Part Three

Our performance

Part Three reports on performance against the NBA's Operational Plan 2007–08. It provides analysis of the NBA's performance against the Agency Outcome and Output Groups within the *Health and Ageing Portfolio Budget Statements 2007–08.*

3.1 Outcome performance report

The National Blood Authority's (NBA) performance is reported against the Agency Outcome and Output Group reported in the *Health and Ageing Portfolio Budget Statements 2007–08*.

Table 3.1 shows an extract from these budget statements to highlight key performance indicators and specific activities for the NBA in 2007–08.

NBA's outcome — 'Australia's blood supply is secure and well managed.'

Table 3.1 Extract of NBA key performance indicators reported in the *Health and Ageing Portfolio Budget Statements 2007–08*

Performance Information for Administered Programs

Indicator	Measured by	Reference Point or Target
Administered Funding – National Blood Authority		
Informed decisions on the quality of use and demand for blood and blood services.	The implementation of an operational system to provide accurate and timely data.	Operational system implemented by June 2008.

Performance Information for Departmental Outputs

Indicator	Measured by	Reference Point or Target
Output Group 1 – Meet product demand through effective planning and the management of supply arrangements		
Efficient management and coordination of Australia's blood supply in accordance with the National Blood Agreement between the Australian Government, State and Territory Governments.	The level of satisfaction of all funding jurisdictions on the planning, management and coordination of the blood supply.	A high level of satisfaction from all funding jurisdictions. Product available meets jurisdictional identified clinical needs.
The NBA uses contestability and expertise to drive improvements in product prices and product quality.	Product price and quality.	New product prices favourable in real terms with previous prices and compared to available international benchmarks. Stakeholders satisfied that product quality improving.
Agreed risk management/ mitigation plans in place for the security of supply with the blood sector and the supply of most products is secure and exceptions managed effectively.	The NBA accurately predicts demand for the supply of blood and blood related products.	The NBA predictions are within a 5% variance of total National Administered Budget and/or less than the variance of the previous year.

3.2 Performance indicators

This section reports against the NBA's results in the 2007–08 reporting period and comments are offered in relation to the performance indicators relative to the output.

Efficient management and coordination of Australia's blood supply

To ensure efficient management and coordination of Australia's blood supply, the NBA has supply contracts with various suppliers of blood and blood-related products that it manages closely to ensure that demand for these products is always met. Table 3.2 shows these suppliers.

Table 3.2 Blood and blood-related products purchased in 2006–07 and 2007–08, by supplier

		2006–07	2007–08
Supplier	**Products Purchased**	**Amount ($ millions)**	**Amount ($ millions)**
CSL Ltd	Plasma Products – albumin products – immunoglobulin products – Rh(D) immunoglobulin (including IVIg and hyperimmune products) – plasma-derived clotting factors Diagnostic Reagent Products – blood grouping sera – reagent red cell products Defined Blood Products – Factors XI and XIII – Imported IVIg Management of National Reserve	145.10	159.90
Australian Red Cross Blood Service	Fresh Blood Products – whole blood – red blood cells – platelets – clinical fresh frozen plasma – cryoprecipitate – plasma for fractionation	305.77	385.03
Baxter Healthcare Pty Ltd	Defined Blood Products – Recombinant Factor VIII – Protein C – Factor VII concentrate – Factor Eight Inhibitor Bypass Agent (FEIBA) – WinRho	71.53	80.08
Wyeth Australia Pty Ltd	Defined Blood Products – Recombinant Factor VIII – Recombinant Factor IX	28.88	42.38
Novo Nordisk Pharmaceuticals Pty Ltd	Defined Blood Products – Recombinant Factor VIIa	26.95	17.43
Octopharma Pty Ltd	Defined Blood Products – Imported IVIg	22.24	34.26

DiaMed Australia Pty Ltd	Diagnostic Reagent Products – blood grouping sera – reagent red cell products	0.80	0.94
Ortho-Clinical Diagnostics (Johnson & Johnson Medical Pty Ltd)	Diagnostic Reagent Products – blood grouping sera – reagent red cell products	0.25	0.37
Australian Laboratory Services Pty Ltd	Diagnostic Reagent Products – blood grouping sera – reagent red cell products	0.05	0.05
Total Purchases of blood and blood-related products		**601.55**	**720.45**

All amounts exclude GST

In 2007–08 the NBA managed 13 blood supply contracts and arrangements. Of these, seven were newly negotiated and none were subject to variation. Table 3.3 shows the new blood product contracts that were negotiated and concluded in 2007–08.

Improvements in price and product quality

The NBA has negotiated contracts with suppliers that have provided recurring annual savings to the jurisdictions for the supply of blood and blood-related products since 2003–04. Savings for 2007–08 are estimated at $26 million based on a comparison of prices that would have been paid under previous contracts and indexation. These savings have been achieved after extensive analysis of benchmark products, close international networking, and consultation with industry analysts. These price savings have been achieved alongside improvements in product quality. People with bleeding disorders have given very positive feedback on the range, quality and service support for the new products. This is reflected in the uptake of these new products — see Figures 3.9 and 3.10.

National administered budget performance

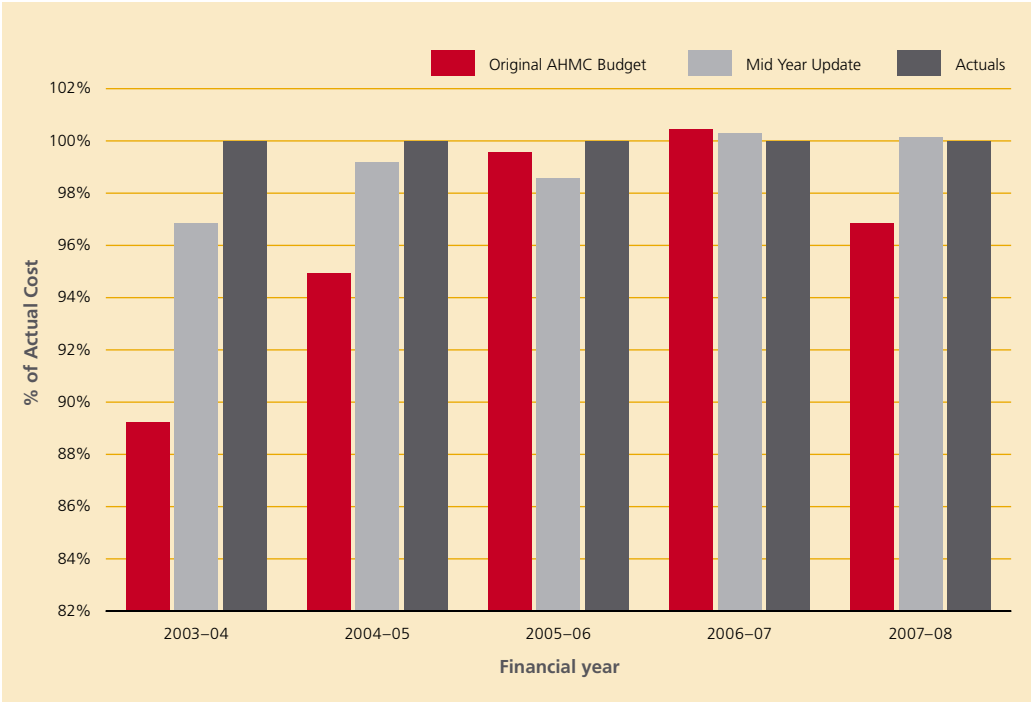
The NBA administered budget is completed annually as part of the National Supply Plan and Budget process agreed by the Australian Health Ministers' Conference (AHMC). The NBA, in consultation with jurisdictions, reviews the National Supply Plan and Budget annually as part of the mid-year review process to adjust jurisdictional funding requirements as a result of the first six months expenditure. As depicted in Figure 3.1, the NBA's performance in forecasting and managing the National Supply Plan and mid-year review budget has improved since its inception to 2007–08. In 2007–08, actual expenditure varied by 3% (compared to less than 1% in 2006-07) against the National Supply Plan and Budget and less than 0.2% against the mid-year review. The main driver for the change from the original budget in 2007-08 was increased demand for IVIg, FEIBA and Recombinant Factor VIII.

The budget for 2003–04 was not set by the NBA, as the NBA was not established until 1 July 2003.

Table 3.3 New blood product contracts negotiated, 2007–08

Supplier	Implementation	Description of Contract
CSL Limited	From November 2007	For the Supply of Diagnostic Reagents
DiaMed Australia Pty Ltd	From November 2007	For the Supply of Diagnostic Reagents
Ortho-Clinical Diagnostics (Johnson & Johnson Medical Pty Ltd)	From November 2007	For the Supply of Diagnostic Reagents
Australian Laboratory Services Pty Ltd	From November 2007	For the Supply of Diagnostic Reagents
Octapharma Australia Pty Ltd	From December 2007	For the Supply of Overseas sourced IVIg
CSL Limited	From January 2008	For the Supply of Overseas sourced IVIg
CSL Limited	From January 2008	Management of the National Reserve of Plasma Products.

Figure 3.1 Performance of National Blood Authority: actual funding versus budgets



3.3 Management of fresh blood products

The ARCBS collects fresh blood from voluntary donors for the purposes of manufacturing a variety of blood products. These products are used for the treatment of major medical conditions such as cancer; heart disease; stomach and bowel disease; liver and kidney disease; haemophilia; and to treat newborn babies and pregnant women. Donated blood is also used to help people who suffer traumatic incidents such as accidents, burns, and during or as a result of surgery. ARCBS also collects plasma, which is provided to CSL Ltd for fractionation into a variety of products to meet the needs of the health sector.

The NBA manages the relationship with the ARCBS — the sole supplier of fresh blood products in Australia — and is responsible for negotiating and managing the ARCBS Deed of Agreement. The NBA also manages a number of projects involving ARCBS, as well as providing secretariat and project management support for the National Managed Fund (NMF) and the National Blood Arrangements Schedule 4 process.

ARCBS funding and product mix

Funding to the ARCBS increased from actual funding of $327.1 million in 2006–07, to an agreed budget of $370.2 million in 2007–08 (see Table 3.4).

The ARCBS continued to be funded on a grant basis during 2007–08. However, the Australian Red Cross Society Board has indicated its support for the implementation of the output funding regime as defined under the terms of the ARCBS Deed. When implemented, this will mean that states and territories pay only for the products and services they order and receive. It is expected the output funding model will be implemented from 1 July 2008.

The growth in funding reflects increased demand and changes in the product mix for fresh blood products. Figures 3.2 and 3.3 show the changes in product mix for red blood cells and platelets over the past five years.

Table 3.4 Australian Red Cross Blood Service, annual funding commitments, 2003–08

Year	Amount ($ million)	% Growth
2003–04	247.8	
2004–05	277.0	11.8
2005–06	297.7	7.5
2006–07	327.1	9.9
2007–08	370.2	13.2
Total	**1519.8**	**(average) 10.6**

Figure 3.2 Product mix of red blood cells issued by the Australian Red Cross Blood Service, 2003–08

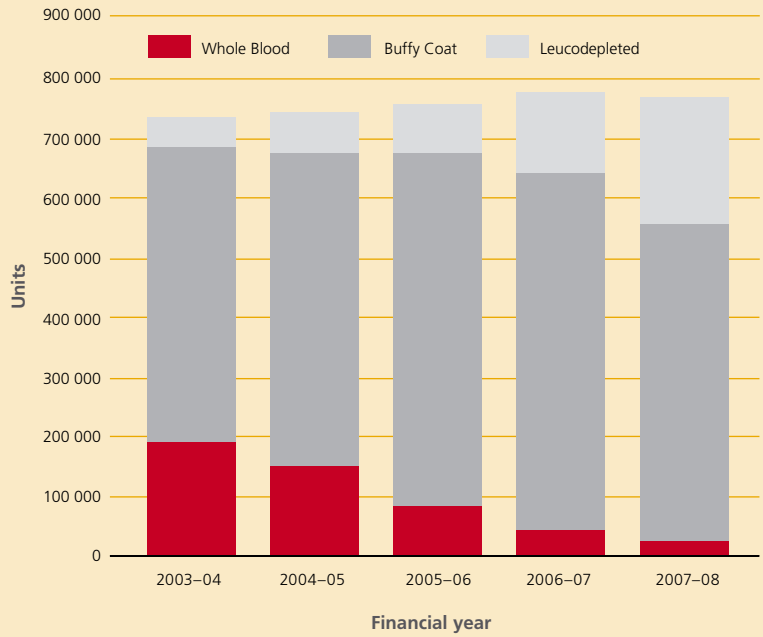
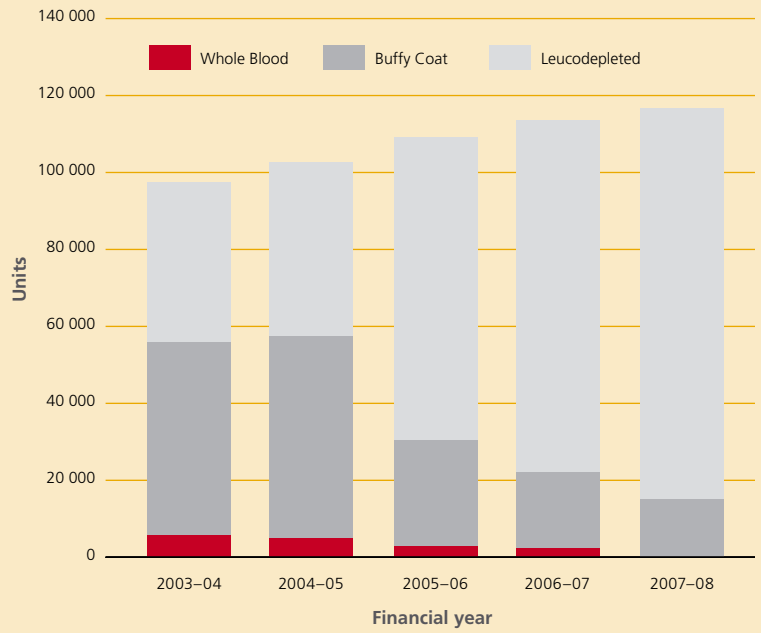


Figure 3.3 Product mix of platelets issued by the Australian Red Cross Blood Service, 2003–08



During 2007–08, governments made a number of decisions to give substantial further funding to ARCBS to support the ARCBS principal site developments. Funding was also used to enhance blood safety measures such as leucodepletion, universal prerelease bacterial contamination testing and the introduction of effective donor recruitment and retention measures to meet the Council of Europe's *Guide to the Preparation, Use and Quality Assurance of Blood Components* (12th edition) requirements.

ARCBS business study

During the year, the NBA continued to manage the ARCBS business study, which commenced in 2006–07. The expert advisory group (EAG), established to advise the NBA General Manager on the study, met six times from 1 July 2007 to 31 January 2008. Members of the EAG included:

- Mr Michael Roche, Independent Chair
- Ms Kerry Flanagan, Australian Department of Health and Ageing
- Mr Ken Barker, New South Wales Department of Health
- Professor Brendon Kearney, Institute of Medical and Veterinary Science
- Mr Robert Tickner, Australian Red Cross Society
- Dr Robert Hetzel, Australian Red Cross Blood Service
- Dr Philippa Hetzel, Australian Red Cross Blood Service
- Mr Garry Richardson, National Blood Authority Board.

KPMG has provided business consultancy services to assist the study. The business study concluded that, based on the analysis and associated benchmarking, there were many positive aspects of ARCBS's delivery of the blood service in Australia. The study also found that the ARCBS is striving to improve its services and management.

The business study has, however, pointed out a number of areas for improvement, including the identification of efficiency measures that have the capacity to deliver cost savings in the medium term. A number of these require up-front project funding, but will potentially achieve savings even in the short term. The ARCBS has yet to validate these savings. The NBA will actively pursue progression of these measures with ARCBS, including the identification of possible funding sources for project costs should these be required.

The report and its recommendations are to be provided to the AHMC for consideration at the AHMC July 2008 meeting.

ARCBS Deed of Agreement

During 2007–08, the NBA gave priority to a number of areas of the ARCBS's operations to ensure that the objectives and intent of the agreement were achieved. This included a focus on ARCBS strategic, capital and business planning; and the assessment of a number of business cases for consideration by governments.

Strategic and business planning framework

The establishment and operation of the Deed framework for providing input to ARCBS's strategic and business planning processes is not yet fully developed, although it has progressed throughout the year. Successful implementation of this important element of the Deed will ensure that governments' priorities are clearly articulated and appropriately reflected in ARCBS operations. Priorities that governments expect to be taken into account in this planning process were

detailed to ARCBS in April 2008 and include:

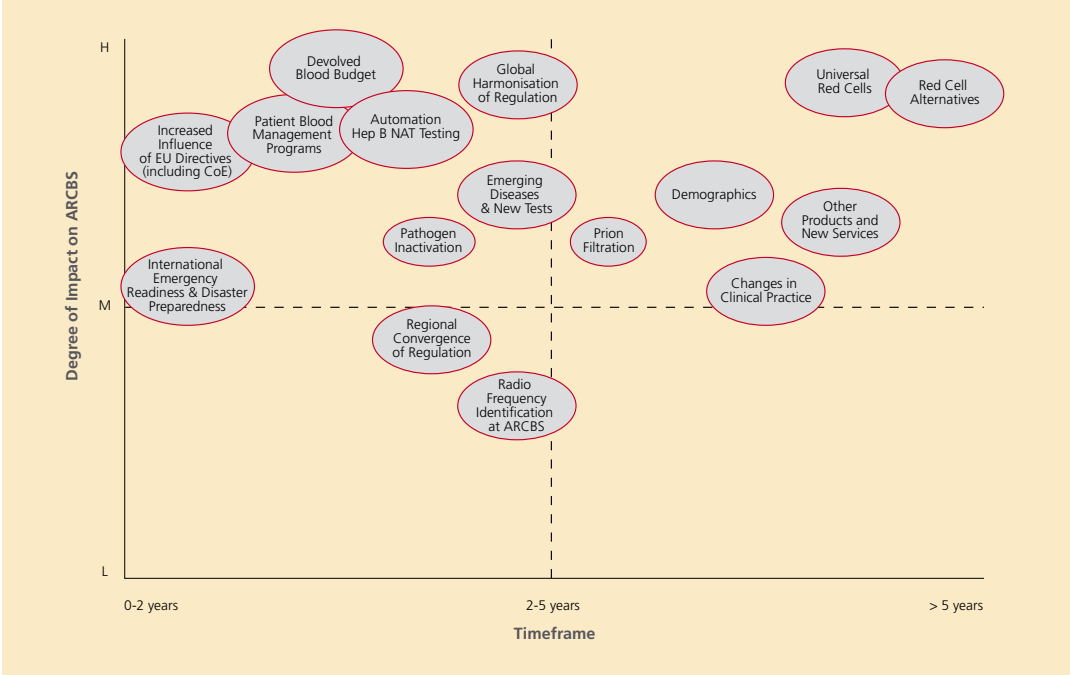
- ensuring states and territories only pay for the products and services they request and receive
- engaging with governments in short and long-term planning activities
- progressing and implementing the business study recommendations in line with the agreed response by AHMC at its July 2008 meeting
- developing and implementing an approved health provider customer service model
- implementing improved measures that support retention of existing donors
- contributing knowledge and skills to the blood sector and providing advice to stakeholders through both horizon scanning and the ARCBS research and development program.

Horizon scanning

A core element of this strategic planning is the need for the NBA to strengthen its engagement with the ARCBS in relation to horizon scanning, research and development, and business and capital planning.

With representative membership on the ARCBS Research and Development Committee, the NBA is working with the ARCBS to restructure the research and development program and prioritise research projects. The interest of the

Figure 3.4 Examples of emerging theme mapping



Australian Red Cross Blood Service: The map above illustrates examples of potential emerging themes and developments relevant to the Australian Red Cross Blood Service. The themes are mapped according to their perceived possible degree of impact over a seven year horizon. The ARCBS is continually scanning for themes and clarifying drivers of change.

NBA in these activities is to ensure decisions to fund particular research and development projects reflect governments priorities.

Under the terms of the Deed there is an expectation that the ARCBS will provide advice to the NBA on new and emerging trends that are likely to affect the provision of blood and blood-related products in Australia, including emerging technologies, public health activities and analysis of international trends in blood banking. In March 2008, representatives from the ARCBS provided an update on its horizon scanning processes and outlined the emergent themes facing the international blood and blood-products sector from their perspective.

The NBA will continue to work with ARCBS on ensuring timely consideration of these issues to ensure careful and balanced decision making for the blood sector.

Strategic capital investment plan

The ARCBS Strategic Capital Investment Plan demonstrates the intended capital expenditure required to sustain fixed assets including asset replacements such as vehicles, laboratory equipments and premises (eg refurbishments, relocations and new sites).

The Strategic Capital Investment Plan covers a five-year period. The first year is the annual capital plan, which outlines the expenditure required for the next financial year. The Strategic Capital Investment Plan is prepared by the ARCBS annually and submitted to the JBC as part of the approval process for the annual supply plan and budget.

Under the Deed, the annual capital funding provided to the ARCBS covers 10% of their main operating program. The value of approved annual capital plans from 2005–08 is shown in Table 3.5.

Table 3.5 Value of Australian Red Cross Blood Service annual capital plan ($ million), 2005–08

2005–06	2006–07	2007–08
27.02	29.58	32.96

In addition to the approved annual capital plans, governments have agreed to fund, as appropriate, the redevelopment of the principal manufacturing sites to maintain the flexibility and capacity of the ARCBS. This will allow the ARCBS to respond promptly to changing circumstances and needs, and to meet national obligations and standards for maintaining a high quality blood supply in Australia.

An update of the major principal sites is provided below.

Queensland

The ARCBS took possession of its new Queensland principal site, situated within the Queensland University of Technology development at Kelvin Grove on 4 February 2008. The $33.98 million cost of the Queensland facility has been borne by the ARCBS from existing capital funding provided by all Australian governments.

New South Wales and Australian Capital Territory

On 18 April 2008, the AHMC gave policy approval for additional funding of up to $115 million (at 2008 prices) to be provided to the ARCBS to meet building leases and fit-out for a new principal manufacturing site for New South Wales and the Australian Capital Territory.

NBA Board members at their visit to ARCBS Clarance St, NSW facilities

The new 12,500 m^2 manufacturing facility will replace the existing manufacturing facilities at 158 Clarence Street, Sydney and Dann Close, Canberra, which are no longer suitable due to the ARCBS's growth. When completed in 2009–10, the new facility will accommodate nearly 600 people and contain all ARCBS activities in a purpose-built facility with a proposed minimum occupancy of 20 years.

Victoria and Tasmania

During 2007–08, the ARCBS commenced planning for the new Victorian and Tasmanian principal sites. The NBA expects to receive the final business case from the ARCBS in the first quarter of 2008–09, allowing for consideration by the Health Ministers during the second quarter of 2008–09.

Business case assessments

The strategic and business planning processes, established in the Deed, provide for the conduct of feasibility studies and the development of business cases for initiatives that can be shown to meet government and ARCBS future priorities. In 2007–08, the ARCBS submitted the findings of three feasibility studies for the NBA's consideration. These studies investigated the feasibility of implementing new donor relationship management, a computer-assisted donor questionnaire and improved blood inventory management systems within the ARCBS. The NBA has supported further investigative work on these initiatives with the exception of the Blood Inventory Management System, which requires additional supporting information.

Funding of $1.2 million was approved for release to ARCBS in 2007–08 to address the impact on the blood supply by new requirements on whom can donate blood under the Council of Europe guidelines. The *Guide to the Preparation, Use and Quality Assurance of Blood Components* (12th edition) is the regulatory standard to which the ARCBS is currently mandated as a minimum standard for fresh blood components by the Therapeutic Goods Administration (TGA). The changes implemented in 2007–08 relate to the management of donors with a history of acupuncture treatment and body piercing. Funding provided will assist in the effective implementation of new donor recruitment and retention measures.

The ARCBS business study required KPMG to review several business improvement initiatives the ARCBS proposed to implement. Work is continuing with the ARCBS to quantify the costs, savings and timeframes associated with implementing these efficiency measures.

Change program funding

As part of the negotiation for the Deed, a change program funding pool of $7 million was established for 2006–07 to 2008–09 to fund the following:

- specific initiatives as part of the ARCBS national change program
- specific transitional initiatives to be implemented under the Deed
- other specific initiatives that will deliver cost savings or otherwise increase the efficiency of the production of goods or services under the deed (only if the purposes of the above two points have been substantially fulfilled by initiatives which have been funded).

As of 27 September 2007, eight of the nine proposals put forward by the ARCBS had been approved by the JBC. Two further proposals had been approved out of session by the JBC and two other proposals had the consideration of their funding withheld pending the ARCBS announcing any other requests for funding. The total funding approved for these ten proposals was $4.6 million. To date, the NBA has received invoices totalling $1.57 million.

ARCBS performance

Engagement between the two organisations is supported via regular communications and meetings, review of key performance indicators and third party reviews.

Communications and meetings

Regular reporting is provided through:

- quarterly meetings between the NBA General Manager and the ARCBS CEO in relation to strategic issues and planning, progress against performance targets and other high-level issues
- Chief Financial Officers meeting quarterly to discuss issues concerning ARCBS financial management and reporting, and capital planning
- regular meetings between the NBA's deed management team and representatives from the ARCBS regarding matters such as supply planning, intensive product management, contingency planning, principal sites and business cases.

These meetings are an opportunity for an exchange of information and review of ARCBS performance against the Deed. These meetings have seen the approval of a number of protocols and joint arrangements that support effective implementation of the Deed. Processes approved in 2007–08 include public affairs management, acknowledgment of government funding, third party reviews, development and amendments to the Annual Capital Plan, and management of change program funding pool approved projects.

It was also agreed during these discussions that the NBA prepare for ARCBS' consideration a key document required under the Deed of Agreement, the ARCBS Handover Plan. This document sets out arrangements to apply between the ARCBS and the NBA and any third party in all situations of termination or expiry of the Deed, to ensure the effective management of the blood service (should this ever be necessary).

Key performance indicators

The ARCBS is implementing a number of strategies in the area of donor management. Although faced with a number of challenges in the 2007-08 year (including the impact of cold and flu early in the season) resulting in a decreased number of donors and donations generally, key performance indicator data showed success in implementing these strategies.

The encouragement of regular whole blood donors to donate through apheresis collection of plasma and platelets had a positive impact, evidenced by a rise in the number of apheresis plasma donors and donations in the final quarter of the year.

Development of approaches for increasing donor retention rates (as opposed to increasing the donor panel with first time donors), and increasing the number of donations per donor in the period, are priorities for the ARCBS's donor management program. Both of these areas showed positive results, with donation frequency higher than planned for whole blood and platelet apheresis donors, and the number of new donors (as a proportion of the total donor panel) decreasing steadily from 28.4% in the first quarter of 2007-08 to 27.1% at the end of the fourth quarter, indicating a slight improvement in the donor retention rate.

The total demand for red cells in Australia during 2007–08 reduced with a resulting decrease in red cell issuage per 1000 head of population to 36.3 units. (See Figure 3.5). At the same time, platelet issuage per 1000 head of population increased to 5.51 units from 5.45 from the previous year (see Figure 3.6).

Figure 3.5 Red blood cells issued per 1000 head of population

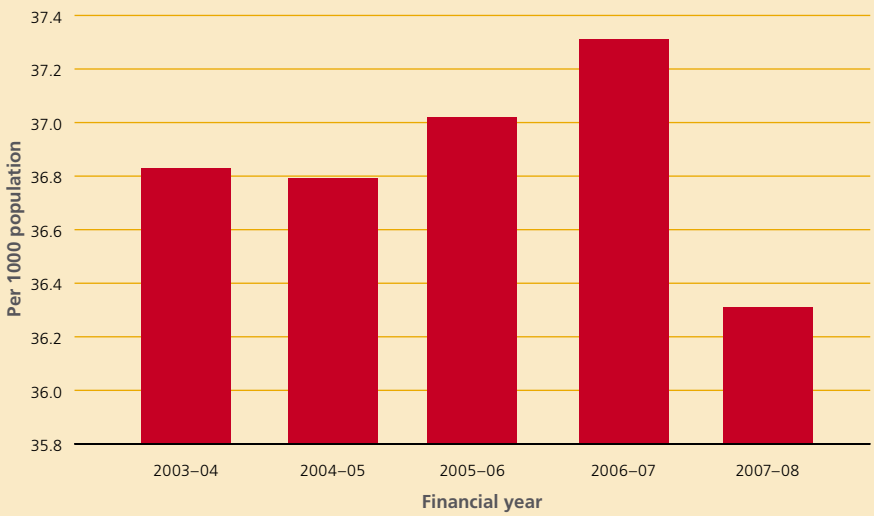
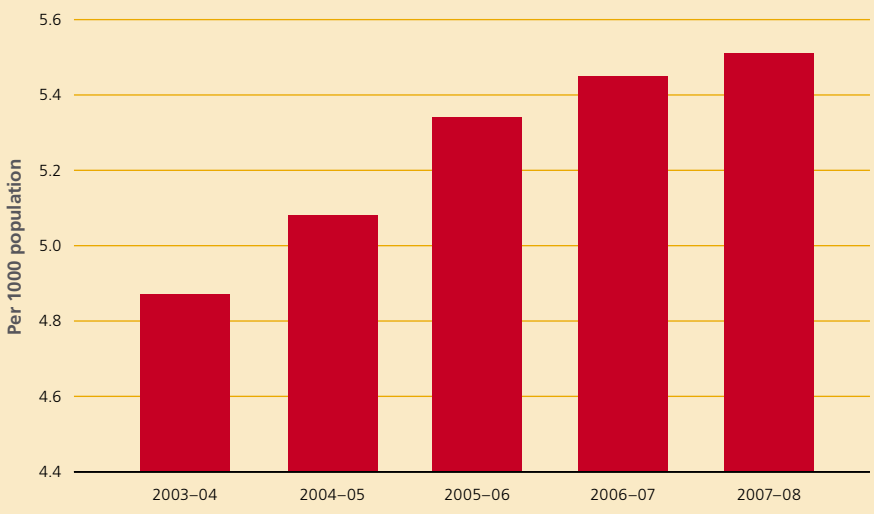


Figure 3.6 Platelets issued per 1000 head of population



Throughout the period, the number of process-related recalls fell below the KPI planning parameter except in quarter 4, during which the introduction of 100% bacterial contamination testing of platelets resulted in a significant increase in the number of recalls.

The NBA and ARCBS have been reviewing the KPIs under the Deed in an effort to improve on quantitative and qualitative reporting. This was done so that the NBA can gain further understanding of the variables contributing to ARCBS performance against the KPIs.

Third party reviews

Third party reviews are jointly commissioned by the NBA and ARCBS as parties to the procurement, evaluation and management of the contract for services. The reviews are designed to assist the two organisations in ensuring that the ARCBS operates in line with better practice in a cooperative and positive framework. The first of the third party review projects under the Deed was tendered for in late 2007–08 on ARCBS governance arrangements. Other third party reviews are to be conducted prior to the current Deed expiry date (June 2009), including the ARCBS's procurement arrangements; risk management arrangements; and product ordering, delivery, receipt and invoicing.

Agreement to supply project

The agreement to supply project is driven by the reliance of the ARCBS and jurisdictions on the cooperation and good practices of approved health providers to help achieve the most efficient management and use of blood and blood-related products in pathology laboratories and hospitals. This includes integration of planning and demand management, comprehensive reporting on product usage, appropriate storage and inventory management.

The project proposes development of agreements between the ARCBS and approved health providers (more specifically pathology laboratories) and, where appropriate, between jurisdictions and their approved health providers. The agreements aim to articulate the JBC's safety and quality expectations of recipients of government funded blood and blood-related products, including supporting appropriate use of products by clinicians in hospitals.

A discussion paper and project plan were developed and discussed with ARCBS and South Australia, the jurisdiction chosen to pilot the agreements. Further work has been identified as necessary before agreements can be effectively implemented. This work includes research to gain an understanding of barriers to appropriate management and use of blood products within hospitals and pathology laboratories.

Product change proposals

Under the National Blood Agreement, interested parties can make proposals for changes to products or services on the National Products and Supply List. Schedule 4 of the National Blood Agreement provides for evidence-based evaluation, information and advice to support decisions on these changes.

In 2007–08, the NBA commissioned an academic health economics department to design purpose-built guidelines to evaluate national blood supply change proposals. It is expected that the guidelines will be finalised and implemented in 2008–09. A number of proposals have been submitted to the NBA and are currently being reviewed.

National Managed Fund

The National Managed Fund (NMF) was established by the Australian Health Ministers' Advisory Council (AHMAC) to cover future liability claims made against the ARCBS in relation to the supply of blood and blood-related products within Australia. The NMF became effective from 1 July 2000, prior to the establishment of the NBA.

The National Indemnity Reference Group (NIRG) acts as a technical advisory subcommittee to the JBC on NMF-related matters and comprises Australian, state and territory government members. The NBA provides secretariat support to the NIRG, which met on 2 November 2007, and noted a number of significant achievements, including:

- endorsing of the actuarial and liability services reports by the management and advice support services provider, PricewaterhouseCoopers.
- establishing and implementing of the claims management system and processes, and data reporting and analysis by the claims management and advice services provider (Marsh Pty Ltd).
- implementing of comprehensive service level agreements and business plans with both service providers to the NMF.
- ensuring full awareness of the key aspects of ARCBS risk management arrangements in relation to blood-borne diseases.

The NIRG's attention is now focused on further consideration of the scope to harmonise statutory defence under state and territory legislation.


PLATELETS POOLED

3.4 Commercial contract management

The NBA is responsible for negotiating and managing contracts and standing offers with commercial suppliers of blood and blood-related products. These contracts relate to the supply of:

- locally produced plasma-derived[1] products
- imported plasma-derived and recombinant blood products[2]
- diagnostic reagents.

Locally produced plasma-derived products — CSL Ltd Plasma Products Agreement

Since the 1940s, it has been possible to extract different proteins from plasma on a large scale using fractionation processes. In Australia, CSL Ltd fractionates plasma collected by the ARCBS to produce products to meet the needs of the Australian health sector. Plasma fractionation arrangements are governed by the Plasma Products Agreement (PPA) between the NBA and CSL Ltd which covers pricing, invoicing, supply planning and monitoring, ordering and delivery.

Funding to CSL Ltd

Funding to CSL Ltd for the PPA increased from $141.3 million in 2006–07 to $155.9 million in 2007–08. Growth in funding reflects the demand for plasma products.

The NBA and CSL Ltd maintained a highly effective contract throughout 2007–08 that ensured the optimum supply of Australian manufactured blood products. The NBA worked with CSL Ltd to ensure all domestic plasma-derived products were delivered when and where required. Performance against the KPIs for the contract is shown in Table 3.6.

Table 3.6 Key performance indicators for the CSL Ltd Plasma Products Agreement

Key performance indicator	Achievement
Yield of Group 1 products	5.3 g IVIg per kg starting plasma
Loss of Group 2 plasma or Group 2 finished products	1.98%
Fulfilment of orders	99%

In order to finalise a new agreement with CSL Ltd by 31 December 2009, a stakeholder consultation process started that included meetings with senior health department officials.

A key tool to gather feedback on the contract and its products was the release of a discussion paper on the current arrangements. The discussion paper was posted on our website and also circulated on 19 May 2008 to 108 stakeholders including CSL Ltd; ARCBS; funding jurisdictions; other blood product commercial suppliers; and national, state and territory organisations representing clinicians, nurses, hospitals, pathology labs and patient groups. The paper sought opinions on product selection, product delivery, improvement in support and product demand. Feedback from this and further bilateral discussions will inform the development of the next contract with CSL Ltd.

1 Plasma is the liquid component of blood in which the blood cells are suspended. Plasma contains a large number of biologically critical proteins, which have multiple physiological functions. The separation of blood and plasma from its constituent proteins for medical use is called fractionation to produce plasma-derived products.

2 Recombinant products are produced by inserting a human gene into a cell line, which synthesises the required human protein (eg factor VIII or factor IX). This product is then harvested from the supernatant for clinical use.

Figure 3.7 Issues for IVIg products

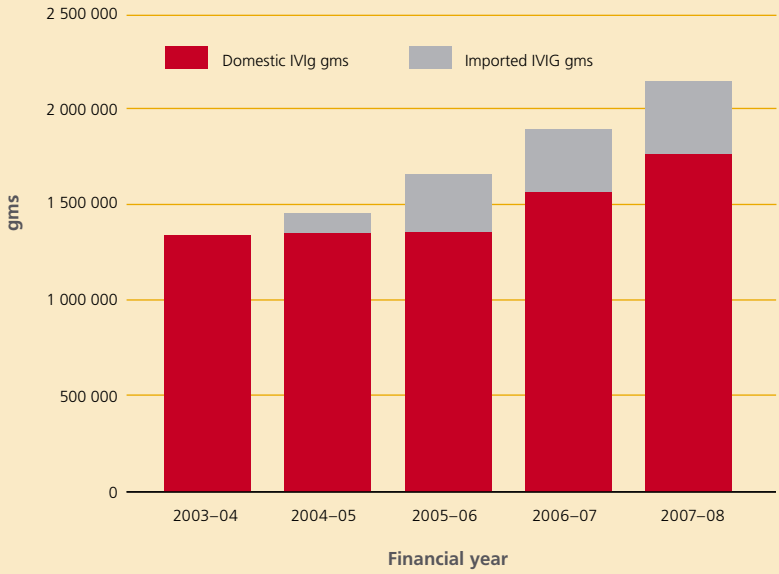
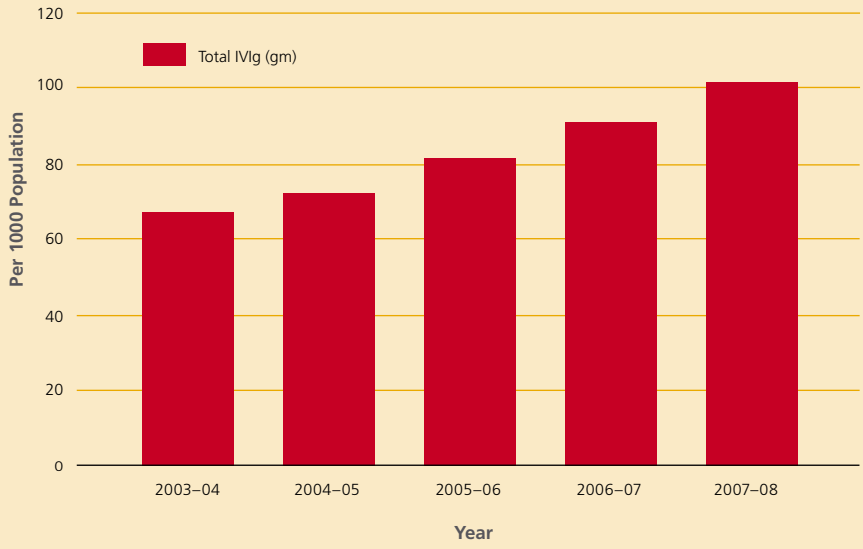


Figure 3.8 Issues of IVIg per 1000 head of population



In May 2008, members of the JBC agreed to a new set of negotiation policy parameters that will guide the nature and scope of negotiations. The parameters address issues such as the nature of pricing, the potential for changed product management and distribution arrangements and term.

Imported plasma-derived and recombinant blood products

The NBA has established and operates a range of contracts with overseas suppliers for the importation of selected plasma-derived and recombinant blood products to augment domestic supply and source products which cannot be manufactured in Australia, either because of an unavailability of technical capacity or uneconomic viability. The most significant of these are the contracts for imported IVIg and recombinant blood products.

Imported intravenous immunoglobulin standing offer

Intravenous immunoglobulin (IVIg) is a product derived from donor plasma and is used to treat a variety of acute and chronic haematological, neurological and immunological conditions (ie multiple myeloma and acquired immunodeficiency syndromes). It is also used extensively to treat autoimmune disorders and an increasing number of autoimmune-based neurological conditions.

Although IVIg is manufactured in Australia, limitations on the amount of plasma collected mean that local supply is unable to meet demand and some product must be imported (see Figure 3.7). Australia's demand for IVIg continues to increase in line with global trends and now exceeds 100 grams per 1000 head of population as seen in Figure 3.8.

The NBA has standing offer contracts for the supply of imported IVIg. With the ending of contracts in late 2007, the NBA commenced a procurement process for new contracts in mid-2007. The procurement process built on extensive consultation with all relevant stakeholders, which included stakeholder representation on the request for tender evaluation committee.

The outcome of the procurement was the finalisation of a new fixed price contract with Octapharma Australia Pty Ltd for the supply of Octagam for three years under the National Blood Supply arrangement. Octagam and a CSL Ltd imported product, Sandoglobulin Liquid, are also supplied under Jurisdictional Direct Order (JDO) arrangements negotiated by the NBA on behalf of state and territory health providers.

The NBA has expended approximately $34.3 million against this new standing offer in 2007–08, an increase of $13.6 million over 2006-07 expenditure. The new standing offer contracts satisfy all JBC-mandated parameters and offer governments' exceptional value-for-money and a range of significant improvements, including:

- a highly competitive price compared to current and forecast global prices
- a choice of two imported products for JDO
- the transfer of the overhead and risk for inventory management from the NBA to the supplier
- the maintenance of a three month NBS in-country reserve at the supplier's cost
- strong delivery requirements throughout Australia.

Figure 3.9 Market share of recombinant factor VIII issues

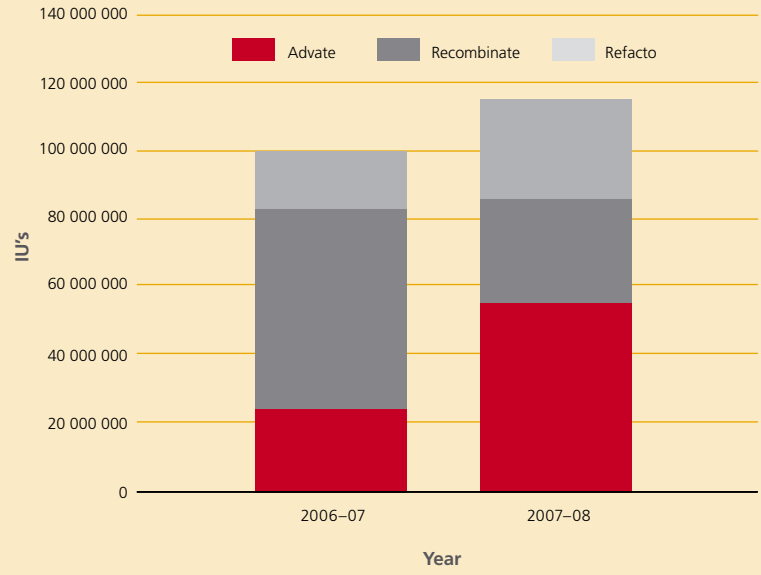


Figure 3.10 Issues of factor VIII products

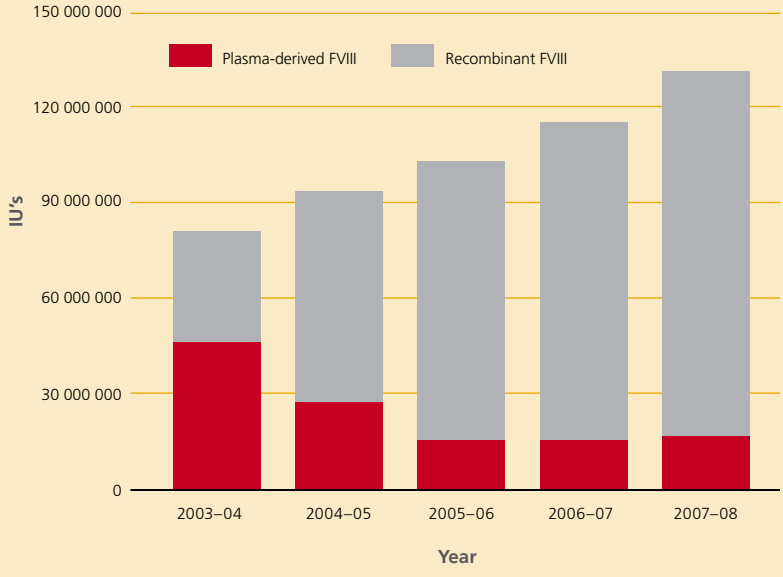


Figure 3.11 Issues of factor IX products

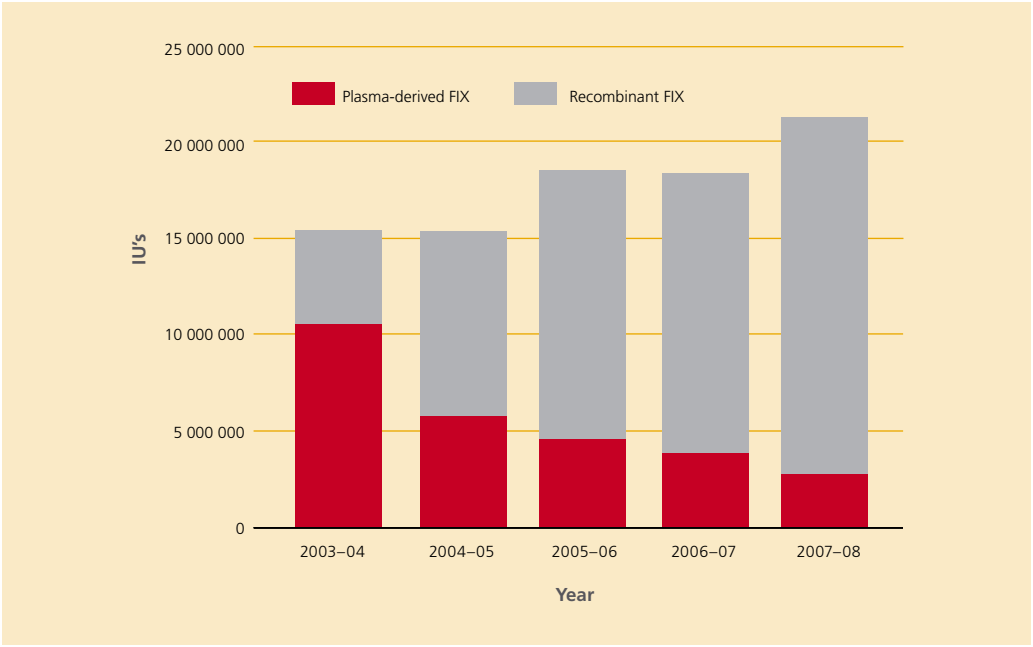


Figure 3.12 Issues of recombinant factor VIIa products

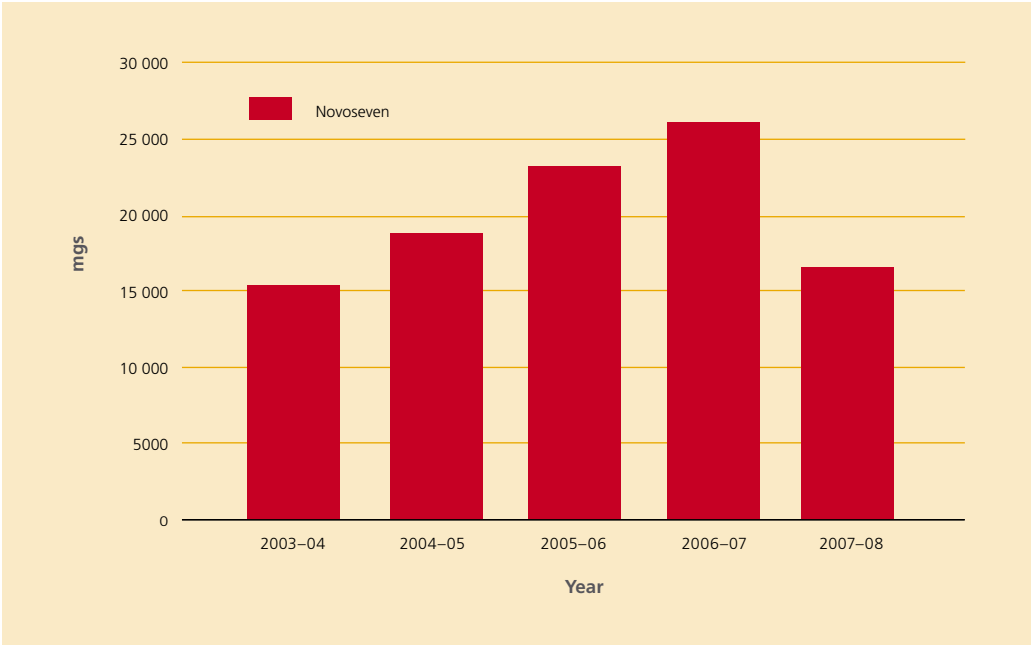


Figure 3.13 Issues of total factor VIII per 1000 head of population

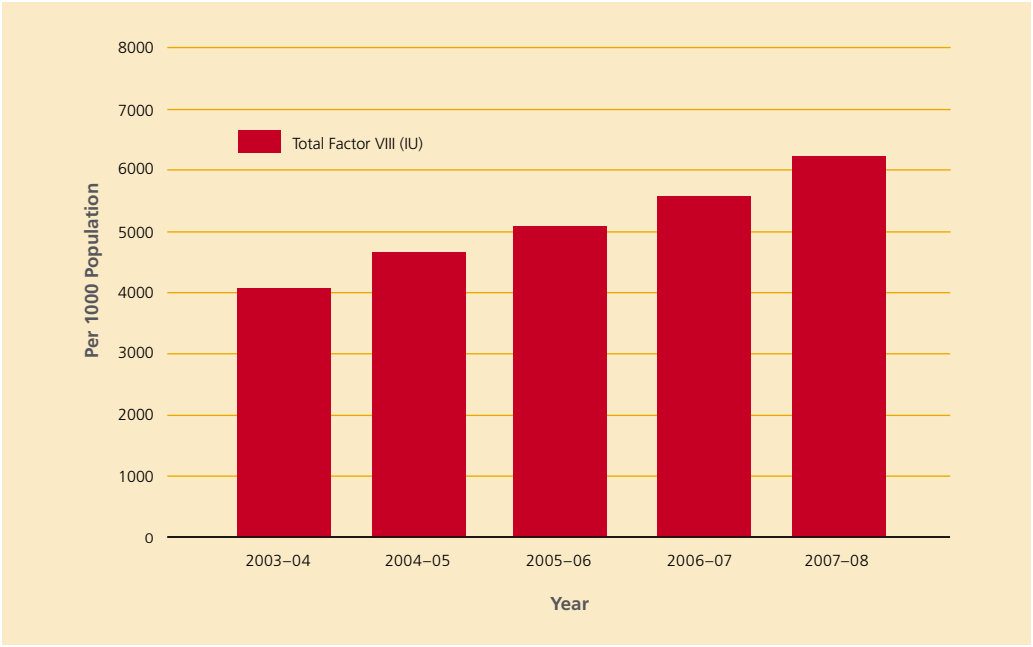
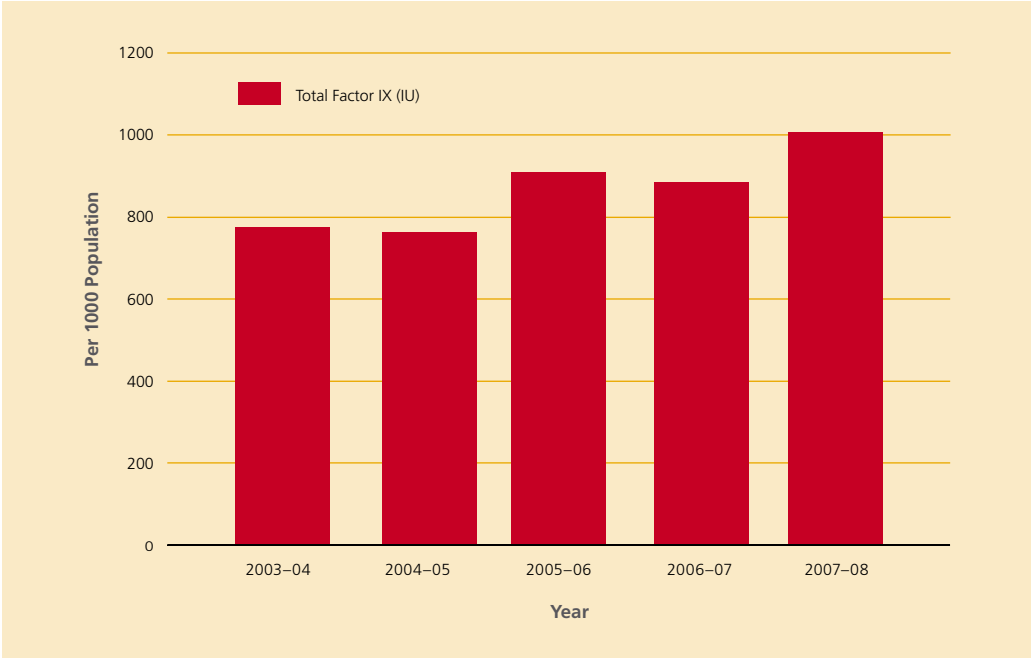


Figure 3.14 Issues of total factor IX per 1000 head of population



Imported defined blood products

The development of recombinant biotechnologies in the 1990s has resulted in the availability of several blood products produced by recombinant genetic engineering that would otherwise be available only as plasma-derived products. Recombinant products are mainly used for the treatment of bleeding disorders, such as the different types of haemophilia. They offer potential advantages over plasma-derived products for some patient groups. As recombinant products are not manufactured in Australia, all such products are imported.

The NBA manages contracts for the supply of imported recombinant and some plasma-derived products with Baxter Healthcare Pty Ltd, Wyeth Australia Pty Ltd and Novo Nordisk Pharmaceuticals Pty Ltd. New contracts for the supply of these products commenced in July 2006 and include:

- a commitment by all suppliers to ensure the supply of products to Australia, in times of national or international product shortage, as a preferred customer
- an increased and consistent level of product support by suppliers
- wider delivery options, including home delivery of products to approved recipients
- significant savings in product costs over the life of the contracts compared to previous arrangements
- the availability of three recombinant factor VIII products, including the latest generation of these products. Figure 3.9 depicts market share for these three products in 2006–07 and 2007–08.

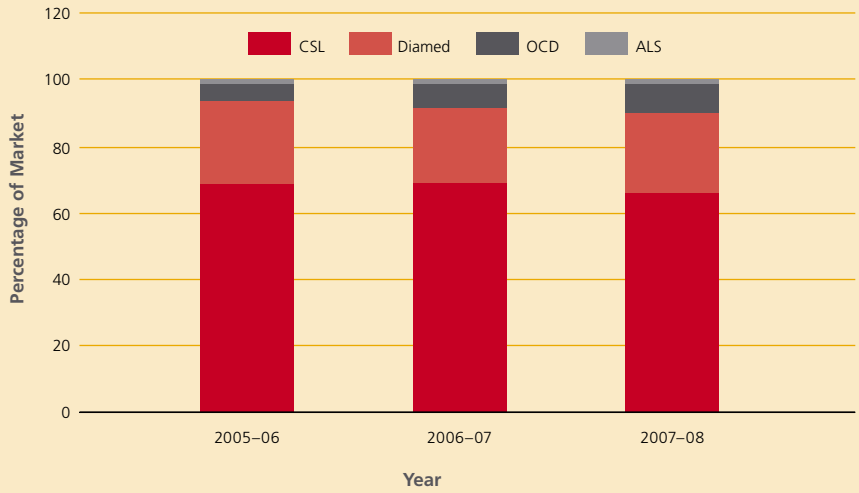
The NBA expended approximately $139.9 million under these contracts in 2007–08 for the supply of imported blood products. The issues of the specific products are illustrated in Figures 3.10, 3.11 and 3.12. Figures 3.13 and 3.14 show growth in issues per 1000 head of population.

Following the establishment of new contractual supply and logistic arrangements in 2006–07, the focus in 2007–08 was to strengthen the three-way interaction between suppliers, stakeholders and the NBA to achieve best practice operation. A summary of the performance of suppliers against contractual KPI's in 2007–08 is shown in Table 3.7.

Table 3.7 Imported recombinant blood product contract key performance indicators

Key performance indicators	Baxter	Wyeth	Novo Nordisk
Delivery performance	Achieved 10 out of 12 months	Achieved	Achieved
In-country reserve	Achieved	Achieved	Achieved
Ordering	Achieved	Achieved	Achieved
Record keeping	Achieved	Achieved	Achieved
Reporting	Achieved	Achieved	Achieved
Shelf-life of products to Approved Recipients	Achieved	Achieved	Achieved

Figure 3.15 Market share for diagnostic reagent supply



Diagnostic reagent products

Laboratories use diagnostic reagents for antenatal antibody screening and pretransfusion testing (blood grouping, antibody screening and cross-matching) to ensure there is compatibility between donor blood and the patient requiring a blood transfusion. The ARCBS uses diagnostic reagents for donor testing and when providing blood in difficult situations — for example, when patients present with multiple antibodies.

The NBA manages standing offer contracts for the supply of diagnostic reagents to public hospitals and laboratories to enable them to purchase a wide range of products that best suit their needs. By combining jurisdictional requirements, the NBA has achieved significant savings and a level of service that has high user acceptance and satisfaction. The NBA conducted an extensive procurement process for new contracts that concluded in the second half of 2007. The procurement process identified areas for improvement over the contracts that existed at the time, further improving the service provided. The new contracts commenced on 1 November 2007 with four suppliers:

- Australian Laboratory Services Pty Ltd
- CSL Ltd
- DiaMed Australia Pty Ltd
- Ortho-Clinical Diagnostics.

Around 110 red cell diagnostic reagent products are available under the new contracts.

In 2003–04 and 2004–05 diagnostic reagents were supplied by CSL Ltd to the private and public pathology laboratories. This was funded by all Australian governments. In 2005–06 all governments amended the policy to only fund public hospitals and pathology laboratories and agreed to providing market competition. New agreements were entered into with four suppliers and the market share for each of these suppliers since 2005–06 is depicted in Figure 3.15.

3.5 Blood Counts

The Blood Counts Program aims to collaborate with jurisdictions, health professionals and other stakeholders to improve patient outcomes through the appropriate utilisation of blood and blood-related products.

The Blood Counts Program comprises a number of projects divided into streams that reflect the safety and quality intent of the National Blood Agreement. Specific projects have been selected after consideration by the NBA Clinical Advisory Council, the professional and community forum, JBC priorities and other key stakeholders.

Stream 1 — Development, implementation and promotion of best practice guidelines and standards

Criteria for the Clinical Use of Intravenous Immunoglobulin (IVIg) in Australia

The growth in demand for IVIg, (Figure 3.8) the relatively high cost and the potential for supply shortages, prompted action by Australian governments to ensure that IVIg use is reserved for those with the greatest need.

The *Criteria for the Clinical Use of Intravenous Immunoglobulin (IVIg) in Australia* (the Criteria), published in March 2008, was developed under guidance of a JBC Working Party with funding and project management provided by the NBA. The review process, conducted between 2004 and 2006, involved two systematic reviews of the evidence, a review of use of the product in Australia and extensive consultation with the clinical community through the invitation of written submissions and two national workshops.

The Criteria identifies the conditions and circumstances as found by the evidence and recommended by experts for IVIg therapy. The Criteria has four introductory chapters covering governance arrangements, production of IVIg, supply and demand, and the methodology used to develop the Criteria. Chapters 5–8 of the publication provide clinical information for each indication considered in the review process. Indications are allocated to chapters according to therapeutic use as follows:

- Chapter 5 — Established therapeutic use
- Chapter 6 — Emerging therapeutic use
- Chapter 7 — Exceptional therapeutic use
- Chapter 8 — Indications for which IVIg is not recommended.

After JBC endorsement of the Criteria and the associated funding policy statement in May 2007, the Criteria was progressively endorsed by the Clinical, Technical Ethical Principal Committee (CTEPC), the AHMAC and then Health Ministers at the AHMC in December 2007.

A communications strategy was devised in collaboration with the ARCBS and other key clinical stakeholders and implemented during February and March 2008. This was to ensure that all relevant stakeholders including hospitals, colleges, societies and key individuals were aware of, be provided with or could easily obtain a copy of the Criteria.

The Criteria was published in full as a book and also in an abbreviated form as a Quick Reference Guide. Both were published in hard copy and various electronic formats to create flexible access and modes of use. Copies can be requested or downloaded from the NBA website free of charge.

Between March and June 2008, 4594 full Criteria and 4658 Quick Reference Guides have been distributed including those downloaded from our website and those hardcopies ordered. The NBA will continue to monitor product use against these criteria and note any demand for changes to the Criteria arising from new clinical evidence of benefit for consideration as part of the review of the Criteria in 2010.

The top ten uses of IVIg in Australia as detailed in Figure 3.17 account for 74.6% of total use.

The NBA established a process endorsed by the JBC to respond to questions arising from the implementation of the Criteria. The purpose of the process is to provide nationally consistent interpretations of any diagnostic, qualifying, exclusion or review criteria published in Chapters 5, 6 or 7 of the Criteria where ambiguities have arisen or are considered likely to arise.

The process will be managed via email through an NBA secretariat. Issues will be submitted to a consultation group for comment. The comments will be collated by the secretariat and then submitted to a resolution group for decision. Where decisions have no impact on the supply plan, they will be promulgated through the consultation group. Where there is a potential to impact in a material way on supply, JBC endorsement is required prior to promulgation.

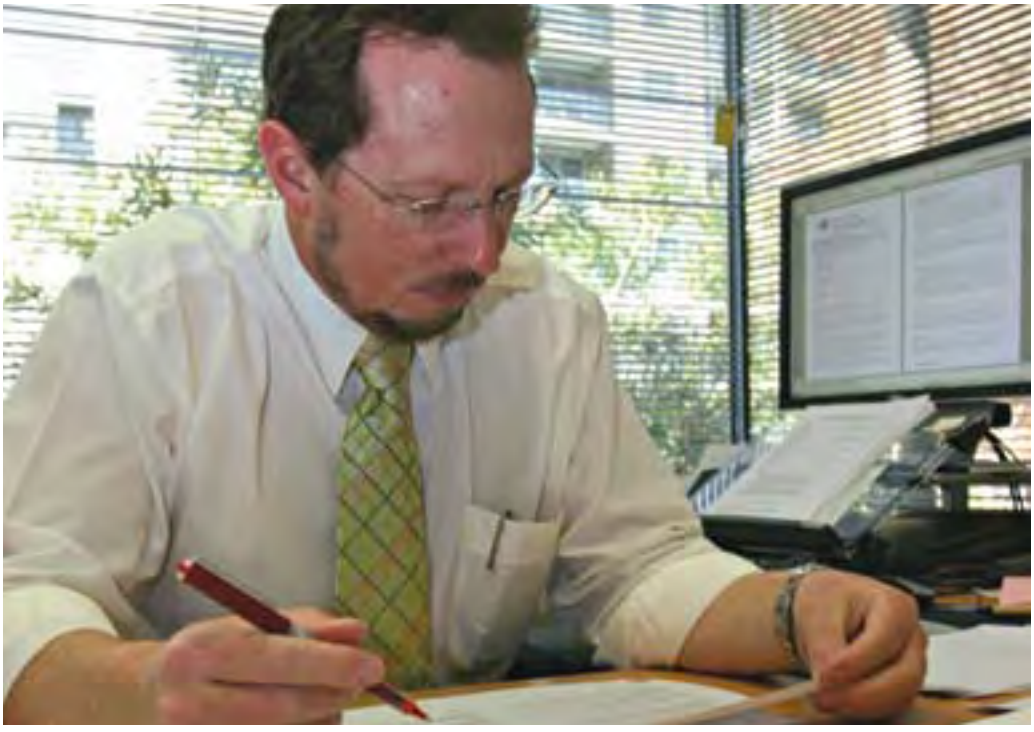
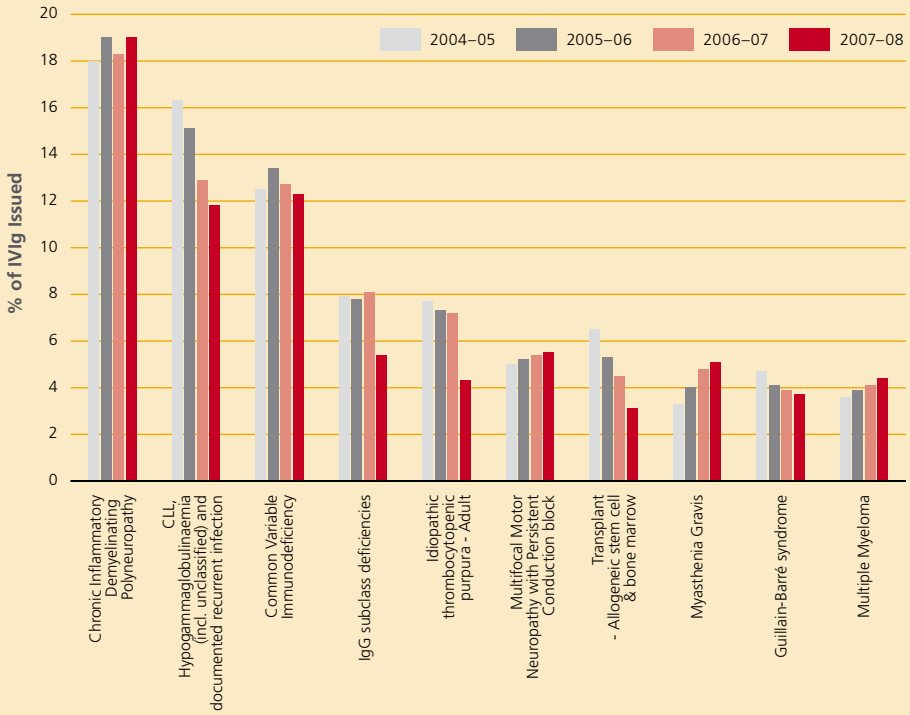


Figure 3.16 *Criteria for the Clinical Use of Intravenous Immunoglobulin (IVIg) in Australia*: book and Quick Reference Guide

Figure 3.17 Top ten uses of intravenous immunoglobulin (IVIg)



IVIg

We'd like to introduce you to Sam – Sam is a normal 11 year old boy who loves to be outside kicking a soccer ball with his Dad or fishing and catching crabs in the Queensland sunshine. But Sam is also one of more than 500 Australians who have common variable immune deficiency or CVID for short.

CVID is one of a group of diseases which affect the immune system and mean that the person is very susceptible to infections. Thankfully there is a treatment which can help with CVID and other immuno-deficiency diseases – intravenous immunoglobulin (IVIg). IVIg is a product that is derived from blood plasma. It is a solution of globulins containing antibodies normally present in adult human blood that provides immunity against disease. IVIg is prepared from human plasma pooled from many donors which has undergone stringent screening and testing to ensure it is safe. IVIg must be administered slowly through a needle in the vein, so once a month Sam spends 6 hours at the hospital getting his treatment. It's not fun but Sam doesn't mind too much as the nurses are really nice and he gets to play with the 'purple egg' (computer games).

No-one knows why or how people like Sam develop CVID. Tracy, Sam's Mum, says that Sam was a sick toddler; 'He got lots and lots of infections. He got pneumonia and meningitis. Where the other kids got the normal bugs and viruses, Sam would end up in hospital with all sorts of unusual symptoms'. Finally Tracy asked her doctor if there could be some underlying cause for all Sam's infections and, after lots of tests, he was diagnosed with CVID and started on IVIg.

Whilst Tracy and Sam's Dad Rob were relieved to finally have a treatment for Sam, they also found it somewhat daunting to be confronted with a diagnosis for their son of a condition that would probably require long term use of intravenous infusions in a hospital setting. Like most people, Tracy and Rob had never heard of CVID or immune deficiency diseases and they are very grateful for the education and support they have had from the Immune Deficiencies Foundation of Australia (IDFA).

IDFA is a non-profit organisation dedicated to supporting children, teenagers and adults with diagnosed primary immune deficiency (PID) disorders and has a strong focus on education for both the public and medical professionals.

For Sam and his family, having IVIg means that Sam is a normal healthy kid who gets on with school and loves to play soccer, cricket and go swimming. Without IVIg he is very susceptible to infections, is chronically tired and consequently, his behaviour and his schooling suffers. 'Having IVIg has made a huge difference to Sam, without it he is so tired that he can't concentrate at school, to the point where the teachers tell me he lies on the floor or puts his head on his desk to go to sleep. Because he is so tired, he is irritable and not tolerant of others'. With IVIg treatment Sam is a happy, energetic boy who can do all the things other boys his age do.

Review of National Health and Medical Research Council and Australasian Society of Blood Transfusion guidelines

The *Clinical Practice Guidelines on the Use of Blood Components* (2001) were jointly developed by the National Health and Medical Research Council (NHMRC) and the then Australasian Society of Blood Transfusion, in cooperation with the Australian Government Department of Health and Ageing, the Royal Australasian College of Surgeons, the Australian and New Zealand College of Anaesthetists and other relevant groups. The Guidelines focused on the clinical decision to transfuse and the supporting quality processes. Their aim was to improve transfusion practice by:

- reducing the proportion of blood components given without a specific indication
- ensuring adequate documentation of all use of blood components
- ensuring accountability processes are in place in all situations where blood components are used.

Significant new clinical and scientific data have emerged since the 2001 Guidelines were developed. Omitting important areas of practice (specifically obstetrics and paediatrics) was acknowledged at the time of publication of the Guidelines and a review of the Guidelines will provide an opportunity to include these areas. In addition, critical bleeding scenarios, haemodynamically unstable patients and chronic transfusion recipients (especially haematology-oncology patients) have been identified as other important gaps in coverage.

During the year, a review of the Guidelines commenced. The aim of the review is to develop evidence-based recommendations to guide health practitioners in effectively managing patients who require blood management intervention. The review will achieve this aim through:

- making clinically-relevant recommendations based on available evidence and best practice
- identifying opportunities to promulgate a multimodality approach to clinical patient blood management
- expanding the scope to incorporate other important areas of health care that require a patient blood management approach (eg chronic and paediatric transfusions, obstetrics, and massive transfusion and critical bleeding situations)
- changing the focus from product use to blood management in relevant clinical scenarios
- ensuring sufficient engagement of the clinical community in the review process to ensure clinical relevance and to facilitate uptake.

A multitiered management framework has been established to coordinate the review. The framework consists of an overarching steering committee chaired by the NBA and with representation from the Australian and New Zealand Society of Blood Transfusion (ANZSBT), the NHMRC and the National Institute of Clinical Studies. An expert working group (EWG), chaired by the ANZSBT will oversee the clinical aspects of guideline procedures, including gaining input from a number of clinical reference groups. These will provide expertise on specific elements of the new Guidelines. Engagement of clinical users of blood products in the review process will assist with acceptance and implementation of the Guidelines.

A Guidelines Assessment Register (GAR) expert appointed by the NHMRC will provide advice and mentoring to the EWG. This will ensure the new Guidelines and the development process complies with NHMRC requirements.

It is anticipated that the systematic reviewer and guideline writer will be appointed soon after the initial meeting of the EWG, which is planned early in the 2008–09 financial year.

Consultation with the clinical community at several national meetings to date has strongly endorsed a shift from the current product focus of the existing Guidelines to one that focuses more on managing the patient's particular condition. In addition, the place of alternative therapies in managing patients who would otherwise have required transfusion is also of significant interest to clinicians and will form part of the review process.

Stream 2 — Facilitation of education, information sharing and practice improvement initiatives

Sharing a South Australian e-learning initiative

In Australia, mandatory accreditation of hospitals now includes specific requirements related to transfusion. Hospital policies, practice and systems are assessed against defined criteria that include the collection and labelling of specimens, administration of the blood component, appropriate prescribing and decision making, quality improvement and education.[3]

In 2006 the South Australia Department of Health funded the development of an online education package (e-learning) for clinical staff involved with the transfusion chain, including medical officers, nurses and midwives, and courier or porter staff that transport blood products.[4]

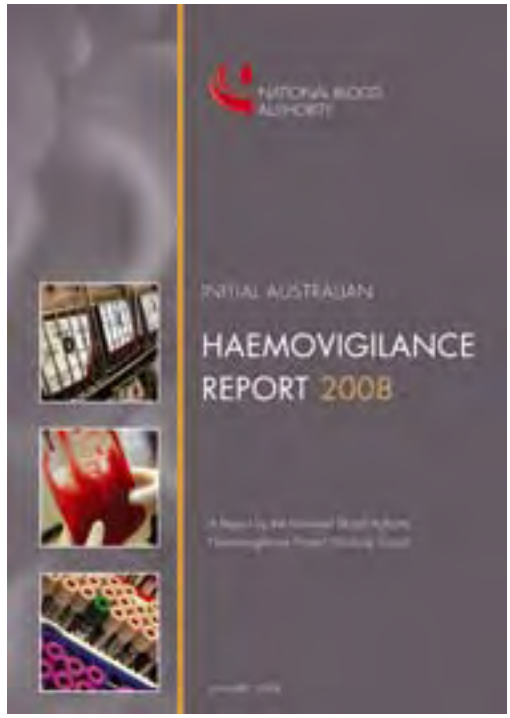
This e-learning tool has been successfully used within South Australia and significant interest has been expressed by other states and territories (and internationally). This interest led the NBA to work with South Australia Health to propose the assessment and development of appropriate governance arrangements to enable this tool to become a sustainable national tool. The project to determine these arrangements will commence from 1 July 2008.

Stream 3 — Improvements to systems

Publication of the *Initial Australian Haemovigilance Report*

In February 2008, the NBA published the *Initial Australian Haemovigilance Report* (see Figure 3.18) under the expert guidance and support of the National Haemovigilance Project Working Group and was subsequently endorsed by the JBC.

Figure 3.18 *Initial Australian Haemovigilance Report*



3 Australian Council on Healthcare Standards (ACHS): Standards and criteria for the Evaluation and Quality Improvement Program Version 4 (EQuIP 4). 2007 Accessible online at http://www.achs.org.au

4 Available for viewing online at http://www.bloodsafelearning.org.au

The Report outlines jurisdictional progress towards achieving improvements in transfusion safety through increased systems of vigilance and improved transfusion safety practices.

The Report also provides a synopsis of available jurisdictional and national data. Although there were variations in reporting periods and definitions, the broad types of transfusion risks in Australia were found to be similar to those of other countries that report transfusion adverse events, such as the United Kingdom, New Zealand, Sweden and Canada. A key observation relating to the more than 600 transfusion-related incidents reported over the past 3–5 years in Australia was that approximately 65% of reports involved procedural errors. These included patient misidentification, labelling errors, wrong blood in tube, prescription and dispensing errors, incorrect blood component transfused and ABO incompatibilities.

The Report makes the following recommendations:

- that governments support the establishment of an enduring national haemovigilance program
- that states and territories continue to align their reporting systems with the agreed dataset to create a comprehensive national minimum dataset.

In recognition of the prevalence of procedural errors, the Report recommended that state and territory governments consider:

- facilitating standardised training, development and proficiency testing
- performing procedural audits of near-patient activities
- actively encouraging compliance with universal specimen-labelling standards and patient identification standards
- that governments work collaboratively with clinical colleges and the ARCBS to scope, assess and, where appropriate, promote a stronger awareness and adoption of comprehensive patient blood management strategies to reduce risks associated with exposure to unnecessary transfusions.

The NBA is committed to facilitating the achievement of these recommendations in the coming years.

Stream 4 — Research, data and benchmarking to improve appropriate use of products

National Red Cell Utilisation Workshop

On 18 April 2008, the NBA conducted a National Red Cell Utilisation Workshop. The aim of the workshop was to facilitate sharing of existing data on current red cell use, to improve understanding of current red cell use and data collection methodology (including limitations).

Representatives from five jurisdictions and the ARCBS presented the methods and results of the investigations conducted into red cell use.

Table 3.8 outlines the five broad approaches used to look at red cell use in a range of jurisdictions.

Table 3.8 Types of red cell usage studies being undertaken within the states and territories

Model type	Methodology
Red cell survey	A random sample survey of red cell units considered the urgency of the transfusion, transfusion demographics and the clinical indication for usage.
Red cell audit	Undertook a paper-based audit process that assessed red cell utilisation against the 2001 Guidelines, for randomly selected patients.
Data linkage	A number of jurisdictions have undertaken data linkage processes that used information from various sources such as hospital records, pathology information and ARCBS data, allowing individual patient requirements to be cross-matched. These types of processes created rich data source that allows a variety of analysis to be undertaken.
Databases	Data was collected based on the guidelines and clinical information provided at the time of request for red cells. This database provides the ability to then report the information collected.
Market research	Interviews were conducted with 21 surgeons and registrars in various specialities (cardiac, orthopaedic, gastroenterology and anaesthetics) and split between rural and metropolitan areas, based on their perceptions and decision making with respect to blood transfusion.

Each of these models provides a varying degree of information about red cell use within Australia.

Red cells were found to be prescribed in a highly variable way across and within individual institutions, states and jurisdictions. Some institutions had much less variation in red cell prescribing than others. On investigation, these sites were found to have well-developed systems to inform and control blood prescribing practices. Highest volume use was found in cardiovascular, gastroenterology and haematological (malignant and nonmalignant).

Some key highlights from the data presented include:

- cardiovascular, haematology and digestive specialities were consistently the highest users of products
- a significant proportion of transfusions are inappropriate against guidelines
- limited correlation between comorbidities and transfusion
- significant use of product to treat pre-operative anaemic patients
- high variability of red blood cell use in elective surgery
- impact of the ageing population and demographics on the quantity of products used.

A round table discussion was held after the presentations that led the group to propose a number of recommendations for the NBA's consideration as a part of its broader work program. The NBA has committed to developing a multifaceted strategy, in collaboration with key participants at this meeting, to underpin improvements to red cell prescribing practices.

Market research into red cell prescribing practices for haemodynamically stable patients

Although red blood cell transfusions are an important part of the treatment of some haemodynamically stable patients, there is evidence to suggest that a number of transfusions in such settings are inappropriate. Some patients are being exposed unnecessarily to the risks associated with transfusion. The NBA and the Clinical Excellence Commission in New South Wales jointly funded market research to inform the development of state and national communications strategies. These will aim to enhance prescriber compliance with the NHMRC and ASBT guidelines on the use of blood components and to reduce the number of unnecessary or inappropriate prescriptions for red blood cell transfusions.

In summary, the research reached six conclusions:

- Haemoglobin levels were the key indicator used when prescribing blood, especially when this indicator reached 8 g/dL.
- Doctors typically prescribe a minimum of two units; few doctors were able to offer evidence-based support for this aspect of blood prescription.
- Doctors felt confident in prescribing blood, or as confident as any other aspect of their practice — blood prescription was not seen to be exceptional to other 'normal' aspects of clinical practice.
- Doctors generally reported that they made transfusion decisions individually rather than in consultation with others, although consultation on more complicated cases was not uncommon: registrars reported that they conferred with their consultants if they felt a case was borderline, and some practitioners reported that they consulted with haematologists and anaesthetists, who are seen as the experts in blood component therapy.
- When asked how they would feel if someone questioned their decision to prescribe blood, doctors indicated that they were open to questioning by colleagues regarding 'legitimate' concerns. It was clear, however, that there was some resistance to having their clinical judgment queried, although they may be happier to be questioned by more senior or specialised staff.
- Generally, doctors reported that they believed patients were comfortable with the process of red blood cell transfusion (with the obvious exception of Jehovah's Witnesses). The doctors were asked about the necessity of the transfusion and blood-borne infections, such as HIV and hepatitis. Practitioners said that they were generally proactive in supplying information to patients. Importantly, doctors did say that they would be open to influence if patients expressed genuine concerns about transfusion.

In light of the above findings, in May 2008 the New South Wales Clinical Excellence Commission and the NBA agreed to co-fund further research to develop communications strategies and key messages to enhance appropriate prescribing of blood for haemodynamically stable patients.

Blood Measures — a collaborative project between the National Blood Authority and the Australian Red Cross Blood Service

Despite a number of clinical practice guidelines regarding blood transfusion, there is still wide variation in use, both internationally and domestically, within countries, regions and even within hospitals. Learning about the variation in use is vital to understanding clinical demand and therefore ensuring supply. Within Australia, there have been a number of separate initiatives to investigate product use; however, each of these projects has developed independently with different motivations, aims, methodologies and outcomes. Comparison between outcomes of these projects is difficult due to the differences in data types, definitions and methodologies.

Blood Measures aims to achieve widespread use by those involved in the collection of blood use data by:

- a set of standard parameters that are indicators of appropriate blood and blood-related product use across a range of clinical scenarios
- consistent data management techniques that will enable the data collected on the use of blood and blood-related products to be used to promote best practice and provide data for registry and research purposes.

Chaired by Professor James Isbister (consultant in haematology and transfusion medicine), and with participants coming from a wide range of clinical backgrounds, the National Blood Measures Working Group is developing a national guide outlining suggested standard measures and definitions which can be used in any study of blood and blood-related products.

3.6 Supply and data management

National Supply Plan and Budget

The NBA plays the key role in coordinating an annual National Product List and National Supply Plan and Budget for approval by Health Ministers. As part of its role in managing the supply of blood and blood-related products, the NBA is responsible for:

- collecting data on products issued and reporting to jurisdictions against the approved supply plan
- making improvements to the national supply planning process
- monitoring the balance between supply and demand throughout the year
- intensively managing products in short supply.

The National Supply Plan and Budget for 2007–08 was $680.7 million as approved by the AHMC in March 2008 for the supply of blood and blood-related products. The actual demand for 2007–08 and funding by all jurisdictions was $703.0 million. This represents a $22.3 million increase, or 3.2%.

Move to universal leucodepletion of red cells

Leucodepletion is the removal of white blood cells (leucocytes) from red blood cells and platelets by filtration. This is done to decrease the likelihood of a patient experiencing an adverse reaction or event. In 2006–07, the AHMC gave in-principle support for the introduction of universal leucodepletion of red blood cells and platelets by 2010–11. In 2007–08, the ARCBS leucodepleted 27.6% of red blood cells and 87.1% of platelets nationally (see Figures 3.2 and 3.3). In April 2008, the AHMC approved bringing forward implementation of universal leucodepletion of red blood cells and platelets to 2008–09. This was achieved through the NBA's coordination across jurisdictions and with the ARCBS on the cost and timing implications.

Universal bacterial contamination testing of platelets

Platelet components are stored at room temperature for up to five days and, as such, provide a natural growth medium for bacteria that may have been introduced through skin puncture or an underlying bacterial load from the donor. When the platelets are transfused into a patient, who may be immunocompromised, there is potential for septic complications. In April 2008, the ARCBS implemented universal bacterial contamination testing of platelets in accordance with the 2006–07 AHMC in-principle support for its introduction.

Table 3.9 Issues of blood products 2006–07 and 2007–08

Non Fresh Blood Products		2006–07	2007–08	Variance
Total Albumin	gms	5 310 878	5 829 292	9.8%
Total IVIg	gms	1 898 527	2 152 678	13.4%
Total Factor VIII	IU	116 012 250	131 984 750	13.8%
Total Factor IX	IU	18 422 500	21 322 500	15.7%
Total Rh (D)	IU	68 561 175	68 777 800	0.3%
Hepatitis B	IU	2 252 200	2 109 300	–6.3%
Normal Immunoglobulin	mls	13 920	16 280	17.0%
Tetanus	IU	1 498 250	1 357 250	–9.4%
CMV Immunoglobulin	vials	2 370	2 421	2.2%
Zoster 1g 2ml	vials	2 788	2 131	–23.6%
Prothrombinex-VF	vials	16 782	21 202	26.3%
Thrombotrol-VF	vials	469	993	111.7%
Ceprotin	IU	10 000	20 000	100.0%
Recombinant Factor VIIa	mgs	26 119	16,570	–36.6%
FEIBA inhibitor Treatment	IU	2 202 500	4 121 500	87.1%
Factor XI	IU	75 325	39 380	–47.7%
Factor XIII Concentrate	IU	110 000	149 750	36.1%

Fresh Blood Products		2006–07	2007–08	Variance
Total Whole Blood Products	Unit	1 145	801	–30.0%
Total Red Blood Cells	Unit	777 972	768 919	–1.2%
Total Platelets (Adult Doses)	Adult Doses	113 579	116 665	2.7%
Total Clinical FFP (Adult Doses)	Adult Doses	145 874	144 987	11.0%
Total Cryoprecipitate	Unit	49 333	51 957	5.3%
Total Cryo-depleted	Unit	12 321	14 487	17.6%
Other Products	Unit	8 705	6 371	–26.8%
Plasma for fractionation	Kgs	329 331	352 781	7.1%

Sector information management and data strategy

There is a substantial amount of data available within the blood sector; however, there is no coherent information systems architecture integrating and serving the blood sector as a whole.

The National Blood Agreement

Under the National Blood Agreement, there are two primary policy objectives for the Australian blood sector.

To provide an adequate, safe, secure and affordable supply of blood products, blood related products and blood related services in Australia

To promote safe, high quality management and use of blood products, blood related products and blood related services in Australia.

To meet these obligations, given the wide range of information systems within the sector, the NBA has developed a sector information management and data strategy (SIMDS) this year. The primary objectives of the SIMDS are to provide a framework which supports the development of information management systems and the generation of data on blood and blood-related products that contribute, in a cost effective way, to:

- improved clinical outcomes
- improved cost-effectiveness and use of products
- a secure supply.

There are a number of approaches that could be taken in moving forward with sector data management. In the past, it has been common to attempt to build and impose large, national, integrated systems into an existing environment. Historically, this approach has been very costly and has had limited success.

A second philosophy has been the incremental approach, where system development is undertaken on an 'as needed' or 'incremental' basis. This involves understanding the existing environment, identifying gaps within it and developing systems to fill those gaps. To date, this has largely been the approach within the blood sector.

An alternate approach is to gain consensus on the data sets, requirements and standards needed to allow the collection of that standardised data through a diversity of systems. The 'standard requirements' approach proposes developing standards and a framework for achieving the information needed without necessarily having to build an information technology (IT) system. With this approach, jurisdictions and other stakeholders are able to collect the required data in ways that suit their business processes, yet the standards placed on the dataset means that national compilation of the data is possible. The SIMDS proposes a 'standard requirements' approach, as well as the use of incremental nationally sanctioned systems where needed.

JBC has agreed to the NBA developing a SIMDS to help guide a national approach to blood sector data. This will include using the strategy to set priorities applying the criterion developed within it to determine when national systems should be developed and when data should be gathered from existing systems.

Australian Bleeding Disorders Registry

In collaboration with a range of sector stakeholders, the NBA made significant progress on a project to redevelop the ABDR. The primary purpose of the redeveloped ABDR is to collect data that will contribute to improvements in the treatment and care of people suffering from bleeding disorders. This will occur on a range of fronts, delivering new capabilities for everyone involved in treating bleeding disorders. The ABDR will facilitate the collection of information which will be used to:

- build an accurate demographic profile of bleeding disorders in Australia
- keep clinical information such as treatment, bleed frequency, joint health, pathology, radiology, genetic mutation and others to provide information for assessment of treatment outcomes to improve care
- understand product use by diagnosis and enable governments to undertake supply planning and demand forecasting to secure an ongoing supply of clotting factor product.

Overseas supply of blood products

Under the National Blood Agreement, blood and blood-related products manufactured in Australia may be supplied for the personal use of Australian citizens travelling overseas and for humanitarian aid and disaster relief.

A policy for the provision of product overseas was endorsed by the AHMC in 2006–07 and the provision of these products is managed by the NBA, as set out in the National Blood Agreement.

In addition to those travelling or studying overseas, the NBA also facilitates the supply of blood and blood-related products for those Australians serving overseas and in international waters, such as the Australian Defence Force (ADF), Australian Customs Service (ACS) and the Australian Antarctic Division (AAD).

Australian Bleeding Disorders Registry (ABDR)

The NBA is particularly proud of its part in the redevelopment of the ABDR throughout 2007–08. The project, initiated in late 2006 (but starting in earnest in early 2007), has made marked progress. The redeveloped ABDR is expected to go live across all haemophilia treatment centres at the time this annual report is likely to be published in November 2008.

From its inception, the project has been an unprecedented example of collaborative effort and exercise in consultation. The project is overseen by a steering committee with clinical, patient and government representation. The key clinical organisation, the Australian Haemophilia Centres Directors' Organisation (AHCDO), and haemophilia patient organisation, Haemophilia Foundation Australia (HFA) are represented. In fact, the chair of the Steering Committee is one of two AHCDO representatives: Dr John Rowell from the Royal Brisbane and Women's Hospital in Queensland. To develop the statement of user requirements, Project Officer Ms Elizabeth Arnold conducted over 80 interviews across the sector encompassing government, clinicians, physiotherapists, social workers, nurses, data managers, transfusion medicine scientists, suppliers and 14 of the 16 haemophilia treatment centres across Australia. This developed a precise, comprehensive list of needs.

The level of consultation did not stop there. Representatives from key stakeholder organisations were involved in the development of the system, including representatives from AHCDO, the Australian Haemophilia Nurses Group, ARCBS and jurisdictions. Genix Ventures were the successful contractor and commenced system development in January 2008, conducting a workshop with all stakeholders. A reference group consisting of clinicians, nurses, data managers, physiotherapists, social workers, HFA and the NBA from across Australia have, and are, reviewing each reiteration to ensure the finished system meets the sector's requirements in detail.

Due to the efforts of everyone in the bleeding disorders community, the ABDR is an example of collaboration at its best. The project reiterates the theme of World Haemophilia Day 2008, Count Me In. This event focuses on identifying and registering people with bleeding disorders and aims to deliver a world class system that meets the needs of all involved. It is well on its way to achieve this.

Overseas supply of blood products

Since its inception, the NBA has been involved in the supply of blood products and blood-related products to both Australian residents overseas and to non-Australian residents in the case of emergency or for humanitarian aid and disaster relief.

The supply of haemophilia products to Australian residents that are temporarily overseas allows those patients to conduct their lives to the fullest extent, safe in the knowledge that they have access to the same support that is extended to them when they are living at home. The NBA also facilitates the supply of blood products and blood-related products for those Australians serving overseas and in international waters, such as the Australian Defence Force (ADF), Australian Customs Service (ACS) and the Australian Antarctic Division (AAD).

Australia is widely recognised as a leader in the provision of humanitarian aid and disaster relief in the Pacific region, providing support services, financial aid and much needed medical and other supplies. In recent years, the NBA has supported these efforts through the supply of tetanus immunoglobulin to the Solomon Islands and Indonesia in response to the tsunami and devastating earthquake, respectively. As well as these coordinated efforts, the NBA, with the assistance of the Australian Red Cross Blood Service (ARCBS), has also approved the supply of products to our neighbouring countries to provide lifesaving or life-preserving aid on a much smaller scale. Recent examples include the provision of Rh(D) immunoglobulin to a patient who was 34 weeks pregnant in Papua New Guinea, Hepatitis B immunoglobulin to East Timor and Rh(D) immunoglobulin to Indonesia.

Following a minor change to the National Blood Agreement to allow supply of product overseas under the National Blood Arrangements, Jurisdictional Blood Committee (JBC) has now agreed to the funding mechanisms that will allow for greater equality between the states and territories when it comes to funding the various situations of supply overseas. Together with a recently endorsed internal NBA process, and a joint arrangement on overseas supply with ARCBS, the NBA will continue to make available the same products and services for Australian residents travelling or serving overseas, and in response to requests for humanitarian aid and disaster relief.

Review of distribution arrangements for blood products

In June 2008, the NBA advertised a request for tender for the Review of Distribution Arrangements for Blood Products (see Table 3.10). The NBA anticipates that the successful respondent will be appointed in September 2008 and tasked to deliver their recommendations in 2009.

The Review of Distribution Arrangements for Blood Products is an outcome from the Australian Government's consideration of the Review of Australia's Plasma Fractionation Arrangements (Plasma Fractionation Review[5]; PFR). The PFR was submitted to the Australian Government on 13 December 2006 and recommended, among potential areas for improvement, the optimisation of the distribution of blood products, particularly between the ARCBS and CSL Ltd Bioplasma. In response, governments endorsed a work strategy for the NBA to undertake the recommended Review of Distribution Arrangements for Blood Products in 2008.

Table 3.10 Terms of Reference for the Review of Distribution Arrangements for Blood Products

The 2006 Review of Australia's PFA suggested there may be scope to improve the efficiency and effectiveness of current blood product distribution arrangements, particularly between the ARCBS and CSL Ltd Bioplasma. It recommended that the NBA should initiate a review. This recommendation was endorsed by the AHMC in 2007.

The aim of the Review is to identify improvements to the distribution arrangements for blood products by examining the current system, comparing it with best practice and identifying areas of improvement.

The Review should describe the current distribution system, and in doing so:

- consider the links between the approval process and distribution
- assess the costs, efficiency and effectiveness of the current system
- prepare a formal analysis of the supply chain requirements of different users
- assess risks in the current system and potential mitigation strategies
- quantify improvements that could be made in better achieving the objectives of the National Blood Agreement.

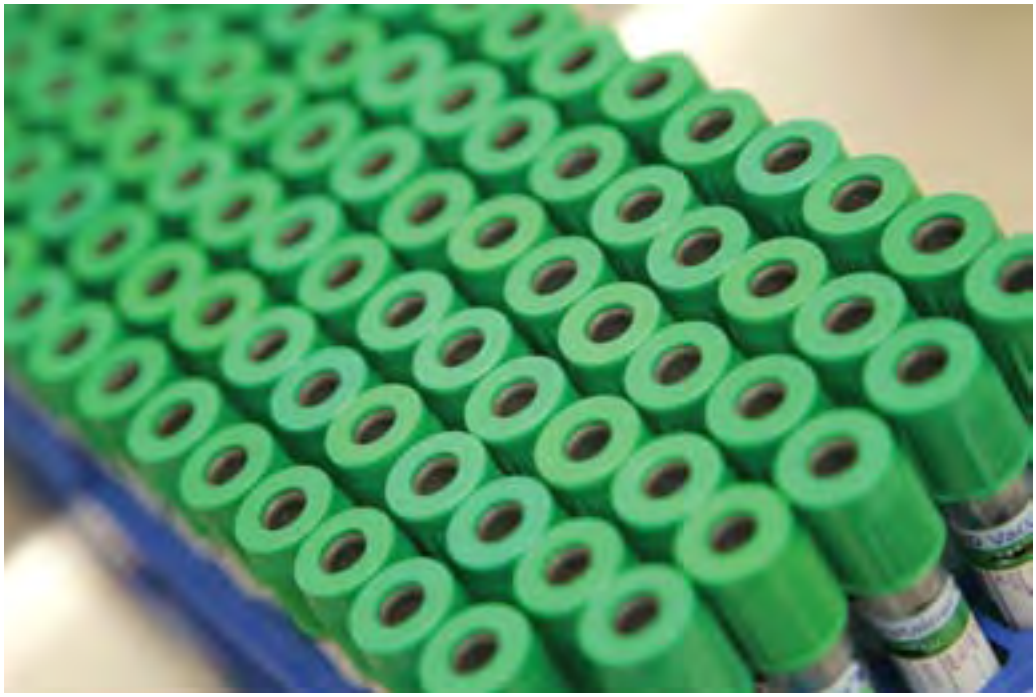
In undertaking the work of the Review and providing recommendations, the Review should also consider the potential for the number of stocking points and stock levels, inventory target levels and the adoption of multiple distribution channels to either positively or negatively contribute towards improving the current system.

The Review should identify an implementation strategy for any recommended improvements.

5 http://www.health.gov.au/internet/main/publishing.nsf/Content/plasma-fractionation-review-overview.htm

Progression of barcoding policy

In 2006–07, the JBC agreed to the national implementation of a barcode standard of ISBT 128 for all fresh blood products and GS1 128 (formerly EAN 128) for all plasma, recombinant and diagnostic products by 1 July 2011. Since that time the NBA has been consulting with jurisdictional representatives and the ARCBS in order to provide assistance in the implementation of the policy. Projects have now been developed to assist in the implementation, and during 2008–09 these will be trialled to inform the wider sector implementation plan.



3.7 Budget and financial management

The NBA is an Australian Government agency that must comply with the *Financial Management and Accountability Act 1997*. During the year, the NBA met all of the Department of Finance and Deregulation's monthly reporting deadlines and implemented policies and procedures to further improve budgeting processes as specified by the department. These included:

- development and refinement of finance procedures in line with Australian Government requirements and best practice
- review, revision and application of Chief Executive's Instructions and the instrument of delegation
- refinement of internal travel policies.

Integrated data management system

In 2007–08, the NBA implemented an integrated data management system. The system provides the NBA with an integrated capability for facilitating the supply management of blood and blood-related products across core functional areas including:

- budgeting and forecasting supply and demand of blood and blood-related products
- tracking inventory
- contracting administration
- reporting obligations.

The integrated data management system has been designed to facilitate further development of the National Supply Plan and Budget process and move towards multiyear budgeting and demand and supply planning.

Financial statements

The NBA aspires to produce unqualified financial statements each year with categories that are rated no higher than B. This year, the NBA has unqualified statements and no Category B findings.

3.8 Sector risk management

The NBA has approached the management of sector risk through several strategies, including the National Blood Supply Contingency Plan (NBSCP), sector risk coordination and appropriate stocking and the management of the national reserve.

National Blood Supply Contingency Plan

In August 2007, the JBC endorsed a draft of the NBSCP. In line with business continuity or emergency management approaches, this plan was tested through a desktop exercise in September 2007.

This was the first national exercise to test the governments' preparation in the event of a blood supply crisis. It confirmed that the framework for decision making, broad roles and responsibilities of the key players was adequate to manage the activities required as part of the exercise. Despite this, it highlighted a need to make some operational improvements in how the NBSCP was implemented.

On 18 April 2008, the NBSCP was endorsed by Health Ministers, after consideration and support by a range of relevant committees, including AHMAC, Australian Health Protection Committee (AHPC) and the CTEPC.

An appropriate communication strategy for the NBSCP was developed in consultation with the jurisdictions that aim to:

- engage the clinical community, as they will play a key role managing the limited availability of product through determining treatment requirements of patients, through the implementation of governance arrangements that support appropriate blood management and provide a framework to manage product use during a crisis
- ensure appropriate linkages with jurisdictional emergency management arrangements.

Further work will be required during 2008–09 to communicate and implement the NBSCP, as well as to ensure that appropriate operational processes are put in place so that timely and accurate information to stakeholders is provided in the event the plan is activated. The NBA will also consider and commence work on additional response annexes, such as a transfusion transmitted infection annex.

National Blood Supply Contingency Plan

The National Blood Supply Contingency Plan (NBSCP) outlines the planning, preparation, governance and decision making, response and recovery frameworks for a supply shortage or increased product requirement due to a demand surge.

The Plan was endorsed by the Health Ministers on 18 April 2008 and incorporates the careful networking and collaboration with sector wide stakeholders. This consultation process has ensured that the NBSCP is appropriately integrated and linked with the national health emergency arrangements. It details three levels of accountability

Nationally, the NBA is responsible for the overall management of the plan, but is primarily the conduit between governments' decisions and suppliers. The Australian Health Protection Committee (AHPC) becomes involved in decision-making when actions required impact on the capacity of the health sector to maintain normal practice or where blood sector involvement is required during a broader health sector issue. The Therapeutic Goods Administration (TGA) is responsible for elements that affect or are related to the regulation of blood and blood-related products.

Operationally, suppliers of products are responsible for managing inventories and reserves, reporting, donor recruitment and management, collection, manufacture, equitable distribution and interface with the clinical community, as well as implementation of government decisions.

Clinically, governments cannot predetermine the treatment of patients requiring blood and blood-related products. Hospitals, clinicians and pathology providers will have a vital role in assessing the patient requirements in the context of individual needs and the capacity of their facilities to provide treatment. The Plan encourages institutions to establish governance arrangements and emergency blood management plans with strong triage and vetting processes to support clinical decision making that is built on effective integration between hospitals and pathology services.

To supplement the NBSCP, a range of specific annexes have been prepared to outline the triggers and roles and responsibilities of the major stakeholders for a specific product group or event. At this stage, two response annexes have been developed: red blood cells and plasma-derived and recombinant products.

Sector risk coordination

During 2007–08 the NBA has continued to work with the Office of Health Protection, a unit of the Department of Health and Ageing, to ensure continual linkages with broader health sector emergency management arrangements.

Key elements of this work included:

- continuing the NBA's role on the health infrastructure assurance advisory group
- working on the process and draft of the Blood Supply Annex to the Australian Health Management Plan for Pandemic Influenza (AHMPPI)
- observing and participating in several national exercises that were designed to assess at the broader health sector's preparedness in emergency situations.

National reserve

The NBA contracts with CSL Ltd to manage a national reserve of the plasma products it produces, as well as supplying certain imported plasma-derived products. The national reserve is held at locations around Australia for contingent use. In 2007–08, the contractual arrangements for the management of the national reserve were renegotiated for a further two years.

3.9 Corporate performance

The NBA successfully implemented a number of internal improvement projects designed to improve our stakeholder engagement and overall capabilities, risk management and effective use of ICT. We regularly monitor our performance against internal goals set in our 2007–08 Operational Plan. This includes our performance related to JBC and Board support and broader government compliance and policy expectations in the areas of customer service and ecologically sustainable development. Performance outcomes in these areas are detailed in this section.

2007–08 Operational Plan performance

Of the 64 elements in the 2007–08 Operational Plan, 54 were completed on time, and a further eight have, or will be, completed with a minor time delay.

In 2007–08, the NBA further refined its monthly performance reporting to include an overarching scorecard, which is considered by executive management monthly and quarterly and by the Board at each meeting.

2008–09 Operational Plan

In January 2008, the NBA commenced its operational planning for 2008–09. Prior to the annual executive planning workshop, held in April 2008, each of the teams within the NBA developed business plans to detail their work priorities and key projects for 2008–09. At the executive planning workshop, these work plans were considered and strategies for enhancing stakeholder engagement discussed. The priorities articulated in the 2008–09 Operational Plan align with the overarching objectives of the 2006–09 Corporate Plan. The NBA Board endorsed the 2008–09 Operational Plan in April 2008.

Stakeholder strategy

To ensure effective engagement with stakeholders and the clinical community, the NBA started work in 2007–08 to formalise our approach to stakeholder engagement. The strategy acknowledges that we have a range of objectives for engaging with stakeholders, including:

- developing understanding and support for the strategic intent of the NBA
- managing risks associated with changes and directions requested by governments
- ensuring up-to-date and credible policy advice to governments
- building credibility for the NBA in addressing the things that really matter for the sector
- providing clear and demonstrable public accountability for the directions and priorities pursued
- informing decisions and ensuring more effective program delivery.

Emerging from the effective engagement with key sector partners to date, this strategy provides employees with an overview of the NBA's existing relations and provides a framework for engaging with new stakeholders as they are identified. The range of stakeholders that the NBA engages with encompasses both the blood sector specific and broader health areas. In particular the NBA seeks to align blood reform with the broader health reforms, through effective relationships

with agencies such as the Australian Commission on Safety and Quality in Health Care. The strategy is designed to ensure careful consideration and consistent discipline in our assessment and relationship with each and every stakeholder. Importantly, the strategy acknowledges that the contribution of each stakeholder may differ depending on the activity underway. The strategy provides an appropriate set of tools that staff can use to document and assess these requirements.

The stakeholder engagement plan will be reviewed annually as part of our operational planning and risk assessment processes and will form part of NBA's KBPs.

Capability strategy

During 2008–09, the NBA took time to consolidate a detailed consideration of the capabilities they require to deliver on their responsibilities at a consistently high standard. Following advice and input from the Board, a detailed staff survey assessed views on those activities that would achieve the maximum impact on our capabilities. A number of activities were designed and are now in various stages of implementation to build capabilities in each of these areas.

For example, in the area of maximising the knowledge available to the NBA, we have:

- implemented a project to assess options on how best to search our electronic documents, including assessment of a system search tool and a scoping study on the implementation of an electronic document and records management system (EDRMS)
- instigated an international network to share information on plasma supply and planning, which has been warmly welcomed and will meet for the first time in early 2009
- taken a more proactive approach to engaging with stock analysts to gain a fuller understanding of international product trends and pricing
- formalised programs under which blood product suppliers are contractually obliged to provide the NBA with knowledge updates
- developed and implemented a core research project to establish key questions and knowledge areas that the NBA needs answers to or requires information about (ie new products in company pipelines).

Activities designed to further build our capabilities are also undertaken in the areas of:

- recruiting and retaining staff to apply efficient and known processes and knowledge
- maximising the use of business systems and processes
- building effective engagement with stakeholders
- ensuring a capacity to constantly improve and measure performance.

Risk management

The National Blood Authority has a strong commitment to risk management, demonstrated through the inclusion of risk management concepts and activities in our daily operations. Over the past year this has included:

- revision of KBP 7 – The NBA's Risk Management Policy and Framework and Risk Management Process
- biannual review of NBA's Strategic Risk Management plan
- development of risk management plans for significant projects and
- participation in the annual Comcover Risk Management Benchmarking Program.

Participation in the 2008 Comcover Risk Management Benchmarking Survey resulted in the NBA gaining the same overall benchmarking score as in 2007, with an overall score of 6.7 out of a possible 10. This score puts the NBA at the level of 'Comprehensive' indicating a high level of competency in implementing an enterprise wide risk management framework.

A key element of our risk management is our business continuity planning and in November 2007, the NBA received a Highly Commended award in the 2007 Comcover Awards for Excellence in Risk Management for the implementation of the NBA's Business Continuity Plan.

Jurisdictional Blood Committee and Board secretariat

Under the terms of the *National Blood Authority Act 2003*, the NBA is required to provide secretariat services for the JBC and the NBA Board. During 2007–08, the JBC held four face-to-face meetings and one teleconference while the NBA Board met on four occasions. Secretariat support included preparing papers, coordinating meetings, monitoring and updating progress against agreed work plans and providing liaison between the NBA and members of these committees.

Key performance indicators set by the NBA relate to the quality and timeliness of support provided to the JBC. Table 3.11 shows progress in achieving these indicators.

Table 3.11 NBA Performance indicators for JBC support, 2007–08

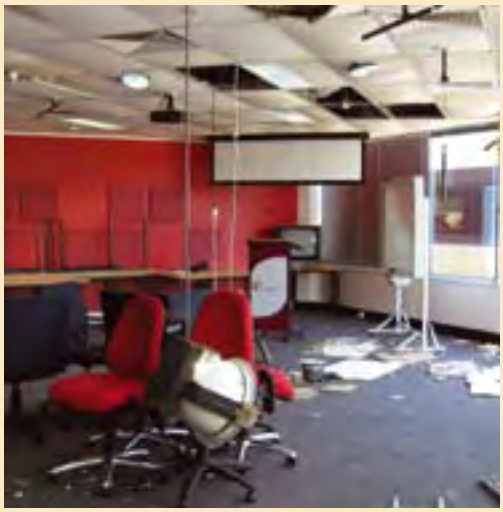
Meeting	% of papers prepared by the NBA provided to JBC (seven days prior to the meeting)	% of recommendations in NBA papers agreed by the JBC
30 August 2007	100	98
29 November 2007	95	93
21 and 22 February 2008	95	89
17 April 2008	100	100
16 May 2008	100	97

Comcover Award for Risk Management

The NBA has a strong culture of risk management incorporated into the everyday activities of the organisation. Reflecting this, the NBA has developed a business continuity plan (BCP) to ensure critical services can be delivered in the face of a natural disaster.

Just one week before the NBA was scheduled to undertake a desktop exercise to test the recently finalised BCP, the NBA's premises were destroyed by flooding from a severe hailstorm.

At 3:00 am on Wednesday 28 February 2007, the NBA activated its BCP. Two and a half days later, the NBA had relocated to alternate premises, information technology systems were up and running and successful negotiations for a contingent supply of plasma-derived factor VIII had been concluded. The response to the emergency demonstrated the NBA's organisational efficiency and ability to continue functioning effectively during an emergency.



As a result of the BCP implementation, the NBA received a highly commended award in the Comcover 2007 Awards for Excellence in the risk initiative category. This category considers demonstrated excellence in risk management as it relates to a specific agency program or project.

Successful implementation of the BCP has provided short and long term benefits. In the short term, immediate business obligations were met with the suite of normal business functions operational within 14 business hours, during which time staff and stakeholders were kept well informed.

In the longer term, the NBA's evident approach to risk management has increased our credibility amongst key stakeholders in blood sector wide and broader health sector contingency planning. The agency's internal culture has also been strengthened, reflected by greater levels of trust and respect amongst staff and willingness to adopt a team approach to resolving key business issues.

Information communication technology

The NBA's Information Communication Technology Refresh was completed in 2007–08. This has enabled the NBA to assess future priorities for information management and develop a detailed plan for maximising the application of this technology.

The NBA launched its new website in February 2008. This user-friendly site is designed to be a tool for clinicians, stakeholders and the general public. It contains links to a range of guidelines either put forward by the NBA or in relation to appropriate blood use. It also provides information on the role, objectives and projects undertaken by the NBA.

Customer service charter

The NBA is committed to providing a professional, high quality and efficient service to clients, stakeholders and the general public in accordance with the *Public Service Act 1999*. Our roles and responsibilities in dealing with external clients, and their rights in dealing with us, are articulated in the NBA's Customer Service Charter, which was developed in early 2007.

During the year, the NBA received 29 feedback responses. Of these, 100% were positive responses. The feedback received was wide ranging and included strong support for the IVIg Criteria to applauding innovative supply arrangements. The NBA addressed any issues in line with the Charter's requirements.

The Customer Service Charter is available on the NBA website (http://www.nba.gov.au).

Communications

The NBA produced a range of publications in 2007–08. The most notable were the:

- *Criteria for the Clinical Use of Intravenous Immunoglobulin (IVIg) in Australia*
- *Initial Australian Haemovigilance Report*
- *Fresh Blood Products: Products Benchmarking and Demand Drivers Report.*

Ecologically sustainable development

Furthering its commitment to ecologically sustainable development during the year, the NBA committed to minimising its carbon footprint created from fleet vehicles and interstate and international travel by having signed up to GreenFleet's carbon offsetting program. Half of the NBA fleet vehicles are powered by liquid petroleum gas and fuel efficiency has been a key consideration when replacing fleet vehicles.

The NBA has also sought to hold teleconference meetings in preference to face-to-face meetings when feasible. This reduces the amount of travel undertaken by interstate parties, further helping to minimise the carbon footprint of the NBA's operations.

Within the NBA premises, the installation of movement sensors and changing all lights to be on timers minimises electricity consumption outside business hours. The NBA is also currently trialling energy efficient light fittings in certain areas of its office.

Recycling is another area in which the NBA has sought to improve its performance. A recycling contract has been extended to ensure the continued provision of recycling services for office paper, cardboard, aluminium, plastic containers, printer consumables, telecommunication handsets and batteries. The NBA now purchases 100% recycled A4 paper for all office printing.

Continuous improvement framework

Through the regular internal monthly consideration of performance improvement strategies, the NBA instigated a range of initiatives to enhance the efficiency and compliance of our operations. These activities specifically focused on a range of simple IT functionality improvements, documentation of corporate procedures, corporate training priorities and more efficient management of internal and external stakeholders' meetings.

Our internal audit program and fraud control activities provide further reassurance on the effectiveness of our compliance framework, and through these activities improvements were instigated in:

- documentation of non-blood procurement procedures
- documentation of corporate procedures, including payroll and leave management
- information technology
- physical and personnel security arrangements.

In addition, the NBA has maintained close monitoring of progress against required actions in our Fraud Control Plan and has maintained the application of appropriate fraud prevention, detection, investigation, reporting and data collection procedures and processes consistent with requirements of the Commonwealth Fraud Control Guidelines. The current fraud risk assessment and control plan will be updated by October 2008.