
- morale issue associated with staff always operating in a negative environment where creditors are threatening continuity of supplies.

Refer to recommendation 10 following the Executive Summary.

Appendices

Appendix 1 The audit methodology

Audit objectives

The audit

- assessed the overall efficiency and effectiveness of the management of the supply chain(s)
- identified key issues that helped or hindered leveraging the potential of e-procurement and its impact on the management of the supply chain.

Audit scope

The audit examined in-depth the operations of South East Sydney Area Health Service (SESAHS), as a case study, with a view to identifying systemic issues that are relevant to and impact on all of Health.

SESAHS is the largest metropolitan AHS. It:

- represented over 12.5% of Health total net cost of service in 2000-01 ($813 million)
- has 10 hospitals, including major tertiary referral and teaching hospitals
- services a population that doubles from 750,000 at night to 1.5 million during working days.

In addition, the audit scope included an examination of practices in Northern, Hunter, South Western and Central Sydney AHSs to confirm the systemic nature of findings.

The five AHSs examined represented 52% of Health total expenditure in 2000-01 and 45% of total expenditure on goods and services.

Audit criteria

The audit criteria were whether Area Health Services:

- had a strategic plan for the management of the supply chain(s), which is consistent with the Government e-procurement strategy and Health strategic directions
- had efficient, effective and transparent performance management, monitoring and reporting systems to ensure accountability for public expenditure on goods and services
- had identified key supply chain processes and, where necessary, re-engineered, automated and/or integrated these processes to maximise value adding
- used technology enablers and standardisation to ensure optimum data utilisation and information flow

- monitored costs, utilisation, waste, stock holdings and compliance with State contracts
- had systems and procedures in place to:
  - address non-compliance with contracts
  - track supplies and ensure maintenance of optimum levels of stock holdings and warehousing capacity
  - ensure new products are supported by valid and appropriate clinical evaluation/trials, where necessary
- used performance information in making management, planning and resource allocation decisions and in promoting service innovation
- had established appropriate strategic relationships with key suppliers
- had effective training and education programs to support the introduction of new products and to influence purchasing practices.

Audit Approach

The audit:

- focused on the overall strategic and operational management frameworks as well as the reporting arrangements at AHS and whole-of-Health levels
- examined in greater detail several facets of pharmaceuticals, medical and surgical supply chain management, including: product procurement, order management, invoice processing, management of strategic alliances with suppliers, contract management, systems integration and information and performance management
- consulted with over 90 people, covering five AHSs, ten major hospitals including two private, key suppliers, industry associations and government agencies
- used the services of a consultant with extensive clinical expertise to enhance our understanding of coalface issues, bring in a practical perspective and help identify key practices and areas with significant potential for improvement
- reviewed relevant materials and researched better practices, including detailed visits to inspect some best practice sites first hand.

Appendix 2 Glossary of terms

Area Health Services Provide health services to the residents of NSW. There are 17 Area Health Services in NSW – 8 rural and 9 metropolitan - and the Children's Hospital at Westmead.

Barcode A carrier of alphanumeric data which is machine readable.

E-catalogue An electronic list of material, products or service information, which supports one or several business processes. In Health this will typically be a product code, product description, and various other attributes of the product, such as suppliers code or price.

E-government Use of web-based technologies to:

- enhance citizen access to government information and services
- increase productivity and reduce costs
- provide new ways to increase citizen participation in the democratic process.

E-marketplace An on-line environment where accredited buyers and suppliers can transact business, including identification and selection of goods and services and the placement and tracking of orders, invoices and payments.

E-procurement Use of web-based technologies and communication to connect buyers and sellers. E-procurement facilitates the process from requisition and approval through to receipt and settlement.

Imprest Cost centre managers pre-set the maximum stock level to be maintained in a given hospital ward. This level is checked and reordered 1-2 times a week and replenished regularly by the supply department in each Area Health Service.

Interoperability Extent to which diverse software applications are able to interact and share data seamlessly.

NSW Supply A business unit of the Department of Public Works and Services that administers contracts on behalf of the State Contracts Control Board for public sector and associated organisations.

Panel Contract State Contract awarded to more than one supplier.

Period Contract	State Contract under which there is a standing offer for the provision of goods or services over the period of the contract on the order of any customer for whom the State Contracts Control Board has arranged the contract.
Procurement	A process involving all activities, following the decision that a good, an asset, facilities or service is required. It involves the acquisition of goods, assets, facilities and services.
State Contract	Contract approved by the State Contracts Control Board and managed by NSW Supply.
State Contracts Control Board	Chaired by the Department of Public Works and Services and made up of NSW Government major policy and procurement agencies.
Supply Chain	Covers all goods and services required to support the operations of an Area Health Service, including medical, surgical and pharmaceutical supplies, support services, maintenance services and capital equipment. It covers all product classes, ie consumable, durable and capital.

Appendix 3 Acronyms

AHS	Area Health Service
CEO	Chief Executive Officer
DASH	Diagnostic of the Australian Supply chain to Hospitals
DPWS	Department of Public Works and Services
EAN	European Article Numbering
EHCR	Efficient Health Care Reform Council
FIS	Free in store
HIBCC	Health Industry Business Communications Council
IT	Information Technology
IT.14.10.1	Standards Australia working group on messaging guidelines for the health sector
IT.14.10.4	Standards Australia working group on product identification standards for the health sector
KPI	Key Performance Indicator
PECC	Project Electronic Commerce and Communication
PPC	Peak Purchasing Council
QICS	Quick Information Contract Search
SCCB	State Contracts Control Board
SCRS	Supply Chain Reform Strategy

Performance Audits by the Audit Office of New South Wales

Performance Auditing

What are performance audits?

Performance audits are reviews designed to determine how efficiently and effectively an agency is carrying out its functions.

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 relating to those functions.

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.

They seek to improve the efficiency and effectiveness of government agencies and ensure that the community receives value for money from government services.

Performance audits also assist the accountability process by holding agencies accountable for their performance.

What is the legislative basis for Performance Audits?

The legislative basis for performance audits is contained within the *Public Finance and Audit Act 1983*, *Division 2A*, (the Act) which differentiates such work from the Office's financial statements audit function.

Performance audits are not entitled to question the merits of policy objectives of the Government.

Who conducts performance audits?

Performance audits are conducted by specialist performance auditors who are drawn from a wide range of professional disciplines.

How do we choose our topics?

Topics for a performance audits are chosen from a variety of sources including:

- our own research on emerging issues
- suggestions from Parliamentarians, agency Chief Executive Officers (CEO) and members of the public
- complaints about waste of public money
- referrals from Parliament.

Each potential audit topic is considered and evaluated in terms of possible benefits including cost savings, impact and improvements in public administration.

The Audit Office has no jurisdiction over local government and cannot review issues relating to council activities.

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

How do we conduct performance audits?

Performance audits are conducted in compliance with relevant Australian standards for performance auditing and our procedures are certified under international quality standard ISO 9001.

Our policy is to conduct these audits on a "no surprise" basis.

Operational managers, and where necessary executive officers, are informed of the progress with the audit on a continuous basis.

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 an exit interview is held with agency management to discuss all significant matters arising out of the audit. The basis for the exit interview is generally a draft performance audit report.

The exit interview serves to ensure that facts presented in the report are accurate and that recommendations are appropriate. Following the exit interview, a formal draft report is provided to the CEO for comment. The relevant Minister is also provided with a copy of the draft 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 of an audit, performance audits can take from several months to a year to complete.

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

How do we measure an agency's performance?

During the planning stage of an audit the team develops the audit criteria. These are standards of performance against which an agency is assessed. Criteria may be based on government targets or benchmarks, comparative data, published guidelines, agencies corporate objectives or examples of best practice.

Performance audits look at:

- processes
- results
- costs
- due process and accountability.

Do we check to see if recommendations have been implemented?

Every few years we conduct a follow-up audit of past performance audit reports. These follow-up audits look at the extent to which recommendations have been implemented and whether problems have been addressed.

The Public Accounts Committee (PAC) may also conduct reviews or hold inquiries into matters raised in performance audit reports.

Agencies are also required to report actions taken against each recommendation in their annual report.

To assist agencies to monitor and report on the implementation of recommendations, the Audit Office has prepared a Guide for that purpose. The Guide, *Monitoring and Reporting on Performance Audits Recommendations,* is on the Internet at www.audit.nsw.gov.au/guides-bp/bpglist.htm

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards.

The PAC is also responsible for overseeing the activities of the Audit Office and conducts reviews 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.

For further information relating to performance auditing contact:

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Performance Audit Reports

No.	Agency or Issue Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
64*	Key Performance Indicators	▪ *Government-wide Framework* ▪ *Defining and Measuring Performance (Better practice Principles)* ▪ *Legal Aid Commission Case Study*	31 August 1999
65	Attorney General's Department	*Management of Court Waiting Times*	3 September 1999
66	Office of the Protective Commissioner Office of the Public Guardian	*Complaints and Review Processes*	28 September 1999
67	University of Western Sydney	*Administrative Arrangements*	17 November 1999
68	NSW Police Service	*Enforcement of Street Parking*	24 November 1999
69	Roads and Traffic Authority of NSW	*Planning for Road Maintenance*	1 December 1999
70	NSW Police Service	*Staff Rostering, Tasking and Allocation*	31 January 2000
71*	Academics' Paid Outside Work	▪ *Administrative Procedures* ▪ *Protection of Intellectual Property* ▪ *Minimum Standard Checklists* ▪ *Better Practice Examples*	7 February 2000
72	Hospital Emergency Departments	*Delivering Services to Patients*	15 March 2000
73	Department of Education and Training	*Using computers in schools for teaching and learning*	7 June 2000
74	Ageing and Disability Department	*Group Homes for people with disabilities in NSW*	27 June 2000
75	NSW Department of Transport	*Management of Road Passenger Transport Regulation*	6 September 2000
76	Judging Performance from Annual Reports	*Review of eight Agencies' Annual Reports*	29 November 2000
77*	Reporting Performance	*Better Practice Guide* *A guide to preparing performance information for annual reports*	29 November 2000
78	State Rail Authority (CityRail) State Transit Authority	*Fare Evasion on Public Transport*	6 December 2000
79	TAFE NSW	*Review of Administration*	6 February 2001
80	Ambulance Service of New South Wales	*Readiness to Respond*	7 March 2001
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

No.	Agency or Issue Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
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
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