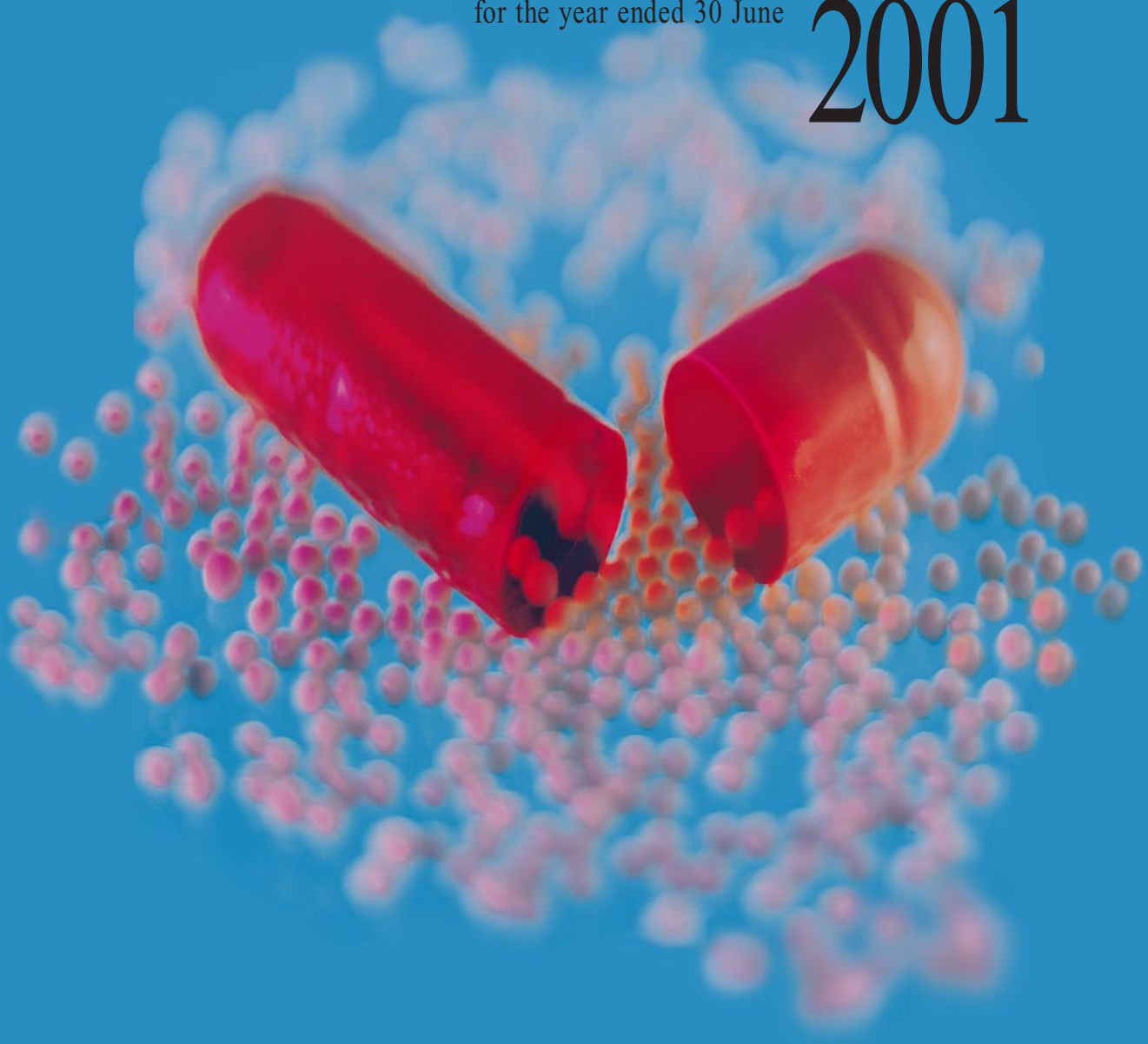
PHARMAC
Pharmaceutical Management Agency

Annual Review

for the year ended 30 June 2001



PHARMAC

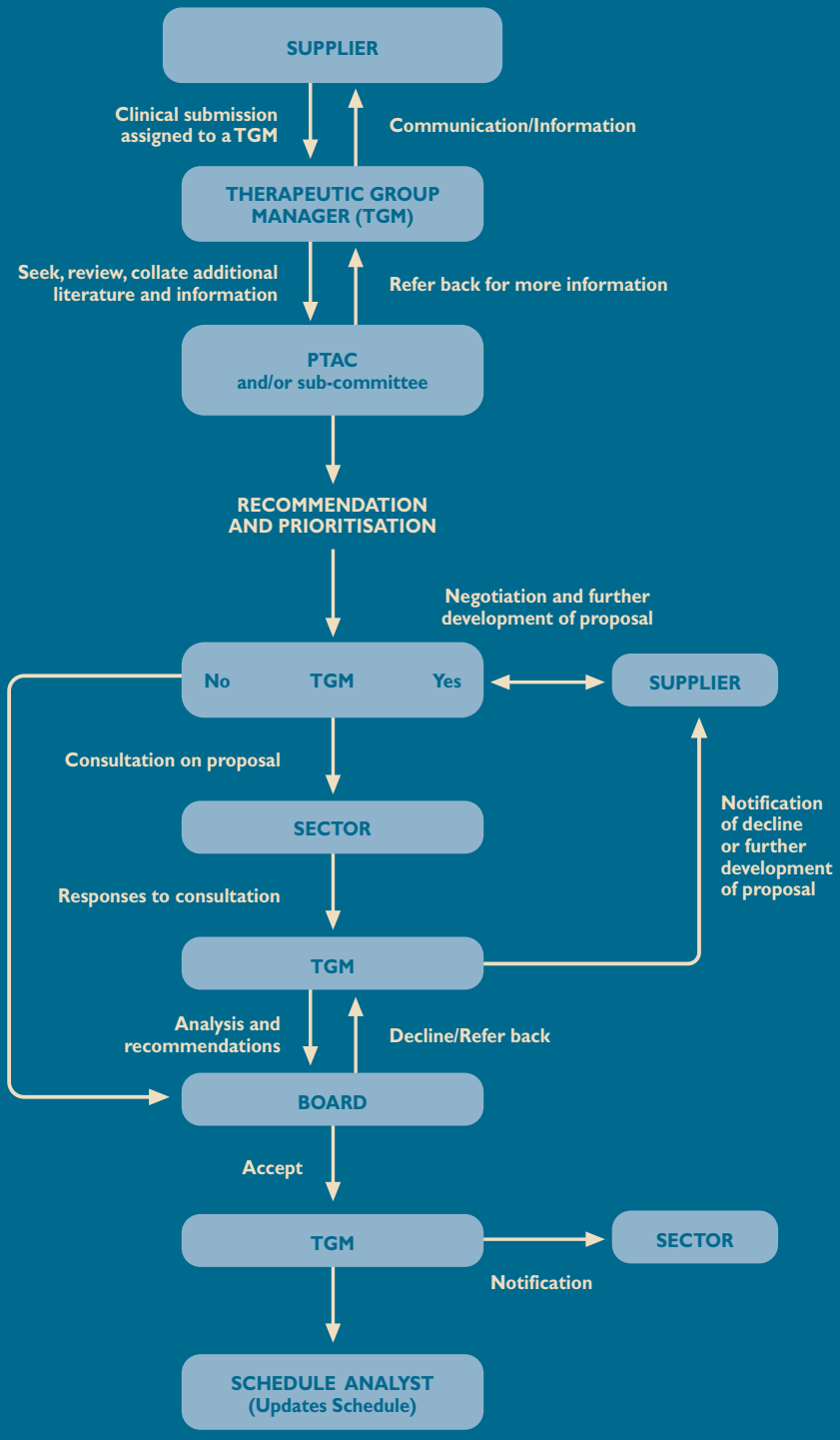
(the Pharmaceutical Management Agency) is a Crown entity established under the New Zealand Public Health and Disability Act. Its statutory objective is to secure for those in need of pharmaceuticals the best health outcomes that are reasonably achievable from pharmaceutical treatment within the amount of funding provided. PHARMAC's primary function is to manage the national Pharmaceutical Schedule, which is a list of over 3,000 prescription drugs and related products that are subsidised by the Government. The Schedule applies consistently throughout New Zealand and is updated monthly.

The Schedule records the price of each drug, the subsidy it receives from public funds and the guidelines or conditions under which it may be funded.

The PHARMAC Board makes the final decisions on subsidy levels and prescribing criteria and conditions with independent advice from medical experts on the Pharmacology and Therapeutics Advisory Committee (PTAC) and advice from its specialist sub-committees, and PHARMAC's managers and analysts.

In all its decisions PHARMAC seeks to balance out the needs of patients for equitable access to healthcare with the needs of taxpayers for responsible management of the costs they ultimately bear.

Process for listing a new pharmaceutical on the Pharmaceutical Schedule



The process set out in the diagram above is intended to be indicative of the process that may follow where a supplier wishes to list a new pharmaceutical on the Pharmaceutical Schedule. PHARMAC may, at its discretion, adopt a different process or variations of this process.

Inside

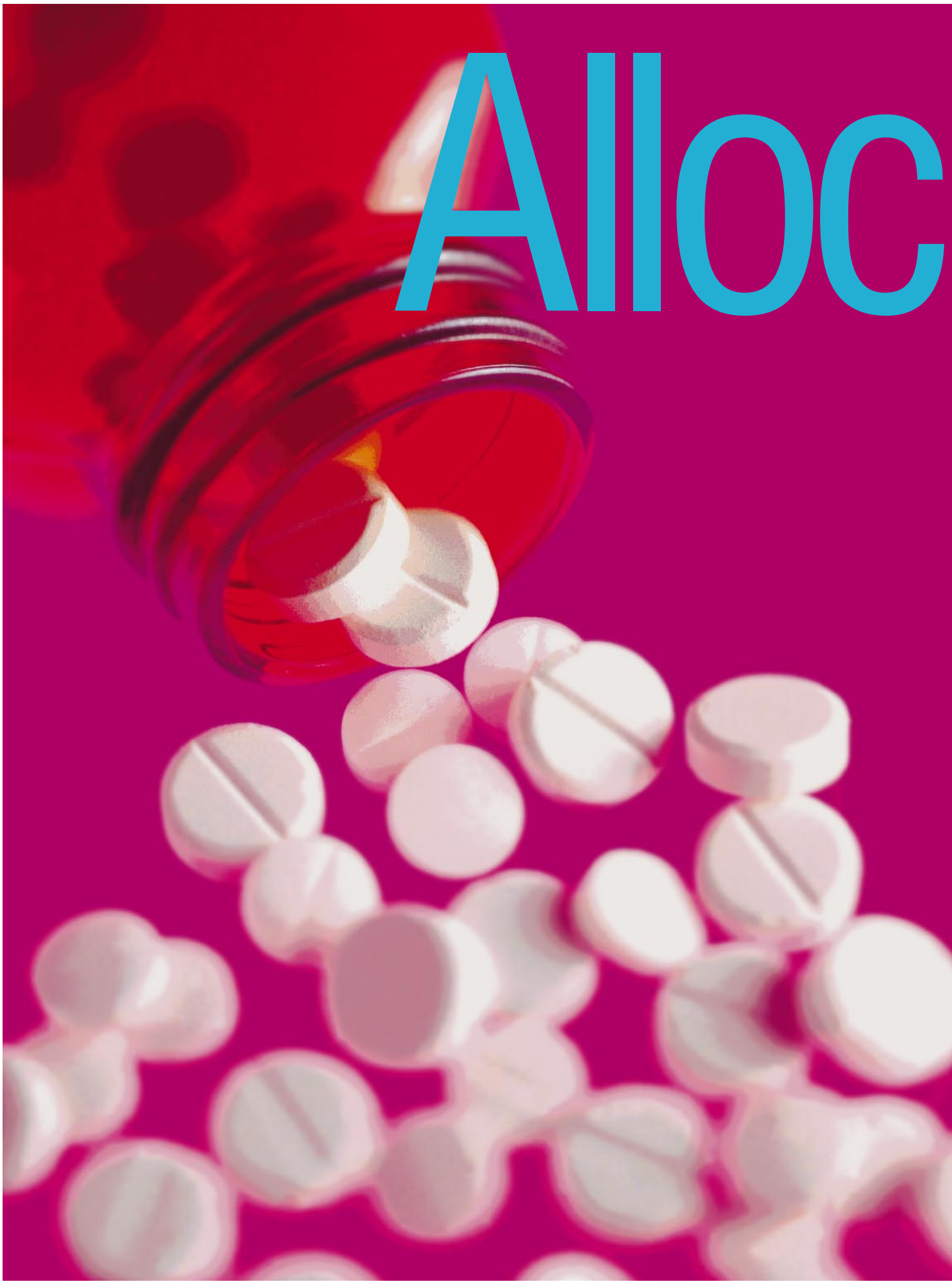
In this Review:

- *"Year" means year ending 30 June. For example: "this year" means the year ended 30 June 2001; "last year" means the year ended 30 June 2000, "next year" means the year ended 30 June 2002.*
- *Unless otherwise stated all values are in New Zealand dollars.*
- *Unless otherwise stated all references to expenditure are unadjusted for any rebates that may be due or paid by suppliers under risk sharing agreements.*

Highlights of 2000/01

Successes included:

- Providing new or wider access to subsidised treatments for asthma, schizophrenia, osteoporosis, HIV/AIDS and epilepsy under cost-neutral and/or financially sustainable arrangements.
- Containing pharmaceutical spending by successfully negotiating subsidy reductions worth approximately $50 million.
- Recognition of PHARMAC as a Crown Entity in the New Zealand Public Health and Disability Act, 2000.
- Acknowledgement of PHARMAC's lead role in the promotion of responsible use of medicines in the new legislation.
- Being able to continue our business largely as usual while change affected most of the rest of the health sector.
- Being asked by other parts of the health sector to contribute our expertise to help manage issues not directly linked to our current core business.
- Better relationships with the industry and the lowest ever level of litigation.


Alloc

ation of Resources in the New Health Sector

PHARMAC Chairman, Richard Waddel, discusses the challenges facing PHARMAC and District Health Boards in the new health sector.

The health sector has undergone considerable change in the twelve months since I became Chair of the PHARMAC Board in July 2000. While those changes are far from complete, it is now possible for health managers to look back at where we've come from and look forward with greater clarity at where we are heading.

From PHARMAC's perspective, this year has been largely "business as usual." Compared with those health sector organisations more directly affected by the health sector restructuring, this may seem something of a luxury. However, the changes and challenges have been there for PHARMAC too and there are more to come.

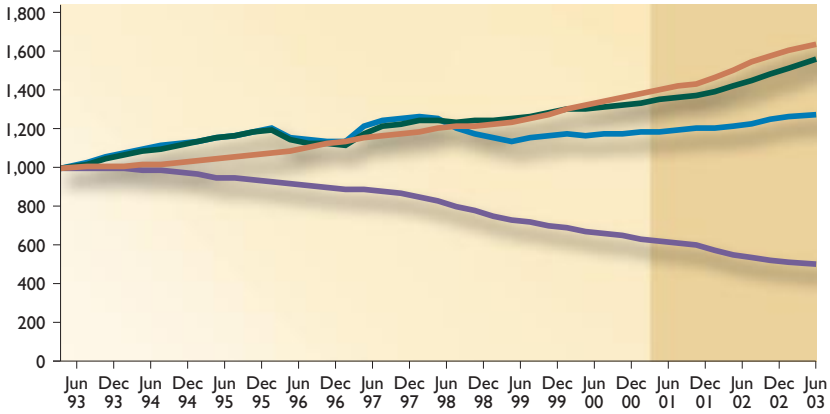
From 1 January 2001, PHARMAC ceased to be a wholly-owned subsidiary of the Health Funding Authority, and a limited liability company. It is now a stand-alone Crown Entity, accountable directly to the Minister of Health, with its powers and functions set out in the New Zealand Public Health and Disability Act, 2000. After seven-and-a-half years of consistently excellent performance, PHARMAC has earned this independence. In reality, it still carries the same burden of responsibility for pharmaceutical expenditure, but the changes have brought with them a subtle shift in the nature of its relationship with stakeholders.

Next year, while VoteHealth is still under the interim risk-share arrangements in place until population-based funding formulae for the 21 District Health Boards (DHBs) are developed, PHARMAC will continue to be directly responsible for the pharmaceutical budget. However, as DHBs assume more individual responsibility for their local budgets beyond next year, it is likely that they will seek more discretionary power to re-allocate financial resources to address the particular health needs of patients living in their areas. Whether that means more or less spending on pharmaceuticals will depend on their resources and the pressures they face, and their strategic responses to those pressures.

Professionals across all parts of the health sector have been left in no doubt that the health budget for the next year is tight. Budget pressure will manifest itself differently in each area. For the primary sector it may, among other things, impact on access to new pharmaceuticals or wider access to existing pharmaceuticals. For hospital managers, there are concerns about their deficits and the impact, if any, this could have on their services and patient care. Hospitals account for approximately half of the expenditure within VoteHealth but have the capacity to consume more. The effects of budgetary pressure on hospitals are already evident, with shortages of beds during times of high demand, more pressure on staff, and greater difficulty meeting salary and wage demands and the high costs of providing the equipment and treatments required. Add to this increasing demand-driven expenditure such as for laboratory services and pharmaceuticals and the risks that DHBs will ultimately carry are readily apparent.

Subsidy, volume, mix and cost indices

Four-quarterly moving averages
Base: four quarters ending June 1993 = 1,000.



***Cost index** is the drug cost to the DHBs ex manufacturer before GST.*

***Volume index** is the number of prescriptions multiplied by a standardised measure of the amount prescribed per prescription.*

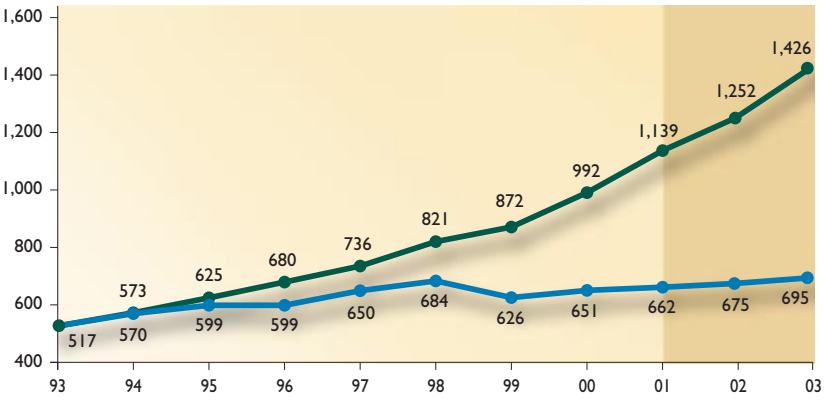
***Mix index** is the residual from cost index divided by (volume index X subsidy index).*

***Subsidy index** is like the consumers price index but for subsidised pharmaceuticals only.*

Forecast.

Effect of PHARMAC interventions

Total subsidised, non-hospital-funded, drug cost in $ millions (excluding GST), including distribution and dispensing fees, 30 June years.



Estimated expenditure without PHARMAC intervention

Actual and forecast expenditure with PHARMAC interventions (including rebates paid) only

Forecast.

Without PHARMAC interventions, it is estimated that the drug subsidy bill this year would have been $477 million higher (this estimate is based on an assumption that no price changes would have occurred without PHARMAC's intervention).

An obvious reactionary approach to all of this pressure might be to spend less on primary health care in order to make up any shortfall in secondary and tertiary care. I do not believe that this would be the right approach. Secondary care and tertiary care are largely the ambulance at the bottom of the cliff. The Government has signaled, and I support the view, that the key to better health outcomes and management of healthcare spending lies in prevention and primary care. It suggests that investment in some pharmaceuticals is not only desirable but can be cost-effective. PHARMAC has been able to list 20 new chemical entities on the Pharmaceutical Schedule this year, widen access to 19, and expand the range of presentations listed for 13 agents that were already funded.

PHARMAC has been successful again this year. It's immediate challenge in the new health sector structure is to prove to DHBs that PHARMAC can and will continue to manage the risks associated with pharmaceutical subsidies, and to convince them that further sensible investment in pharmaceuticals is justified. PHARMAC will continue to provide and deliver on the strategies and expertise DHBs will need to both manage their pharmaceutical risks and to make the right investment decisions for their populations. This year PHARMAC held the growth of pharmaceutical expenditure (after rebates) at around 2% – without its interventions growth would have been 9%. This is consistent with its performance over the last eight years and demonstrates PHARMAC's effectiveness. Those "savings" will become even more critical to DHBs striving to balance their accounts in future.

PHARMAC's Demand Side initiatives – now embodied in its legislative functions – could also be of value to DHBs in ensuring that people with poor health status benefit from the treatments available. In short, PHARMAC is aiming to be tuned in and responsive to the needs of the DHBs. Its success will be measured by the continued integrity of the Pharmaceutical Schedule as a national formulary to which DHBs adhere.

Formation of the DHBs has provided PHARMAC with a new set of stakeholders, but its relationships with established stakeholders have also grown and changed. Observers may have noticed a pronounced shift in dealings between PHARMAC and the pharmaceutical industry. For the first year since 1994, no new litigation was brought against PHARMAC by suppliers, and PHARMAC has not had to take legal action against any supplier. In fact the pendulum appears to have swung in the opposite direction. Now, despite the fact that we will always have opposing agendas, there is mutual recognition of the pressures and challenges each other face. There is greater acceptance on the part of the industry that PHARMAC must work within a limited budget, and PHARMAC shares some of the industry's concerns about future access to pharmaceuticals in a constrained financial environment.

Clinicians too have indicated a growing acceptance of the fact that PHARMAC has a job to do and that, because that job involves the allocation of limited resources, some restriction of access to pharmaceuticals is inevitable. This change in the attitudes of some of our key stakeholders may be due, at least in part, to our efforts to make it easier for people to access information about PHARMAC, its plans and activities. This open and informative approach is one I know PHARMAC's Chief Executive, Wayne McNee, is keen to continue.

PHARMAC's new status, and its direct reporting relationship with the Minister of Health exposes to PHARMAC the wider range of political issues and pressures other parts of the health sector face. Our regular liaison with the Minister also provides more opportunity for PHARMAC to create awareness of the issues it faces. This closer relationship also appears to have thrown the spotlight on PHARMAC's performance and an endorsement of its ability. Consequently, PHARMAC has been approached or considered to apply its expertise in other areas such as the purchase of hospital pharmaceuticals, establishment of a Government funded smoking cessation programme and even pharmacy contracting. The latter continues to be a difficult issue for the Government, both in terms of the increasing, and in my view high proportion pharmaceutical spending that goes into the distribution of pharmaceuticals, and negotiation of its contracts with pharmacists.

We have been working this year with other parts of Government to consider the wider impacts of pharmaceutical investment on the economy. This debate will surely develop further during the coming year.

PHARMAC welcomes these challenges, in addition to the continued challenge of managing our core business – the pharmaceutical budget, which becomes increasingly difficult each year. These challenges stimulate the passion, pride and commitment that is part of the unique culture of PHARMAC by which I have continued to be impressed this year, and which give me confidence in next year's success.

Finally, I must express my admiration and sincere thanks to Wayne McNee and all his staff for their huge effort, wonderful performance and achievements during the year. A special thanks also for the contribution from my fellow directors.

Richard Waddel
Chairman
September 2001

Issues and challenges facing PHARMAC

- Constraints on health funding in general make it increasingly difficult for PHARMAC to continue to provide access to new pharmaceuticals, especially given strong underlying growth in the volumes and mix of pharmaceuticals prescribed.
- Restructuring of the health sector into 21 separate health funders may make it challenging to maintain a nationally consistent Pharmaceutical Schedule.
- PHARMAC's analysis of health needs and the benefits of pharmaceuticals is becoming increasingly reliant on data about health services utilisation across the entire health sector, much of which is still not collected and/or available in a useable form.
- Competing with the wealth of promotional material sent to doctors by drug companies to expand markets, using best practice prescribing advice to promote responsible prescribing, is a huge challenge for our modest Demand Side team.

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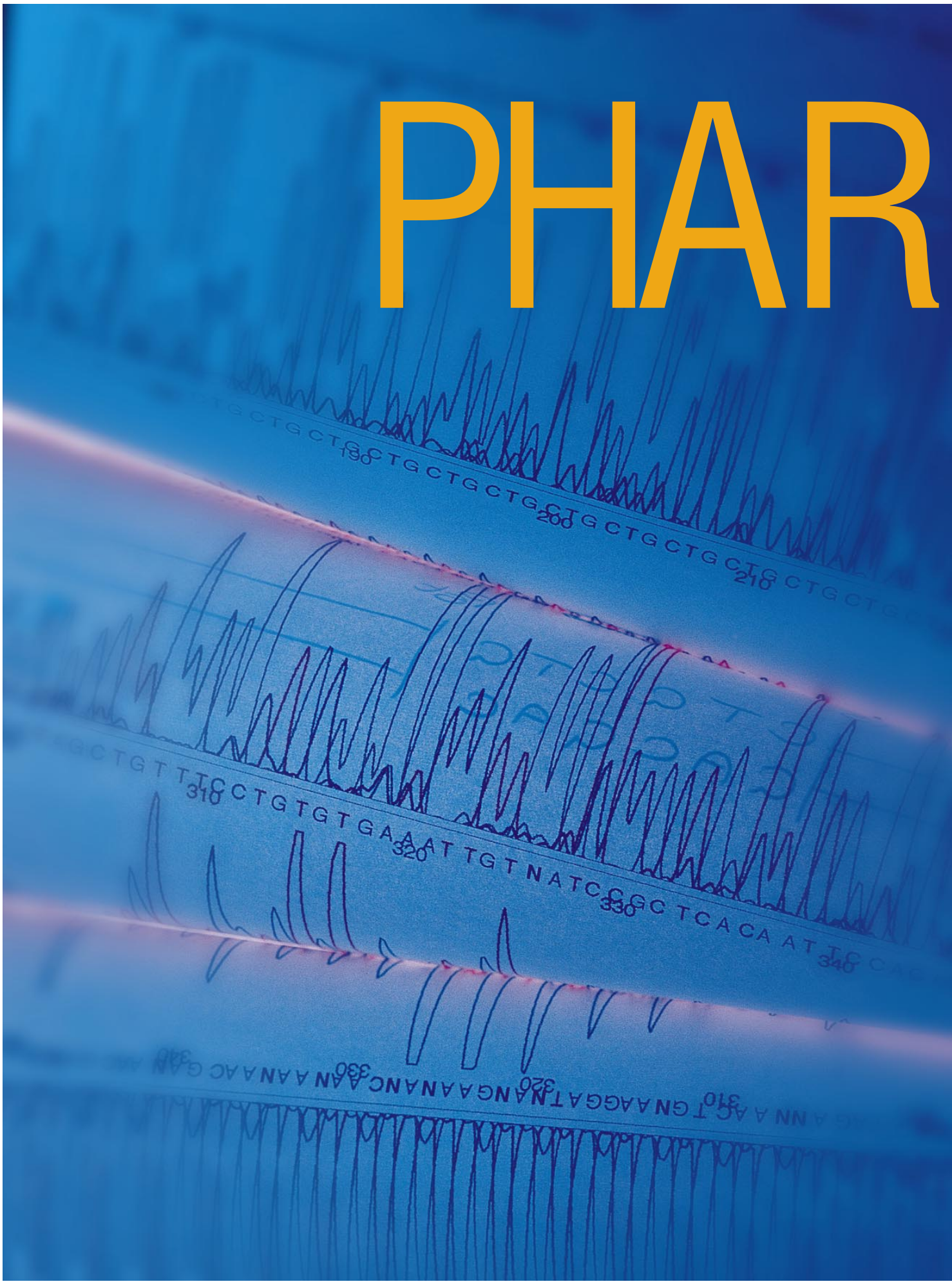


MAC – a blueprint for the rest of the health sector?

PHARMAC's Chief Executive, Wayne McNee considers the merits of applying PHARMAC-style processes in other parts of the health sector.

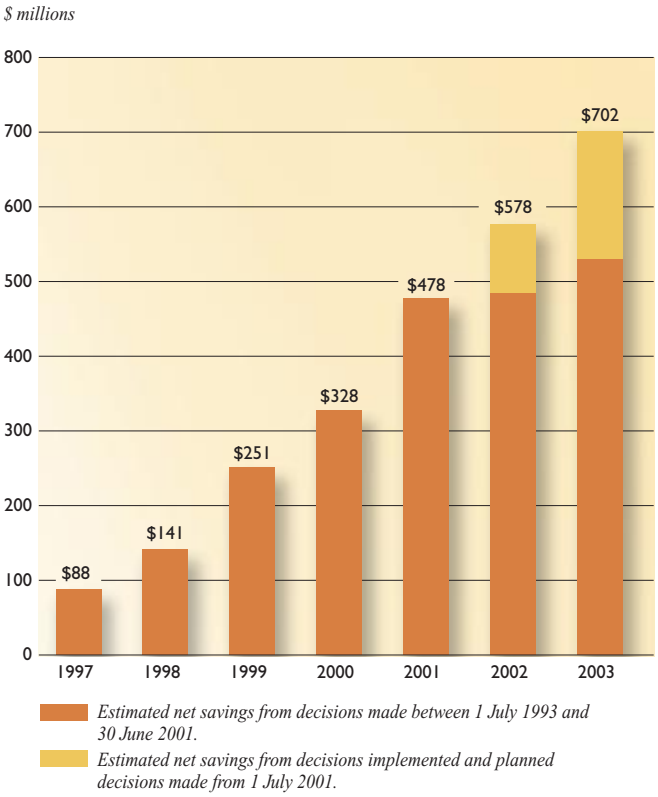
The media headlines throughout the year attest to the fact that it has been a rough year for health. The most obvious event that springs to mind is the Gisborne Cervical Screening inquiry and report, which raised questions about the quality of certain services and the influence of policy and management on such quality. These concerns highlight the point that access to services is only half the story. We think this is an important message given that most of the issues we have had to deal with publicly in the last eight years – the statin debate, funding for beta-interferon, treatment of schizophrenia, to name but a few – have related to restrictions in access to subsidy for pharmaceuticals.

The year has also been characterised for the sector, seemingly more than ever, by the struggle to manage the costs of healthcare whilst providing a comprehensive range of services to New Zealanders. Amidst such budgetary pressure, a new term has emerged in the annual plans of some hospitals – "options analysis." It is suggested that New Zealand's health managers will be closely examining the services currently being offered by hospitals, and choosing which ones can be funded and which cannot. Presumably this also means that, as a nation, we may in future be more restricted in our ability to continue to access an ever-expanding range of new Government funded secondary services and technologies. The Government has also signaled a wish to focus new funding on primary healthcare and preventative medicine.

The concept of options analysis, despite the new nametag, is already familiar to New Zealanders and to PHARMAC. In 1993, a study was launched by the National Health Committee into the wants and needs of New Zealanders in terms of public health and disability services. New Zealanders were asked what health services they would be prepared to do without should budgetary constraints require this. The conclusion, not surprisingly, was that New Zealanders did not want to lose any services. The only apparent "option" left – to allocate more resources. It would be interesting to see whether, if questioned again after the exposure of short-comings with some health services this year, New Zealanders would be focused so exclusively on the range of services accessible or whether they would now be prepared to sacrifice optimal access for better overall quality.

Total cumulative impact of PHARMAC's decisions

Years ended 30 June



New Zealand subsidised pharmaceutical cost breakdown

	30/06/2001	30/06/2000
Drug cost ex manufacturer[1]	$534,480,752	$527,535,500
Patient co-payments	–$69,229,574	–$73,591,647
Dispensing fees and mark-ups paid to pharmacies	$214,736,016	$207,075,254
Rebates paid to PHARMAC	–$21,062,692	–$10,971,637
Total cost to Government	$658,924,503	$650,047,470

1 Includes full and partial subsidies set by PHARMAC. Excludes pharmaceuticals funded through hospital budgets, subsidies paid for compounded preparations, rebates, patient co-payments and GST.

PHARMAC has in fact been practicing options analysis for many years now. Working within a fixed and modestly increasing pharmaceutical budget, our role is to decide which pharmaceuticals are funded, which are not, and which should have more or less restrictive funding associated with them. Our decision-making processes have been refined over the years, and are now generally well understood. They have stood up to the scrutiny of law courts, industrial challenge, lobbying and independent review. This is not to say we have not had to confront the problem that faced the National Health Committee – no-one wants to compromise on access to the best possible treatments for health conditions. However, our robust and transparent decision-making processes seem to have enhanced the quality and helped in the public acceptance of many of our tough decisions.

In addition to PHARMAC's thorough assessment processes, Medsafe also assesses the safety and effectiveness of new medicines before pharmaceutical suppliers can market them in New Zealand. This is particularly important in New Zealand, where suppliers can market their products directly to consumers, before or without PHARMAC's assessment.

This year's budgetary constraints, which resulted in our having only limited ability to fund new pharmaceuticals treatments, required that we undertake rigorous analysis and negotiate strongly to achieve our goals. The review of access to inhaled Long Acting Beta Agonists (LABAs) took significantly longer than we expected because of the complexity involved with addressing clinical needs, while balancing financial constraints and commercial issues. Resolution was also reached this year on issues relating to access to osteoporosis treatments, therapies for HIV/AIDS and New Anti-Epilepsy Drugs (NAEDs) after lengthy consultation processes, discussion with experts, analysis and negotiation.

When assessed within a solid framework intended to balance out issues of evidence, clinical need, alternative therapies, priority, cost-effectiveness and the overall budget, the answers to these difficult health funding questions are often much clearer for decision-makers. It is on this premise that PHARMAC was established eight years ago and its procedures, while standing the test of time, have also been modified and improved over the years.

The adaptation of the decision-making framework for our tendering process demonstrates both our commitment to good decision-making and the applicability of our basic framework to new processes – potentially outside of the pharmaceutical sector. Having begun with the tender of a single product – paracetamol – in 1997, we are now running multi-product tenders involving upwards of 150 products efficiently and effectively. Consultation with suppliers and clinicians, all of which is considered by a sub-committee of the Pharmacology and Therapeutics Advisory Committee (PTAC) before deciding which products are tendered, helps to ensure that only those products suitable for sole supply are included in the tender. Further clinical and commercial assessment is undertaken before sole supply status is awarded to any supplier. PHARMAC continues to build on its experiences of tendering each year in order to refine the bidding process itself, and the implementation of sole supply contracts.

PHARMAC was approached this year to apply its particular skills and expertise in other areas of the health sector. We've been called upon to contribute to discussions on access to oncology treatments, pharmacy contracting, prioritisation, and to apply our tendering processes in other, non-pharmaceutical areas of healthcare. The idea of PHARMAC

managing the burgeoning laboratory services bill has been floated, and more recently we have been given responsibility for negotiating the prices of pharmaceuticals used in hospitals. Our past successes have been recognised and such overtures may simply reflect this. Or is it possible that PHARMAC's processes are becoming regarded as a blueprint for purchasing services in other areas of the health sector?

Where health initiatives have been established in the absence of a clear decision-making framework, they can, as recent examples mentioned at the beginning of this article demonstrate, have a greater propensity to fail the needs of patients they were set up to serve. Enquiries and reviews have their place – to make sure mistakes are not repeated – but does the answer lie in implementation of revised programmes and structures based on the recommendations of lawyers that usually flow from these reviews? We think not. We believe that the answer to issues of health funding lie in tapping the expertise of the sector and maintaining stable decision-making processes and implementation over time. What is needed is a strong framework and a commitment to pulling together those views, openly debating the issues, and reaching conclusion in a consultative way.

Our processes have always been designed to do just that. This year marked the completion of a review of our procedural review, and a review of the operations of PTAC. We acknowledge that there are still critics out there who claim that the reviews into PHARMAC and PTAC could have been conducted in a more open way. Clearly we do not agree on this point. I would be surprised to find anyone among those who have followed our reviews and taken the time to read the information we distribute about our processes and activities that is not now better informed about us than ever before. We certainly intend to continue to build upon this philosophy of transparency.

By the time you read this year's Annual Review, we will already have begun to turn our mind to the application of our processes to the procurement of pharmaceuticals on behalf of hospitals. We openly acknowledge that the strategies and approaches we have adopted in the primary care sector may not always be directly applicable to the hospital sector. However, we believe that the fundamentals of a robust and cost-effective decision-making model are there – that starting with PHARMAC's existing blueprint is better than starting with a blank page. While we have no immediate plans to further broaden the scope of PHARMAC at this stage, it is clear that thought has begun to go into the applicability of the PHARMAC model elsewhere. Whether it's the answer to issues such as why almost $215 million out of approximately $660 million of pharmaceutical expenditure is paid to pharmacists for dispensing the products, why the costs of laboratory services are increasing by somewhere between 6% and 12% per year, and regional disparities in access to pharmaceutical oncology treatments, is not yet clear.

It is with a certain amount of pride that we at PHARMAC observe elsewhere in the world, the uptake of many of the strategies we have used. Other countries, including Australia, have adopted reference pricing, British Columbia has established a pharmaceutical management model that is very similar to that of New Zealand and, more recently, the United Kingdom has announced plans to tender for generic pharmaceuticals. Perhaps PHARMAC-style analysis and decision-making is set to take off more widely both locally and internationally?

PHARMAC's Decision Criteria

Seeking best health value for the pharmaceutical dollar

PHARMAC seeks to operate in an open, transparent and accountable way. Its reviews and changes to the Pharmaceutical Schedule are governed by its Operating Policies and Procedures – a public document developed in consultation with the pharmaceutical industry. The document emphasises the importance of basing decisions on the latest research-based clinical information, and it sets out criteria to be taken into account in decisions about the Schedule. These criteria are:

- the health needs of all eligible[1] people within New Zealand;
- the particular health needs of Maori and Pacific peoples;
- the availability and suitability of existing medicines, therapeutic medical devices and related products and related things;
- the clinical benefits and risks of pharmaceuticals;
- the cost-effectiveness of meeting health needs by funding pharmaceuticals rather than using other publicly funded health and disability support services;
- the budgetary impact (in terms of the pharmaceutical budget and the Government's overall health budget) of any changes to the Pharmaceutical Schedule;
- the direct cost to health service users;
- the Government's priorities for health funding, as set out in any objectives notified by the Crown to PHARMAC, or in PHARMAC's Funding Agreement, or elsewhere; and
- such other criteria as PHARMAC thinks fit. PHARMAC will carry out appropriate consultation when it intends to take any such "other criteria" into account.

1 As defined by the Government's then current rules of eligibility.


Main
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130
110
140
120
100

Pharmacology and Therapeutics Advisory Committee (PTAC) Chair, Dr John Hedley, considers some of the issues raised in respect of PTAC's guidelines in the context of its past performance.

taining Performance through Process

Consultation on the guiding principles that underpin the work of the Pharmacology and Therapeutics Advisory Committee (PTAC) this year has brought into focus a number of issues. We thank those who contributed to the process, especially those who put forward the many positive suggestions we received, which we will work through over the next year. Without wishing to trivialise the issues raised, the process has largely reaffirmed my impression that PTAC has done a lot right in the last eight years. News of escalating pharmaceutical spending and political tension over pharmaceutical-related issues in some overseas countries, of which there has been abundance this year, serves only to underscore this view.

It is clear to me that, without the consistent accomplishments of PTAC and PHARMAC, the outcome of last year's reviews by the Ministry of Health (MOH) and the Ministry of Foreign Affairs and Trade (MFAT), and this year's consultation on PTAC's guidelines might have been far less positive.

The effect of the early years of work by PTAC is clearly evident in both the pages of the Pharmaceutical Schedule and by looking at trends within New Zealand's pharmaceutical spending. Therapeutic sub-grouping, based on PTAC's assessment of clinical evidence and advice to PHARMAC, remains a key feature of the Pharmaceutical Schedule, with fully subsidised treatment options within the sub-groups indicated by the PHARMAC "tick." Part of our on-going work involves review of pharmaceuticals listed on the Pharmaceutical Schedule to ensure that the range of products available and the level and nature of the subsidy associated with them remains appropriate.

We have also applied our critical appraisal skills to identify those New Zealanders who would most benefit from the new medicines we have considered. Securing affordable prices is PHARMAC's job but our advice, which often includes recommendations to use targeting mechanisms such as Special Authorities, reflects our awareness of the need to use such treatments prudently in order to help keep them affordable.

There has been quite a lot said about the administrative burden of Special Authorities on prescribers. It therefore came as a surprise to me to learn that the average number of applications for Special Authorities made by specialists is only about 21 per year and only 13 for general practitioners. When looking at the range of application numbers across these groups, it is clear why some practitioners find the system more of a burden than others. However, the statistics do suggest that the system is effective, most of the time, at ensuring more expensive medicines are used only when necessary.

The combined work of PTAC and PHARMAC has been instrumental in containing growth in expenditure on pharmaceuticals for New Zealand, currently at around 3%. Access to most new pharmaceuticals that have been developed in that time has been possible without massive additional growth.

PTAC is always willing to look at – indeed we hold open a standing invitation for – well-constructed arguments with an evidential base to support the view of others who consider we have erred in our judgment. We seldom receive any. I sense the wider medical community generally accepts that prescribers have a duty of care to patients but also a duty to the taxpayer to conserve resources and avoid waste. In this prescribers have come a long way and all New Zealanders ought to be congratulated for their acceptance of the processes by which this has been achieved. As a consequence, New Zealand is able to proceed in a positive manner, while other countries now appear to be on the back-foot.

In the United Kingdom, organisations like the National Institute of Clinical Excellence (NICE), set up to provide the rigorous analysis required to ensure sensible investment in pharmaceuticals, has had to review decisions following pressure from pharmaceutical companies, clinicians and patient groups. Pharmaceutical expenditure in the United States has soared to 19% this year putting extreme pressure on health insurers. Were we in the same situation, it is clear that PHARMAC could not provide access to new pharmaceutical treatments. In fact, it would be looking to review, and possible reduce access to existing treatments.

In Australia, pharmaceutical expenditure is growing by 21% per annum. The Australian Government has been in conflict with its main Opposition party over claims that the pharmaceutical industry is exerting too much influence over which pharmaceuticals are funded by the state and at what price.

There is a ring of familiarity about the label "inherently adversarial" given to the Australian equivalent of PTAC, the Pharmaceutical Benefits Advisory Committee (PBAC). Members of PBAC were also described as having "relevance deprivation syndrome."

Like PTAC, PBAC underwent a Government review this year. However, rather than the expected gradual changes to committee appointment procedures, the Government passed legislation that would remove at least five of its twelve existing members[1] and then appointed a new member with alleged links to the pharmaceutical industry[2].

I am hesitant to look for further similarities between the review of PTAC and that of PBAC. By comparison, PTAC seems like a peacetime army – although it hasn't always been that way. A closer look at some of the more contentious of the issues raised in consultation on our guidelines in the context of the Australian debate makes for interesting consideration.

1 *"Canberra sides with drug giants to curb own watchdog" – Mark Metherell, Sydney Morning Herald, 1 December 2000.*

2 *"Prescription for Trouble" – Mark Metherell, New and Features, Sydney Morning Herald, 10 February 2001*

PTAC'S PURPOSE AND STRUCTURE

Independent, expert evaluation and advice

The primary purpose of the Pharmacology and Therapeutics Advisory Committee (PTAC) is to provide PHARMAC with objective advice on pharmaceuticals and their benefits including the pharmacological and therapeutic consequences of proposed amendments to the Pharmaceutical Schedule.

PTAC is a committee of medical specialists and general practitioners nominated by professional bodies and appointed by the Director-General of Health.

PTAC's work includes considering and making recommendations on the medical implications of:

- all significant applications by pharmaceutical companies and/or clinicians for inclusion on the Pharmaceutical Schedule, or amendment to it where there are clinical issues to consider;
- requests by PHARMAC for de-listing;
- the management of the Schedule; and
- the need for reviews of specific pharmaceuticals or groups of pharmaceuticals.

PTAC has a generalist focus, but increasingly it seeks advice from known specialists or experts, often via its sub-committees.

PTAC members and those co-opted to sub-committees are paid an hourly rate plus expenses for attendance at meetings and time spent preparing for meetings. PTAC meetings are usually held in Wellington four times a year. Sub-committees are convened as and when required.

Sampled submissions to Consultation on PTAC Guidelines[3]

As expected, most of the submissions received in response to consultation, and any issues raised about the guidelines, originated from the pharmaceutical industry. Dr John Hedley addresses those issues in the second part of his article on page 14.

Appointment process	"...we consider that the appointment of PTAC and PTAC sub-committee members should be vested to the Director-General of Health, who will consult with PHARMAC and other stakeholders on the suitability of candidates." – Pharmaceutical Supplier
Relationship with PHARMAC	"... [certain provisions of the guidelines] are clearly an interference with the independence of PTAC ... No other interested party [except PHARMAC staff] is able to participate in PTAC meetings ... This form of subtle interference does nothing to reduce suspicion ..." – Pharmaceutical Supplier "Independence is not possible with the relationship of PTAC to PHARMAC as defined in [the guidelines] ... this is self evident, just as it is self evident that a paid member of a drug company advisory board would also not be independent ... PTAC would be independent if it was funded equally by PHARMAC and the drug industry..." – Clinician
Use of and appointment of sub-committees	"If the sub-committee is the appropriate expert body then it should not be subject to second guessing by a body with potentially less relevant expert representation." – Pharmaceutical Supplier "Sub-committees of PTAC should be established by PTAC not by PHARMAC... It is wrong for PHARMAC to seek advice directly from sub-committees ... sub-committees should relate to PTAC." – Clinical Pharmacologist
Ability of PTAC and sub-committee members to disclose the fact of an application being received by PHARMAC in order to obtain information from colleagues to assist assessment	"[We] would not support the gathering of ad hoc, anecdotal 'evidence' [which] could amount to decision influencing through hearsay – no matter how well intentioned. This process would be prone to abuse by suppliers and competitors seeking to unfairly bias the outcome of a PTAC decision. Suppliers could seek to unduly influence key doctor opinion in order to gain the desired anecdocal recommendation for possible PTAC consideration." – Pharmaceutical Supplier
Publication of a list of funding applications and PTAC/sub-committee meeting minutes	"Minutes should only be publicly available when they relate to final recommendations, on a case-by-case basis and always in consultation with the relevant pharmaceutical companies before public release. This is because...often the PTAC minutes provide a shorthand summary of impressions, preliminary views or a limited consideration of matters that may give a misleading picture regarding the total issues affecting particular meetings. This would also avoid the potential of forcing companies into the position where they are required to consider a range of civil remedies, or court orders, to protect their interests" – Industry Body "... publishing such information [on PHARMAC's website] could affect the nature of negotiations between PHARMAC and the applying company ... The fact that a company is negotiating with PHARMAC with a certain product in the current NZ environment, is a confidential issue." – Pharmaceutical Supplier "Publishing PTAC and sub-committee minutes...would allow better consultation and awareness among interested parties of the issues under discussion so that appropriate representation may take place. It may also allow the presentation of evidence, positive or negative, that a company may have submitted, for example comparative trials, [etc] and may well serve to reduce the cloud of suspicion that present secrecy requirements sometimes engender." – Clinical Group "... where a definitive recommendation has been made by PTAC, we would support the publication of the minutes on the PHARMAC website subject to prior notification to the sponsor giving at least 5 working days to object to the disclosure of any material on the basis of commercial confidentiality." – Pharmaceutical Supplier
Conflicts of Interest	"It seems ridiculous that ... a member of PTAC or a sub-committee can get off the plane having attended a conference overseas, paid for by a drug company whose product is being discussed, and then have voting rights and discussion on that particular drug ... It is self-evident that a person who has many thousands of dollars spent on them is not independent." – Clinician

3 These comments are taken verbatim from submissions with minor editing (the addition of words or punctuation to clarify or join sentences) for clarification.

The comments PHARMAC received in response to consultation on PTAC's guidelines (which are summarised on page 13), especially those concerning the proposed publication of PTAC's minutes, show there is significant tension between greater transparency of PTAC's processes and commercial sensitivity. It is also interesting to compare the concerns of the industry in New Zealand regarding PHARMAC's relationship to PTAC with the claims across the Tasman that the pendulum has swung too far in the opposite direction. Again, the balance seems hard to strike.

In a way it is understandable that pharmaceutical companies, which currently have no direct access to PTAC, might suspect PHARMAC has an undue influence on PTAC's decisions. However, there is no evidence to support this view. Our procedures have endured close scrutiny and have not been found wanting in this regard. In the end, PTAC stands accountable for its every recommendation and meeting minutes regardless of perceptions about its secretarial support.

Comments about PTAC's sub-committees also seem to reflect a level of misunderstanding about their relationship to PTAC, and to PHARMAC. While the appointment procedures for sub-committees and their functions, as described in the guidelines, might in themselves suggest the sub-committees are much closer to PHARMAC than to PTAC, the reality is different. Even though PTAC is not responsible for appointing sub-committee members, it is consulted on the sub-committee's composition.

In addition, PTAC is represented on each sub-committee. While some may argue this dilutes the "expertise" of the sub-committee, in practice this representation provides the link between PTAC and sub-committee that makes PHARMAC's periodic practice of seeking advice directly from the sub-committee a faster but robust means of progressing issues. PTAC meets only four times a year so it is possible that without this link urgent and more specialised issues would take longer to resolve. In any case, the advice of sub-committees is always reported back to PTAC.

I welcome any changes that remove for PHARMAC's stakeholders any opacity regarding the processes in our guidelines and the way in which we function. However, I believe we should keep the need for such change in perspective given the successful management of pharmaceutical subsidies within the current New Zealand context. I think recent overseas experiences serve as a warning for to us all that it is possible, if we go too far, to throw the baby out with the bathwater.

For their focus and commitment again this year, I wish to thank my colleagues on PTAC and its sub-committees. I would especially like to welcome three new members to PTAC and thank those members of PTAC and its sub-committees who resigned this year. I would also like to acknowledge the contribution of Dr Gavin Stewart McLaren Kellaway, a PTAC member from the early 1970s to the early 1990s, who died during the year.

Promotion of responsible use of medicines

PHARMAC's medical director, Dr Peter Moodie, discusses PHARMAC's new function

The New Zealand Public Health and Disability Act 2000 heralded a number of changes to PHARMAC's structure. It also made explicit certain areas of PHARMAC's activities that have been developed over the last three years. These include the acknowledgment that one of PHARMAC's functions is to "Promote the responsible use of medicines."

Pharmaceutical management has traditionally been described as falling into two activity-types – the "Supply Side " and the "Demand Side" – the implication being that these are separate and discrete. The reality is that successful purchasing contracts are often intrinsically linked to then ensuring that the right treatments are used in a responsible manner. Both access to and use of pharmaceuticals should be modelled on what is expected best practice.

PHARMAC's Demand Side activities fulfil a number of functions, all related to the promotion of the responsible use of medicines, that are critical to the success of PHARMAC's strategies. The promotion of the responsible use of medicines is predicated on a number of factors, including the ability to identify what is responsible use, and then to judge whether this is occurring.

Agreement on what is responsible use is no easy matter. There will always be a tension between grade A evidence, as specified in rigorous evidence based guidelines, and the intuitive opinions of experts in the field. That distinction was once not considered to be important. However, in today's climate of constrained budgets and expensive new medications, use of the best evidence available to make decisions about what to prescribe is imperative. That evidence may not always be available for all older medicines, but with newer chemicals it behoves the pharmaceutical industry to ensure that the relative benefits of new medicines to existing medications are clearly shown in their clinical trials.

Committees such as PTAC who advise PHARMAC, review these data to ensure that there are real gains from any new chemical funded. However, it is important that the guidelines and literature often required to ensure such gains, are also promulgated to prescribers. It is for that reason that, as part of its Demand Side initiatives, PHARMAC funds organisations like the Preferred Medicines Centre (PreMeC) and the Best Practice Advocacy Centre (BPAC).

Not only do we need more evidence-based medicine, but we also need to be able to highlight when that evidence is not being followed. Regular monitoring of utilisation once a new medicine is established in the community is also critical. The increasingly sophisticated data collected via Special Authorities, and prescription data help PHARMAC to identify trends in usage, and thereby monitor appropriate use. A recent example of this was our monitoring of the average dose of each strength and formulation of inhaled corticosteroids for asthma, which allowed PHARMAC to identify the fact that the average dose being used is too high. Likewise Special Authority data for statins has shown us that there is a real gap between the eligible population and those who have obtained access.

These examples, and many more show ways to improve the responsible use of medicines and the scope for further work in this regard.

Information Issues for the Health Sector

***David Moore, a member of the PHARMAC board, was the programme director for the Ministry of Health's recent "Working towards Adding Value to E-information" (WAVE) project. Its report, "From Strategy to Reality", has just been published and is available on* www.moh.govt.nz/wave.**

David formerly managed the Personal Health division of the Health Funding Authority, and was the founding General Manager of PHARMAC from 1993 – 1998.

It's unacceptable so little is known about New Zealanders' health. With pharmaceuticals we work one step removed – able to identify how many pills are funded, but not what all the spending actually means for patients or, more particularly, for which patients. This is likely to impact most on the least healthy and most vulnerable, and may be a contributing factor in the poor health status of Māori. Health administrators need substantially better information about the incidence of disease, the outcome of health interventions such as pharmaceutical treatment programmes, the performance of providers, and directions for further development.

New Zealand does have some information that other countries envy – we know how much is spent on drugs, and we know the average daily dosages used. However, we cannot link these data back to specific populations (such as Māori or the elderly). PHARMAC is relatively well off for information, compared to other parts of the health sector because information on subsidised medicines is captured in its modern data warehouse. Clinical trial information is also useful when assembling economic analyses of drugs. However, better analyses could be undertaken if data on actual health outcomes were more readily available.

Others in the health sector, see similar information holes – the diabetes education nurses who don't have full information about their patients, or the GPs striving to move towards managing populations, rather than the current 15 minute consultation slots. Health providers need to share more information, which would be helped through the implementation of electronic health records. It's ridiculous in today's computerised world that medical notes are often incomplete, scribbled on paper, kept separately, and are sometimes illegible. The same information is collected repeatedly, records can only be transferred physically, and results can only be compared through inaccurate human interpretation rather than systematically measured. These systems are inefficient and waste money that could be spent productively elsewhere.

Better information about who is taking what medicines would help us analyse the effect of pharmaceuticals on secondary care costs. New Zealanders have around 20 million prescriptions filled every year. Many of the newer drugs are expensive, so funding can be justified only if they are proved to be cost-effective, and if targeted to people who would most benefit from them. We need to know if these agents can save money through keeping people well, out of hospital, and in the workforce. However, our decisions are currently based on a mixture of data and assumptions.

A key problem is that we don't know exactly who is being prescribed preventative medicine, or whether such interventions are improving the health of New Zealanders. Cholesterol-lowering drugs can offer significant protection to those at risk from heart attacks. We know exactly how much Government funding is invested in these agents, but their impact on the cardiovascular health of out nation is far less measurable. Just imagine if we had reliable health outcomes data about the many thousands of people who have taken lipid lowering drugs since they were first funded. With better ethnicity data, and linkages to a National Health Index (NHI), we could have tracked those outcomes and potentially have answered questions such as why uptake of these agents is lowest among Maori and Pacific people. The same applies to people suffering from schizophrenia – we only know how much we spend on new anti-psychotics, with little idea whether our initial forecasts of the benefits were correct.

The story is repeated in diabetes, where the incidence is predicted to double within the next 10 years, particularly affecting Maori and Pacific people, and asthma. Those at greatest risk need to be identified and treated.

Much of the problem is caused by gaps in our health data, which hinder sound analysis, formulation of policy, strategy development and, ultimately, decision-making. New Zealand's ethnicity data is unreliable and incomplete making it, effectively, useless. We already have a NHI system, providing unique identifiers for everyone, but it's been poorly implemented. Most people don't know their NHI number, some people have several, and it's not used to gather the critical ethnicity data that could make dramatic strides towards improving the health of our most needy populations. Knowledge and co-operation are the keys in improving patients' health.

Shared information relies on standard definitions, so people can rely on consistency. At the moment, the code used by most DHBs to describe a ward transfer has a different meaning in Canterbury, where it means a discharge from one hospital and admission to another. The problem of inconsistency is repeated throughout the sector – including pharmaceuticals. PHARMAC could make a start by implementing a common pharmaceutical index to replace the different coding systems currently used in the community and hospitals. Once clinicians have confidence in the systems and start sharing information, they would have a better understanding of their peers' approach, and pharmacists, who may have the best overall view of prescribing patterns, could work more closely with doctors.

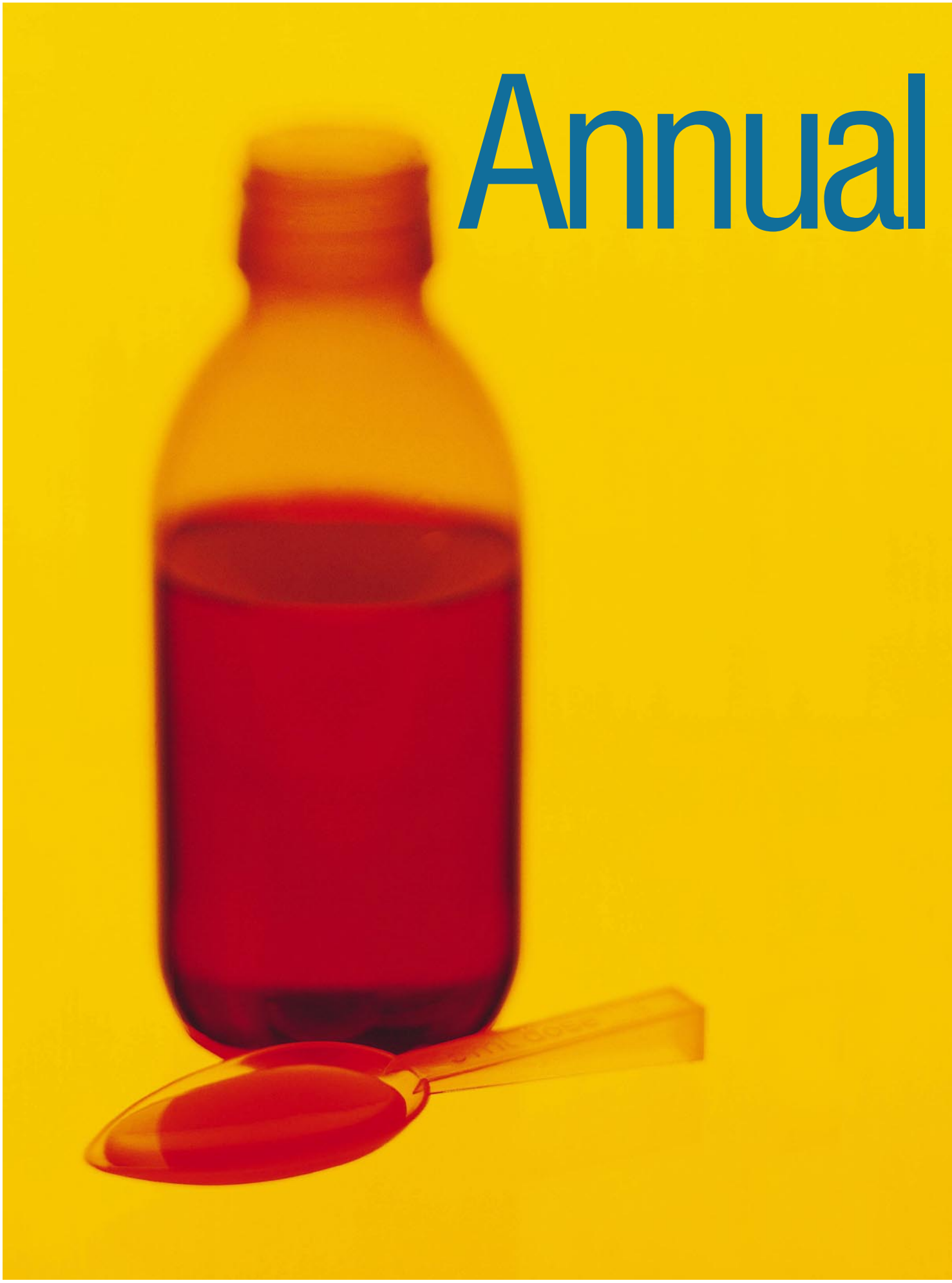
Widespread use of electronic information will save money through rendering data more usable, leading to consistent information, resulting in improved quality and evaluation of clinical evidence. Currently most data standards are too weak to support the move to integrated care. There are no agreed standards for primary care consultations or outpatient information – very little detailed data is collected at all, and there is no national collation of those data collected. Obtaining consistent and useful data requires a greater measure of co-ordination and common purpose than achieved to date. Common coding systems, electronic languages and software applications cannot be approached as a series of ad hoc decisions.

Throughout history, implementation of universal standards has had dramatic results. For example, although it's a relatively recent development, we now expect every country to have a standard railway gauge. The *WAVE* project was about exploring parallel issues in New Zealand's health sector. Standardisation generates learning and knowledge, which leads to better understanding of information and greatly reduced costs.

It's hard to deliver value in the health sector with our piecemeal approach and lack of co-ordination. Governance and compliance are essential in health Information Technology/Information Management (IT/IM), but only as the starting point before focusing on systems aligned to health goals, clinical efficiency and sector integration. It's an international problem, but New Zealand is in a great position to get it right, with our small population, lack of regional differences and strong tradition of achieving quite a lot, at relatively little cost.

It's not an impossible problem to resolve (the *WAVE* report has recommended many quick wins) but it needs real commitment to drive its implementation. The benefits would be dramatic.

Annual



review by therapeutic group

PHARMAC activity this year has been characterised by a number of large agreements. Many of these have facilitated the listing of 20 new chemical entities in addition to providing savings. This approach has enabled significant impact on total pharmaceutical expenditure to be made with fewer individual transactions.

Meeting the budget target was a particular challenge this year because it allowed for no more than modest growth in total expenditure. Making savings to compensate for volume increases in existing products was, therefore, the main focus for the year.

The vast majority of savings achieved this year have been from tendering. Sole supply arrangements for 33 products were implemented this year. Most of these were the result of a multi-product tender involving 86 products begun in December 1999. However, PHARMAC initiated the largest ever tender, involving some 153 products in January 2001. Estimated savings of $15 million per year from those sole supply arrangements are expected to begin to flow through from August 2001. There are also considerable savings to be made by consumers from the removal of manufacturers' surcharges on a number of products.

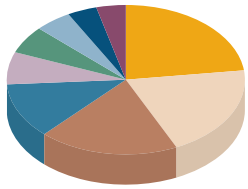
During the year PHARMAC also entered into seven separate agreements involving multiple products offered by suppliers who sought to have their products excluded from the sole supply tender invitation issued in January 2001. With savings of almost $9 million dollars this year resulting from them, and subsidy reductions of up to 92% from tendering, such multi-product agreements appear to provide mutual benefits for both PHARMAC and those companies that enter into them.

One key multi-product agreement, via associated savings, enabled wider access to inhaled long acting beta-agonists (LABAs) for asthma, which concluded an on-going review. That agreement also resulted in expansion of the range of atypical anti-psychotic agents available. It is therefore expected to provide significant patient benefits in addition to dollar savings.

Other reviews completed during the year have resulted in widened access to alendronate for osteoporosis, New Anti-Epilepsy Drugs (NAEDs), HIV/AIDS drugs, and a widening of the access criteria for dornase alpha (Pulmozyme) for cystic fibrosis patients.

Investment by Therapeutic Group

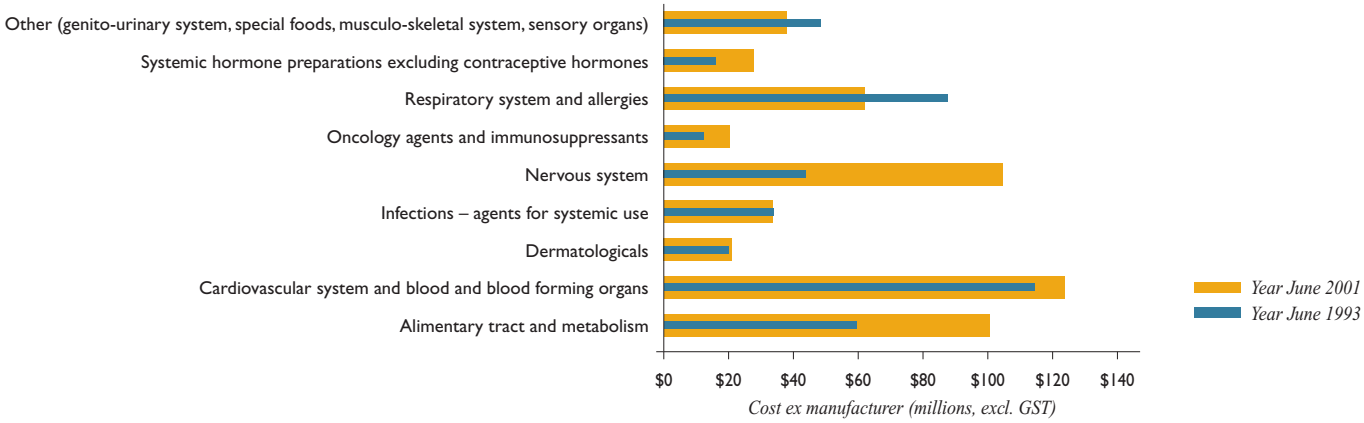
Year ended 30 June 2001



- *Cardiovascular system and blood and blood forming organs (23%).*
- *Nervous system (20%).*
- *Alimentary tract and metabolism (19%).*
- *Respiratory system and allergies (12%).*
- *Other (genito-urinary system, musculo-skeletal system, sensory organs, special foods) (7%).*
- *Infections – agents for systemic use (6%).*
- *Systemic hormone preparations excluding contraceptive hormones (5%).*
- *Dermatologicals (4%).*
- *Oncology agents and immunosuppressants (4%).*

Changes in Therapeutic Group Expenditure

Spending in most areas has increased since PHARMAC's inception highlighting the need for continued management of pharmaceutical prices and prescribing.



This year PHARMAC received an unusually high number of requests for subsidy increases and there were stock shortages on some items. Quite frequently these shortages are unfairly blamed on PHARMAC's procurement strategies. Temporary manufacturing or distribution problems have always been a fact of life here at the bottom of the world, but the observed increase in incidence of such problems may reflect a profound change in the global economics of the pharmaceutical industry. Allegedly, in response to increasing financial pressure worldwide, pharmaceutical companies are abandoning older, less profitable products in favour of newer, more lucrative medicines[4]. This year in New Zealand this has affected access to several products including dapsone for leprosy, probenecid and propylthiouricil. In February 2001, some American hospitals faced shortages of 15-20 different pharmaceuticals with at least as many additional shortages in March and April. Like PHARMAC, it would appear that American authorities are struggling to obtain adequate warning of the shortages to find means to address the shortages and to uncover the real reasons for them occurring.

It should be noted, although it will be of no comfort to New Zealanders in need of health care, that other problems we encounter in New Zealand are also being experienced elsewhere. The struggle of Britain's health authorities to provide access to treatments given their limited budgets is highlighted by publicity about the regional differences in access to newer treatments[5]. Fortunately, New Zealand's nationally consistent Pharmaceutical Schedule helps to avoid such regional difference from becoming widespread in our own country. However, the fundamental issues that give rise to those regional differences in Britain – the question of where to draw the line between treatments that the Government subsidises and those that it does not – are exactly the same.

A critical look at what PHARMAC has listed on the Pharmaceutical Schedule this year reveals that, while containing expenditure with about 2% growth, it has managed to provide access to a number of uniquely new chemical entities and new formulations of previously-funded pharmaceuticals that are associated with significant patients benefits. Virtually all of these new listings were associated with targeting criteria and all considered unique enough to be listed in their own therapeutic sub-group rather than being reference priced to older technology.

The list of pharmaceuticals for which funding or wider access is being sought seems to grow each year. This increases pressure on PHARMAC to continue to make savings each year and requires that it sharpen both its commercial strategies and its tools for assessing and prioritising spending. It may also mean that PHARMAC will not always be able to afford to lessen the impact of its decisions on patients, clinicians and pharmacists, as we have endeavoured to do in recent years.

This year PHARMAC demonstrated its willingness to ease implementation of savings transactions for patients where possible in a number of cases. An obvious example of this is the substantial subsidy reductions that followed expiry of the patent on fluoxetine (Prozac). Reference pricing was applied but exception criteria were put in place to ensure that certain patients continued to have access to full subsidies for other non-tricyclic anti-depressants that are still on patent. Access to the additional subsidies for these products substantially eroded the savings potential associated with the price reductions achieved by the introduction of generic fluoxetine by approximately $11.6 million this year alone, but has avoided the need for thousands of patients with depression to switch treatments or pay a manufacturer's surcharge.

A closer look at each of the therapeutic groups in which there was significant activity this year reveals further modification of PHARMAC's expenditure management strategies to minimise the impact on patients this year.

The top 20 expenditure groups

By therapeutic group 2 by claim date

$ millions, cost ex manufacturer, GST exclusive	**2001**	2000	1999	1998	1997
Lipid Modifying Agents	**44.6**	37.1	22.3	13.4	19.9
Anti-ulcerants	**42.7**	36.1	27.9	31.3	27.0
Anti-psychotics	**29.8**	23.9	9.8	4.7	4.5
Agents affecting the Renin-Angiotensin system	**27.2**	27.2	25.6	50.5	47.1
Anti-depressants	**24.9**	28.6	30.9	32.6	29.1
Inhaled corticosteroids - metered dose inhalers	**18.7**	19.7	24.0	21.3	17.3
Diabetes	**17.1**	18.0	16.6	15.7	15.0
Anti-bacterials	**16.2**	23.1	26.7	33.5	35.5
Diabetes Management	**16.1**	14.0	11.7	10.8	9.9
Anti-Epilepsy Drugs	**15.9**	15.2	12.9	11.0	9.9
Immunosuppressants	**15.6**	12.0	10.9	7.8	8.0
Calcium Channel Blockers	**15.6**	17.5	22.8	25.5	25.2
Inhaled corticosteroids - breath activated devices	**14.1**	15.6	14.6	20.5	23.1
Analgesics	**13.6**	13.4	13.0	13.4	13.5
Anti-migraine Preparations	**9.6**	8.2	6.7	4.5	4.5
Anti-diarrhoeals	**8.7**	7.5	7.2	6.7	5.8
Contraceptives - hormonal	**8.0**	8.2	8.9	9.2	9.2
Beta Adrenoceptor Blockers	**8.0**	8.9	11.2	16.6	17.9
Anti-fungals	**7.5**	6.1	4.9	3.8	3.8
Anti-acne Preparations	**7.2**	6.9	8.3	6.3	6.2

4 *"Shortages of Drugs Threaten Patients" by Alissa J Rubin & Peter G. Gosselin – Los Angeles Times (Sunday Report), Sunday 6 May 2001.*

5 *"The Shocking Truth about Britain's Health Care" by Anne Woodham, Good Housekeeping, July 2000.*

Alimentary Tract and metabolism (excluding Diabetes)

This year saw a continuation of the strong growth and controversy that have dominated the proton pump inhibitors (PPIs) market for three years. The legal dispute between PHARMAC and AstraZeneca in respect of the capped expenditure arrangements took a new turn when, further to the High Court ruling dismissing AstraZeneca's claim against PHARMAC, the Court of Appeal overturned part of the High Court judgement and ordered PHARMAC to pay damages. If any, these damages would have only amounted to a small fraction of the amount originally claimed by the supplier. Following this, AstraZeneca announced that it would no longer continue to bonus Losec (omeprazole) to the level of the ex manufacturer price as it had since Somac's (pantoprazole) derestriction. The effect was that hundreds of patients switched to Somac, exerting pressure on Pharmacia's own, much smaller, expenditure caps. Pharmacia then terminated its agreement with PHARMAC, and the market was left in a state of uncertainty while PHARMAC negotiated a solution. By April 2001, agreement had been reached to drop the price and subsidy of Losec from a daily cost of $1.30 to $1.00 bringing the three-year dispute to a pragmatic closure.

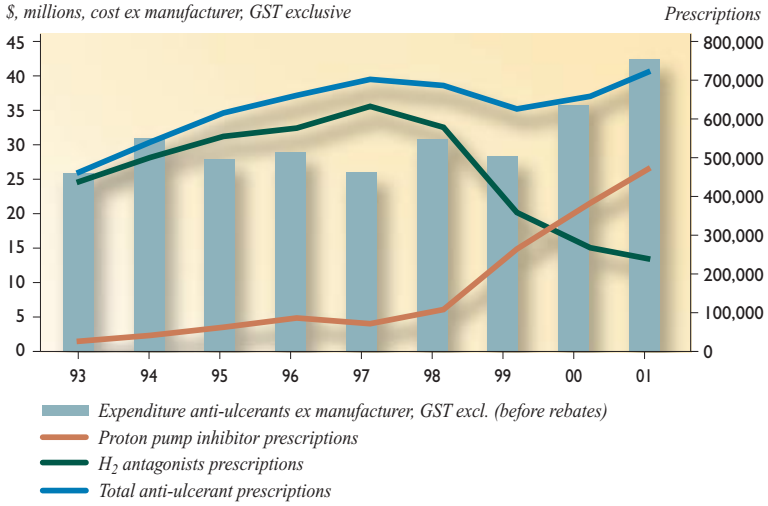
The other long-standing issue and main contributor to growth in this market, which continued this year, was growth in the use of the newer 5-amino salicylic acid agents for inflammatory bowel disease. Despite acceptance in overseas countries that sulphasalazine should be used before resorting to the more expensive newer agents, PHARMAC has been unable to convince local clinicians that this practice should be adopted. This market has continued to grow by $0.5 to $1 million per year since 1996 and more radical action may be required in future.

Diabetes

Expenditure in this group increased moderately over the period, although perhaps not as quickly as one might expect given the population demographic for this disease which is causing strong volume growth. However, containment of the pharmaceutical costs of diabetes appears not to be indicative of access problems since there has been growth in intermediate and long-acting insulin and testing products suggesting increased diagnosis and/or incidence. There has also been strong volume growth in the new, rapid acting insulin analogues listed last year. The effect of these trends on overall growth of the market has, however, been moderated by price reductions on oral hypoglycaemic agents. It is hoped that competition, traditionally not strong in the diabetes market, will help to spread such gains across the range of treatments for both type II and type I diabetes.

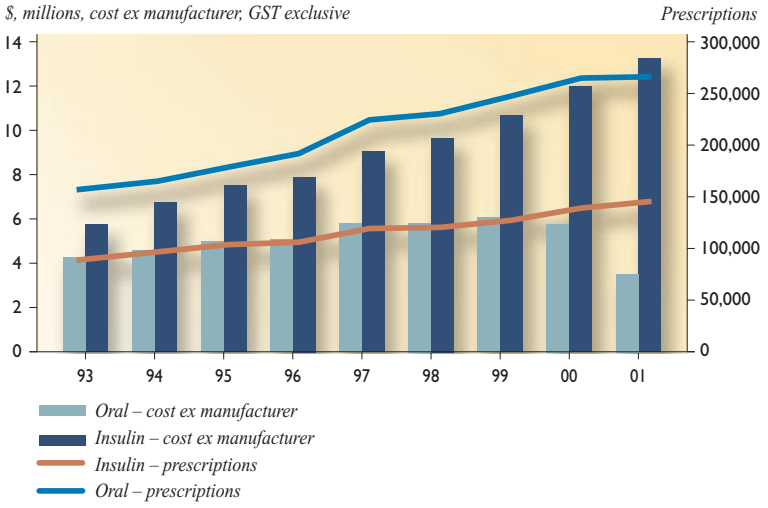
Anti-ulcerants

Further growth in the use of proton pump inhibitors instead of H_2 antagonists and an overall increase in the number of prescriptions written for anti-ulcerants continued to drive up total expenditure.



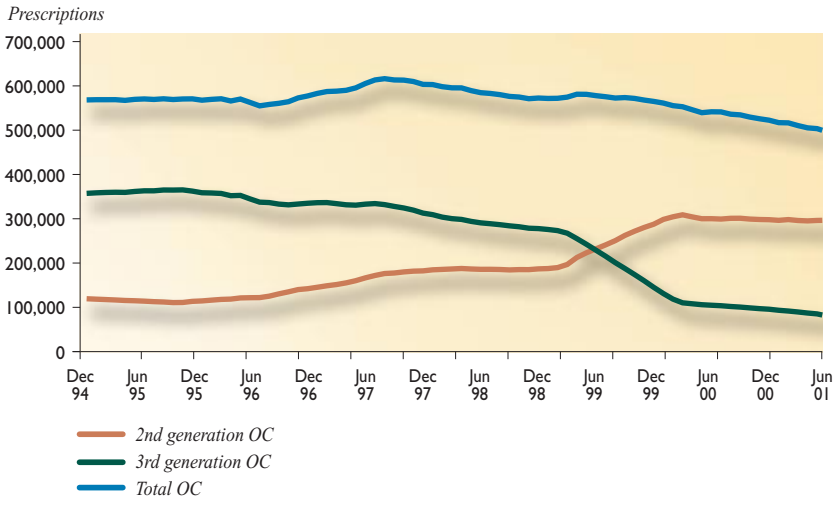
Diabetes

The financial impact of predicted trends in the uptake of treatments for diabetes has been contained by subsidy reductions in the market for oral agents.



Oral contraceptives

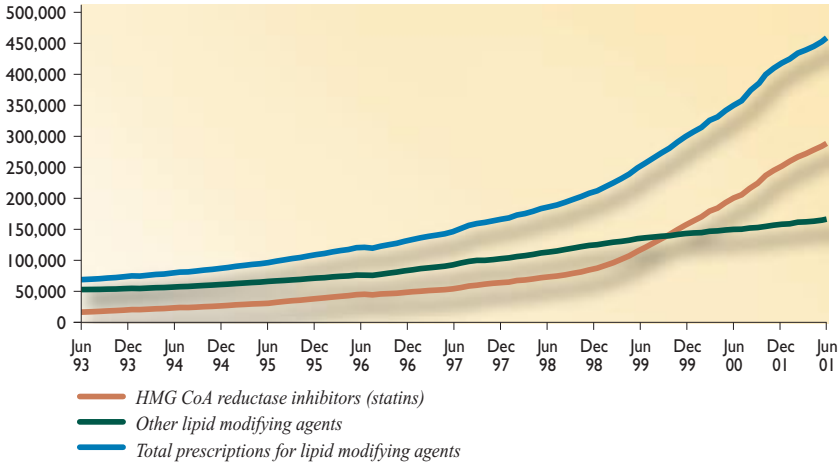
Use of third generation oral contraceptives (OC) and total oral contraceptive use continues to decline because of safety concerns.



Lipid modifying agents

The numbers of eligible patients accessing subsidies for statins has further increased this year.

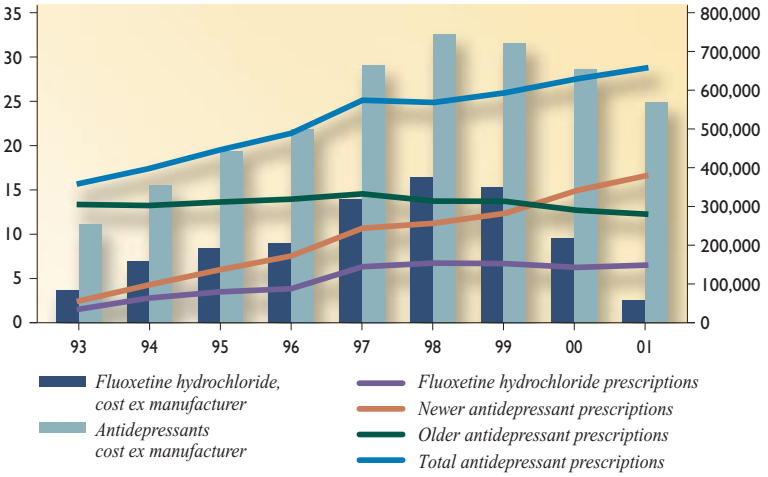
Prescriptions



Antidepressants

Subsidy reductions for fluoxetine have compensated for a general increase in use of antidepressants, particularly newer, more expensive ones.

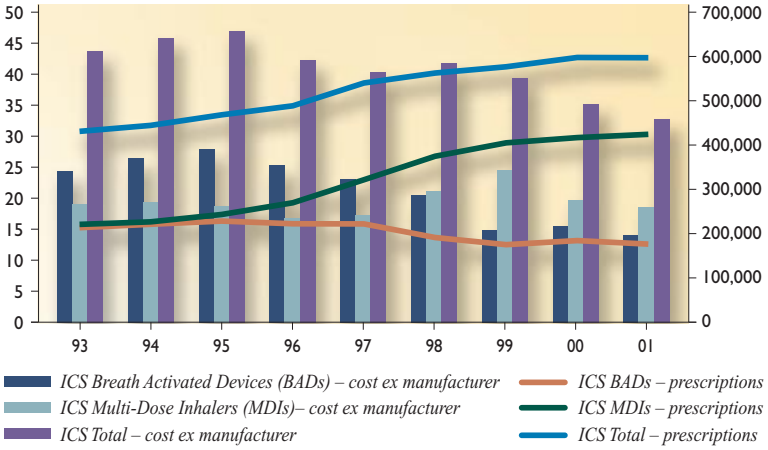
$, millions, cost ex manufacturer, GST exclusive *Prescriptions*



Asthma

Influenced by PHARMAC initiatives, trends in the inhaled corticosteroid (ICS) market have changed over time, allowing more patients to be treated at less cost to the taxpayer.

$, millions, cost ex manufacturer, GST exclusive *Prescriptions*



Blood and Blood Forming Organs

After all the controversy associated with its introduction, the reference pricing of statins continues to pay dividends and help to contain overall expenditure in this area. Falling prices have substantially improved their cost-effectiveness over the years and this trend is expected to continue following the simvastatin patent expiry in February 2001. Strong volume growth for these agents is encouraging given the health benefits of these agents. Further price reductions may assist the case for further widening access to subsidies for these agents in future.

Other potential new investments in this area include widening of access to erythropoietin and possible listing of some new anti-thrombotic agents.

Cardiovascular

Expenditure in this area continued to fall this year despite strong volume growth in most areas. This primarily reflects the further subsidy reductions for ACE inhibitors negotiated this year. Whereas implementation of the initial subsidy cuts to these agents in 1998 required significant switching for patients from one agent to another, PHARMAC was able to introduce these subsequent reductions and expand the range of fully fund agents, with less disruption. While this approach is always PHARMAC's preference, a tight budget could necessitate maximisation of the opportunities for further price reductions presented by the expiry of patents on enalapril and captopril next year.

The main other area of activity in this group this year was the introduction of the Government funded Smoking Cessation Programme, which necessitated the listing of NRT on the Pharmaceutical Schedule. The Government allocated $6.18 million (including GST) for the administration and supply of this programme.

Dermatologicals

The key transaction in this group this year was a reduction in the costs of isotretinoin which has been the subject of strong volume growth. This is also the case for topical corticosteroids on which an agreement was also reached this year. This transaction allowed PHARMAC to respond to requests from dermatologists for subsidised access to new topical corticosteroids products and at the same time created savings.

Anti-infective Agents

This year, PHARMAC completed a review of anti-retroviral therapy, which resulted in the listing of two new chemicals (efavirenz and abacavir), two new formulations (saquinavir soft gel capsules and lamivudine oral liquid) and widened access to dual protease inhibitor therapy for HIV/AIDS. For the estimated 900 people currently infected with HIV in New Zealand (of whom 117 have been diagnosed with AIDS), this restriction amendment is likely to lead to dose reductions, thereby improving long-term adherence to anti-retroviral therapy and therefore its ultimate effectiveness. Significant price reductions on other anti-infective agents and a fall in use of some anti-biotics are contributing to control expenditure growth in this area. However, use of the newer oral anti-fungals has increased and is expected to continue given the higher effectiveness of these agents over older products.

Nervous System

A large proportion of the new chemical entities listed on the Pharmaceutical Schedule this year were listed in this therapeutic area. Both the range of treatments for epilepsy and access to those treatments has been significantly improved this year. Access arrangements to newer anti-psychotic agents that were put in place in 1999 have continued to prove successful with larger numbers of patients than ever before accessing these treatments. The range of subsidised anti-psychotics was also widened this year to include quetiapine. Safety concerns for children having to take methylphenidate during a school day were addressed with the listing of a long-acting presentation. This was enabled, to some extent, by price reductions on the short-acting form of methylphenidate.

This year, PHARMAC also initiated a review of access to tropisetron and ondansetron. However, completion of that review will depend on the availability of funding to widen access and the relative priority of widening such access compared with other demands for additional expenditure.

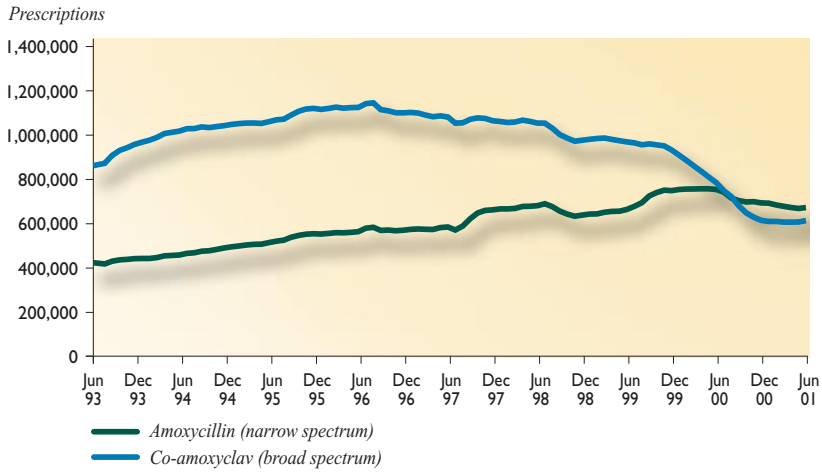
PHARMAC continues to consider applications for additional treatments for Parkinson's and Alzheimer's disease.

Oncology and Immunosuppression

Expenditure in this area increased significantly this year. This increase mirrors pressure in the secondary care sector for equitable access to a wider range of cancer treatments. It also reflects volume growth in treatments for hepatitis C in addition to endocrine agents. A price reduction on cyclosporin A helped to facilitate the listing of a long-acting version of octreotide.

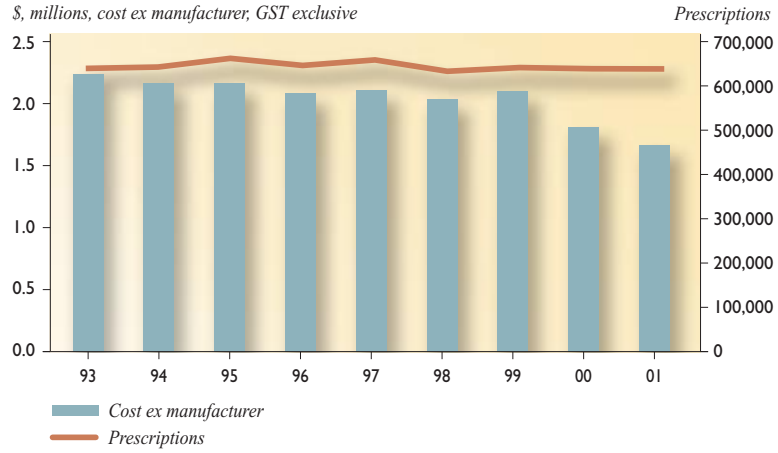
Broad vs narrow spectrum antibiotics

Colder weather may have lessened the effect of this year's awareness campaign to reduce use of broad spectrum antibiotics.



Sedatives

Use of benzodiazepines and other sedative agents has remained steady despite subsidy reductions and associated brand changes.



Prescriptions for these agents must be written monthly. Therefore, an approximate estimate of the number of patients on them can be derived by multiplying the number of prescriptions by 12 months.

Respiratory

Access to inhaled LABAs was widened this year in an agreement involving both savings and health benefits. This was achieved using PHARMAC's ability to encourage suppliers to compete for less restrictive access criteria for their product by using a request for proposal (RFP) process. The length of time the process took reflects the need for procedural care when dealing with lucrative new markets that pharmaceutical suppliers are keen to gain an edge in. Clinicians were initially concerned by PHARMAC's decision to favour one agent when widening access to inhaled LABAs. Competition between suppliers set up by such limitations on wider access was a key factor in PHARMAC negotiating an affordable agreement. In this case commercial reality, by necessity, prevailed over clinicians' preference for equal access to a wider range of treatments.

During this year, PHARMAC also took the first major step towards conversion of the metered dose inhaler (MDI) market from CFC-containing products to CFC-free, with the listings of fluticasone (Flixotide) and salbutamol (Ventolin) CFC-free MDIs. We also made savings in the peak flow meters market without reducing the number of fully funded products available.

Sensory

The range of treatment options for glaucoma patients was expanded again this year with the listing of brimonidine (Alphagan). However, concerns continued to be raised over access to lantanoprost (Xalatan) and dorzolamide (Trusopt). PHARMAC initiated a review of access to both of these agents this year. It is pleasing to note that the clinicians invited to contribute to that review largely supported the current access criteria. Implementation of the PTAC sub-committee's recommendations to widen access at the margins will depend on the availability of funding, the relative priority of widening such access compared with other demands for additional expenditure, and the willingness of suppliers to negotiate commercial solutions to the likely funding problems.

Methylphenidate – Expenditure (cost ex manufacturer, GST excl.) / No. of prescriptions[1]

Year ending 30 June	North Region		Midland Region		Central Region		Southern Region		Total	
1993	$26,389	713	$11,120	394	$22,497	702	$35,664	1,097	$95,670	2,906
1994	$41,807	1,199	$25,557	863	$48,005	1,475	$66,002	2,006	$181,372	5,543
1995	$73,229	2,365	$63,640	2,151	$92,886	2,715	$176,977	4,989	$406,732	12,220
1996	$150,463	4,560	$249,248	6,060	$188,615	5,065	$340,093	8,252	$928,419	23,937
1997	$167,233	4,754	$400,042	8,509	$297,905	7,567	$453,354	10,390	$1,318,534	31,220
1998	$352,878	9,423	$479,062	10,126	$386,328	9,865	$583,592	12,821	$1,801,860	42,235
1999	$443,294	11,548	$502,477	10,820	$492,760	12,083	$670,181	14,788	$2,108,712	49,239
2000	$466,976	11,725	$483,018	10,368	$527,784	12,610	$681,004	14,635	$2,158,783	49,338
2001	$359,894	14,867	$337,184	12,206	$364,993	14,942	$465,618	17,048	$1,527,690	59,063

Dexamphetamine – Expenditure (cost ex manufacturer, GST excl.) / No. of prescriptions[1]

1993	$2,164	130	$910	71	$2,274	127	$1,329	88	$6,677	416
1994	$2,427	157	$1,093	79	$2,658	161	$1,400	98	$7,578	495
1995	$2,536	189	$1,212	88	$3,240	198	$1,889	122	$8,877	597
1996	$2,758	218	$2,098	144	$6,549	416	$3,200	207	$14,605	985
1997	$2,756	402	$4,051	294	$20,215	1,122	$5,905	366	$32,927	1,993
1998	$2,235	419	$6,868	488	$36,271	1,961	$7,092	473	$52,467	3,071
1999	$8,180	472	$10,192	697	$50,801	2,413	$11,168	675	$80,341	4,257
2000	$14,140	639	$17,001	950	$71,736	2,909	$16,949	845	$119,827	5,343
2001	$15,055	692	$19,394	1,076	$68,378	3,011	$20,363	1,032	$123,190	5,811

1 Prescriptions for methylphenidate and dexamphetamine must be written monthly. Therefore, an approximate estimate of the number of patients on these agents can be derived by multiplying the number of prescriptions by 12 months.

The operations of PHARMAC

The Organisation

PHARMAC has had another challenging year. In December 2000, Parliament passed the New Zealand Public Health and Disability Act, 2000 under which PHARMAC became a stand-alone Crown Entity with direct accountability to the Minister of Health.

Under the new legislation, PHARMAC has responsibility for maintaining and managing a Pharmaceutical Schedule that applies consistently throughout New Zealand, including determining eligibility criteria for the provision of subsidies.

PHARMAC was this year, via the legislation, handed a number of explicit new functions including promoting the responsible use of medicines and managing access to pharmaceuticals in exceptional circumstances. Under the legislation, the PHARMAC Board is also required to establish a consumer advisory committee.

While health sector changes had limited direct impact on the structure and function of PHARMAC, they demanded that PHARMAC's focus for the year was about being responsive to the more radically changed needs of the rest of the sector. In May, PHARMAC completed a review of its structure to optimise its ability to meet its legislative obligations and improve its relationship with stakeholders. Key elements of the new structure resulting from that review:

- the establishment of a senior management role within the Supply Side team to ensure that the work of Therapeutic Group Managers is effectively coordinated and prioritised;
- a new corporate function to develop a relationship management approach to communicating with key stakeholders, particularly DHBs, manage accountability arrangements with the Ministry of Health, and oversee general corporate functions; and
- a senior management role to lead the Demand Side team's work on promoting the responsible use of medicines.

PHARMAC Board

The Minister of Health appointed three new members to the PHARMAC Board in July 2000 and made two further appointments from the Health Funding Authority's Board. The diverse mix of business skills and health sector experience of the new Board has provided a solid foundation for leading the organisation. Two of the Board's members are also DHB Board Chairs and another is a DHB Board member. They provide strong linkages between PHARMAC and the community and a first-hand perspective on the issues DHBs have faced during their establishment phase.

This year the Board developed a delegation policy, which enables the day-to-day operation of the organisation to be administered by the management team within the parameters of the delegation. This has enabled the Board to focus on the strategic context in which PHARMAC operates and establish its direction.

Listing changes to the Pharmaceutical Schedule[1]

Year ended 30 June Number	**2001**	2000	1999	1998	1997	**Total since 1994**
New chemical entities listed	**20**	18	32[4]	14	11	**121**
New presentations listed	**13**	21	40	33	24	**195**
New products listed	**28**	39	56	53	20	**314**
Total new listings[2]	**61**	**78**	**128**	**100**	**55**	**630**
Derestrictions or expanded access[3]	**19**	17	34	14	10	**137**
Changes that restrict or limit access	**6**	6	3	7	6	**36**
De-listing	**135**	362[5]	51	106	14	**668**

In 8 years, 630 new or enhanced products have been listed, access has been widened for a further 137 and 704 products have either been restricted or de-listed.

1. *Based on the date on which decisions are implemented.*
2. *Does not represent the total number of products added to the Schedule, since the listing of one new chemical entity can result in the listing of more than one presentation.*
3. *By decision, not necessarily the number of chemical entities affected.*
4. *A higher than usual number of new chemical entities were listed in 1999. This was, in part, due to the completion of a review of Special Foods that resulted in 13 new listings.*
5. *A higher than usual number of products were de-listed last year due to sole supply arrangements and the completion of the review of Extemporaneously Compounded Products.*

Applications declined by PHARMAC Board[1]

Years ended 30 June Number	**2001**	2000	1999	1998	1997	**Total since 1994**
New chemical entities	**32**[3]	1	20[2]	2	14	**65**
New presentations	**1**	2	0	10	3	**31**
New products	**0**	0	0	2	11	**31**
Derestrictions	**0**	0	3	1	1	**11**
Totals	**33**	3	23	15	29	**138**

This year, the PHARMAC Board considered 93 applications for subsidy for 93 products of which 61 were listed, and 32 declined. The acceptance rate, therefore, was 66 percent.

1. *Based on the date on which decisions are implemented.*
2. *A higher than usual number of declined applications for new chemical entities is due mainly to the Special Foods review which resulted in 18 declines.*
3. *A higher than usual number of declined applications for new chemical entities is due mainly to the Special Foods review which resulted in 28 declines.*

Staff

Staff at PHARMAC have a reputation for their professionalism and commitment to achieving the organisation's objectives. It is reflective of the PHARMAC culture and strong team spirit that the decision to leave is often very difficult and due to changing personal circumstances.

Great effort is devoted to recruitment to ensure that the mix of skills and experience in our small team, and the team dynamics are maximised when a vacancy exists. Experience has demonstrated that finding the right staff can be time consuming. Lower than optimal staffing levels were experienced by PHARMAC towards the end of this year.

Departures also create opportunities to gain fresh ideas from new staff members and we have been fortunate to recruit some exceptional individuals. We have recruited five new staff this year, two in response to new positions created as part of the review of PHARMAC's structure.

In the last six months of the year we have also undertaken a comprehensive review of all our human resource policies and procedures. This review emphasised the importance placed by our staff on continued training and development.

Working with DHBs

Working closely with DHBs has been a priority for PHARMAC this year.

In March and April we held meetings with DHB Chief Executives and senior managers around the country to provide an overview of how PHARMAC operates and to identify potential issues that we would need to work on jointly. DHBs indicated that they need information on pharmaceutical expenditure promoting the development of a regular, standard report for DHBs, which began circulation in June and has been well received.

Work on a service level agreement between DHBs and PHARMAC commenced towards the end of the year and, once finalised, will outline the respective roles and responsibilities of PHARMAC and the DHBs on a number of projects.

Maori Health Strategy

During the review of PHARMAC's Operational Policies and Procedures (OPPs) in 2000, we received feedback from Maōri, that they wanted a specific strategy showing how PHARMAC intended to meet its obligations under the Treaty of Waitangi. In response to this feedback, we undertook to develop a Maōri responsiveness strategy.

In February 2001 PHARMAC engaged Kahui Tautoko to undertake an organisation-wide review process that culminated in a draft Maōri responsiveness strategy. The next stage is to conduct hui on Marae throughout New Zealand in a focused manner with the objectives of:

- ensuring the participation of Maōri in the planning of the future direction of PHARMAC;
- engaging with key stakeholders in the Maōri community;
- raising the awareness of Maōri about PHARMAC activities in regard to Maōri responsiveness; and
- establishing on-going working relationships with key Maōri stakeholders.

We are aiming to develop a responsiveness strategy that improves access by Maōri to pharmaceuticals listed on the Pharmaceutical Schedule, improves compliance with pharmaceuticals that are prescribed, and ultimately improves health outcomes for Maōri.

Demand Side Management

The Demand Side function within PHARMAC continued to develop this year. The value of this, with a small, dedicated team has been recognised in the New Zealand Public Health & Disability Act, 2000 under PHARMAC's new function to promote the responsible use of medicines.

This year the Demand Side team has focused on:

- supporting Supply Side initiatives including assisting in the implementation of new access criteria for inhaled LABAs, and facilitating financial support by the Ministry of Health for the NZ Herpes Foundation when the pharmaceutical industry withdrew its funding;

- managing Referred Services contracts with the Preferred Medicines Centre (PreMeC), the Best Practice Advocacy Centre (BPAC), and the Hillary Commission Green Prescription Programme;

- specific projects which increase awareness of issues that drive pharmaceutical expenditure such as the "Wise Use of Antibiotics" campaign. This Independent Practitioner Association (IPA) driven campaign was implemented nationwide for the third year running with PHARMAC providing funding and resources. Evidence from previous campaigns shows very high support for the campaign by both clinicians and the public, with an overall reduction in antibiotic prescribing of nearly 14.8% (1999 compared with 2000 data), and a reduction in public expectation of receiving antibiotics for colds and flu from 80% to 50% (Colmar Brunton research);

- developing clinician and patient support material. Several such resources were developed in the past year including a patient pamphlet on diabetes tablets, which has been translated into 10 different languages and a pamphlet, "My Medicine Looks Different" which provides information for patients when medicines are changed as a result of subsidy decisions. These and other PHARMAC resources are provided free of charge and can be obtained on the PHARMAC website **www.pharmac.govt.nz** or on 0800 66 00 50 (toll free); and

- PHARMAC's public relations. PHARMAC staff have attended numerous conferences and speaking engagements throughout the year talking with health professionals, student groups, consumer representative and interest groups. PHARMAC staff have also met with key stakeholders and representative groups throughout the year to identify and address common issues. Stakeholders we meet with regularly include the Royal New Zealand College of General Practitioners (RNZCGP), New Zealand Medical Association (NZMA), Pharmacy Guild, Pharmaceutical Society, IPAs, patient groups and members of the industry – both individually and collectively via the Research Medicines Industry (RMI). We value the relationships we have with stakeholders and while we may at times have differing points of view having the opportunity to meet and discuss issues with stakeholders is very important to us.

Financial Performance

Due to increased responsibilities and requirements under the New Zealand Public Health and Disability Act, 2000, PHARMAC has increased the number of employees. As noted in the table, the staff costs have increased to reflect this. Also, due to the change of Board at the beginning of July 2001, expenditure on Directors' fees also increased.

Office costs have again risen, mainly due to expenditure on legal costs in an effort to review our contracts and tender process.

Although there have been major increases in two areas of legal expenditure, we have reduced our costs related to litigation, consulting and Pharmaceutical Schedule production.

The annual cost of PHARMAC

Derived from audited figures for years ended 30 June

$ 000s	**2001***	2000	1999	1998	1997
Staff costs *(includes Directors' and professional fees)*	**1,763**	1,598	1,539	1,440	1,245
Office costs *(includes depreciation, rent, phones, library, purchase of data, ordinary legal costs)*	**2,326**	1,744	1,701	1,176	855
Advisory services *(includes PTAC, PR, general consulting, audit fees, HRM and accounting)*	**597**	695	1,215	1,409	1,517
Schedule production *(printing and postage only)*	**348**	464	424	479	345
Costs associated with litigation	**251**	736	594	1,039	1,607
Total cost	**$5,285**	$5,237	$5,473	$5,543	$5,569

At balance date, fixed assets comprised $222,000 of office and computer equipment, furniture and fittings.

* *Figures for 2001 are a composite of audited figures for the period 1 July 2000 – 31 December 2000, and the draft figures for 1 January 2001 – 30 June 2001, which will be audited in September 2001.*

Increases of more than $500,000 in year ending 30 June 2001

By therapeutic group 2 & 3 *$ millions, ex manufacturer GST exclusive*	Dollar change 2001 over 2000	Percentage change 2001 over 2000	Percentage change 2001 over 1993
Lipid Modifying Agents – HMG CoA reductase inhibitors (statins)	7.52	24%	822%
Anti-ulcerants – proton pump inhibitors	6.82	22%	1449%
Anti-psychotics – general	6.45	29%	935%
Immunosuppressants – Multiple Sclerosis treatments	2.86	New listing	NA
Diabetes Management – glucose/blood testing	2.14	16%	174%
Anti-migraine Preparations – acute migraine treatment	1.39	19%	1000%
Anti-fungals – oral	1.32	22%	371%
Other Endocrine Agents	1.12	94%	283%
Fluids and Electrolytes – intravenous administration	1.08	82%	–50%
Agents affecting the Renin-Angiotensin system – angiotension II antagonists	1.07	424%	NA

By therapeutic group 2 & 3 *$ millions, ex manufacturer GST exclusive*	Dollar change 2001 over 2000	Percentage change 2001 over 2000	Percentage change 2001 over 1993
Immunosuppressants	1.00	11%	123%
Trophic Hormones – GnRH analogues	0.96	40%	635%
Anti-diarrhoeals – rectal and colonic anti-inflammatories	0.94	14%	178%
Anti-anaemics – hypoplastic and haemolytic	0.89	27%	395%
Diabetes – insulin: intermediate and long-acting preparations	0.83	10%	133%
Inhaled corticosteroids – metered dose inhalers – very high dose	0.80	10%	NA
Oral Supplements/Complete Diet (nasogastric/gastronomy tube feed)	0.67	24%	1737%
Diabetes – insulin: rapid acting insulin analogues	0.65	80%	NA
Agents affecting the Renin-Angiotensin system – ACE inhibitors with diuretics	0.61	32%	–36%
Eye Preparations – glaucoma preparations	0.54	15%	25%
Inhaled beta-adrenoceptor agonists – long acting – breath activated devices	0.51	35%	NA

Decreases of more than $200,000 in year ending 30 June 2001

By therapeutic group 2 & 3 *$ millions, ex manufacturer GST exclusive*	Dollar change 2001 over 2000	Percentage change 2001 over 2000	Percentage change 2001 over 1993
Anti-bacterials – penicillins	–5.87	–43%	–49%
Nasal preparations – allergy prophylactics	–3.91	–74%	–84%
Anti-depressants – selective serotonin reuptake Inhibitors	–2.74	–12%	463%
Diabetes – oral hypoglycaemic agents	–2.25	–39%	–17%
Nitrates	–2.20	–45%	–68%
Agents affecting the Renin-Angiotensin system – ACE inhibitors	–1.69	–7%	–27%
Anti-inflammatory Non Steroidal Drugs (NSAIDs)	–1.65	–24%	–68%
Calcium Channel Blockers – dihydropyridine calcium channel blockers (DHP CCBs)	–1.61	–17%	–50%
Muscle Relaxants	–1.46	–69%	–69%
Inhaled beta-adrenoceptor agonists – breath activated devices – terbutaline 500 ug	–1.28	–100%	–100%
Inhaled corticosteroids – metered dose inhalers – medium dose	–1.06	–27%	–61%
Beta Adrenoceptor Blockers	–0.98	–11%	–52%
Corticosteroids Topical – corticosteroids – plain	–0.96	–16%	–11%
Hyperuricaemia and Anti-gout	–0.73	–50%	–64%
Inhaled corticosteroids – breath activated devices – very high dose	–0.71	–9%	–33%
Anti-bacterials – tetracyclines	–0.68	–49%	–70%
Corticosteroids – injectibles	–0.66	–48%	28%
Inhaled corticosteroids – metered dose inhalers – high dose	–0.65	–9%	–40%
Other CNS Agents	–0.63	–26%	1044%
Contraceptives – hormonal – combined oral contraceptives	–0.53	–9%	–35%

By therapeutic group 2 & 3 *$ millions, ex manufacturer GST exclusive*	Dollar change 2001 over 2000	Percentage change 2001 over 2000	Percentage change 2001 over 1993
Anti-depressants – cyclic and related agents	–0.50	–16%	–49%
Anti-psychotics – depot injections	–0.50	–40%	–53%
Anti-depressants – monoamine-oxidase type A inhibitors	–0.42	–23%	–33%
Anti-virals – recurrent episodes of genital herpes	–0.42	–24%	–36%
Diuretics – thiazide and related diuretics	–0.39	–39%	–64%
Inhaled corticosteroids – breath activated devices – high dose	–0.39	–7%	–47%
Anti-ulcerants – H_2 antagonists	–0.38	–11%	–87%
Calcium Channel Blockers – other calcium channel blockers	–0.37	–4%	26%
Anti-Parkinson Agents – dopamine agonists and related agents	–0.36	–7%	–28%
Trophic Hormones	–0.34	–8%	–16%
Anti-spasmodics and Other Agents Altering Gut Motility	–0.31	–23%	35%
Extemporaneously Compounded Preparations & Galenicals	–0.31	–75%	–93%
Alpha Adrenoceptor Blockers	–0.29	–5%	186%
Diuretics – loop diuretics	–0.28	–36%	–47%
Anti-virals – acute herpes zoster	–0.28	–31%	NA
Immunosuppressants – immune modulators	–0.23	–12%	41%
Pregnancy tests – HCG urine	–0.23	–34%	–49%
Laxatives – osmotic laxatives	–0.22	–14%	–42%
Diabetes – insulin: short-acting preparations	–0.22	–8%	43%
Inhaled corticosteroids – breath activated devices – medium dose	–0.21	–14%	–68%

Directory

PHARMAC Board

Directors

Richard A Waddel, BCom, FCA, *(Chair)*

David Moore, MCom, Dip Health Ec, CA

Ross Black, BCom

Liz Coutts, BMS, CA

Gregor Coster, MSc, MBChB, FRNZCGP

Karen Guilliland, RM, RGON, MA, MNZM

Pharmacology and Therapeutics Advisory Committee (PTAC)

John Hedley, MBChB, FRACP, FACCP, Member Thoracic, Cardiac and Gastroenterology Societies of Australia and New Zealand, *(Chair)*

Robin Briant, MD, FRACP, physician and pharmacologist

Carl Burgess, MBChB, MD MRCP (UK), FRACP, clinical pharmacologist (new)

Bruce Foggo, MBChB, Dip Obst, FRNZCGP, general practitioner

Jim Lello, BHB, MBChB, DCH, FRNZGP, general practitioner (new)

Colleen Lewis, BHB, MBChB, DCH ,FRNZGP, general practitioner (new)

Peter Pillans, MBChB, FCP, FRACP, pharmacologist

Tom Thompson, MBChB, FRACP, physician

Paul Tomlinson, MBChB, MD, MRCP, FRACP, BSc, paediatrician

PTAC sub-committees

Asthma

John Hedley (PTAC), *(Chair)*
Innes Asher, paediatrician
Carl Burgess (PTAC)

Mental Health

Robin Briant (PTAC)
Peter Ellis, psychiatrist, *(Chair)*
Carl Burgess (PTAC)
John Hopkins, psychiatrist
Anne Walsh, psychiatrist
Janet Holmes, general practitioner

Antibiotics

John Hedley (PTAC), *(Chair)*
Robin Briant (PTAC)
Bruce Foggo (PTAC)
Sandy Smith, microbiologist
Paul Tomlinson (PTAC)
Mark Thomas, infectious diseases specialist

Special Foods

Paul Tomlinson (PTAC), *(Chair)*
Kerry McIlroy, dietician
Jo Stewart, dietician
John Wyeth, gastroenterologist

Cardiovascular

John Hedley (PTAC), *(Chair)*
Alan Moffitt (PTAC)
Gary Gordon, cardiologist
Lannes Johnson, general practitioner
Miles Williams, cardiologist
Peter Pillans (PTAC)

Hormonal Contraceptives

Bruce Foggo (PTAC)
Sharon Kletchko, physician, *(Chair)*
Frances McClure, general practitioner
Christine Roke, general practitioner
John Hutton, reproductive endocrinologist

Diabetes

Tom Thompson (PTAC), *(Chair)*
Pat Carlton, diabetes nurse specialist
Paul Drury, diabetologist
Tim Kenealy, general practitioner
Peter Moore, diabetologist

Neurological

Tom Thompson (PTAC)
Alistair Dunn, general practitioner
Lindsay Haas, neurologist
John Hedley (PTAC), *(Chair)*
William Wallis, neurologist

anti-retroviral agents

John Hedley (PTAC), *(Chair)*
Evan Begg, clinical pharmacologist
Stephen Chambers, infectious diseases specialist
Richard Meech, physician
Mark Thomas, infectious diseases specialist
Paul Tomlinson, (PTAC)

Osteoporosis

John Hedley (PTAC), *(Chair)*
Peter Black, physician and clinical pharmacologist
Anna Fenton, endocrinologist
Ian Reid, endocrinologist
Richard Sainsbury, geriatrician

CNS Stimulants

John Hedley (PTAC), *(Chair)*
Paul Tomlinson (PTAC)
Allan Moffitt, general practitioner
Martin Pollock, neurologist
John Werry, psychiatrist

Extemporaneously Compounded Preparations (ECP)

Allan Moffitt, general practitioner, *(Chair)*
Sue Peacock, pharmacist
Brian Walker, pharmacist
David Woods, pharmacist
Bruce Taylor, dermatologist

Tender Medical Sub-Committee

John Hedley (PTAC) *(Chair)*
Bruce Foggo (PTAC)
Paul Tomlinson (PTAC)
Andrea Shirtcliffe, pharmacist
Peter Cook, pharmacist

The PHARMAC team (as at 30 June 2001)

Wayne McNee, BPharm, MPS, *chief executive*
Jason Arnold, BSc, PG Dip Stats, *forecast analyst*
Richard Braae, BCom (Hons), MA, *strategic development manager*
Matthew Brougham, MSc (Hons), Dip Health Econ, *senior analyst*
Mary Chesterfield, *receptionist (part time)*
Philip Crampton, *manager, supply side*
Cristine Della Barca, Dip Pharm, Dip Bus Admin, MPS, *therapeutic group manager*
Jan Edwards, *office manager*
Ursula Egan, Dip Pharm, MPS, *schedule analyst (part time)*
John Geering, BA, BSc, *programmer/analyst*
Kyle Jones, BA BSc (Hons), *transactions manager* (Resigned Apr 2001)
Luca Li Bassi, Medical Doctor, Dip Mgt, *therapeutic group manager*
Jan McNee, BPharm, MPS, *schedule assistant (part time)*
Lele Ma'auga, *therapeutic group assistant*
Scott Metcalfe, MBChB, D Com H, FAFPHM, *epidemiologist/public health physician (on contract)*
Peter Moodie, BSc MBchB, FRNZCGP, *medical director*
Jessica Nisbet, *receptionist*
Hew Norris, BMS (Hons), *analyst*
Jan Quin, RCpN, *project manager (part time)*
Maureen Narayan-Ram, MPharm, MPS, *demand-side manager* (Resigned Apr 2001)
Olivia Paterson, BCA, BA (Hons), *manager, corporate*
Matthew Perkins, BCom, PGDipCom, *analyst*
Dilky Rasiah, MBChB, DPH, *therapeutic group manager (part-time)*
Sarah Schmitt, BSc, *therapeutic group manager*
Rico Schoeler, Diplom – Volkswirt, Dip Econ, *analyst* (Resigned Apr 2001)
Glenda Stewart, *receptionist* (Resigned Mar 2001)
Martin Szuba, MD, MBA, MSc, *therapeutic group manager*
Rachel Wilson, NZIMR, *demand-side manager*
Lisa Williams, BSc (Hons), PhD, *therapeutic group manager* (Resigned May 2001)

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Publications Available on PHARMAC's Website

- The Pharmaceutical Schedule and Monthly Updates
- PHARMAC's Operating Policies and Procedures (including minutes from meetings relating to the recent review of these)
- PHARMAC's Annual Report to Parliament
- PHARMAC's Post Election Briefing to the Minister of Health
- PHARMAC's Annual Business Plans
- Annual Reviews
- A Prescription for Pharmacoeconomic Analysis (an explanation of PHARMAC's methods for Cost-Utility Analysis)
- Various consultation letters
- PHARMAC's invitation to suppliers to tender for sole supply of pharmaceuticals
- Press releases
- Special Authority Forms
- Patients leaflets
- Statistics about pharmaceutical spending in New Zealand

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