Delivery at the Edge

Purchasing primary health care outcomes from community pharmacy

August 2007

PHARMACY GUILD OF NEW ZEALAND (INC)

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Purchasing primary health care outcomes from community pharmacy

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Contents

1 Introduction

This paper is part of a programme of work being undertaken by the Pharmacy Guild of New Zealand Inc (**Guild**) on the future role of community pharmacy, which began with the publication in 2005 of *Blueprint for the Future of Community Pharmacy* (**Blueprint**).

The paper complements the Guild's submissions on the *National Medicines Strategy* of April 2007 and is intended as a basis for collaborative engagement with the government, District Health Boards (**DHBs**), and other primary health care professionals on options for enhancing the value of community pharmacy as part of an integrated framework for primary health care services delivery.

In particular, the paper considers approaches to the definition and purchase of community pharmacy services that will best contribute to optimal outcomes for individual patients, as well as for the future efficiency, effectiveness and security of primary health care services in New Zealand.

The paper is supported by policy and legal analysis of:

- Government policy and preferred policy outcomes;
- local and international trends in community pharmacy; and
- the legal framework governing DHBs purchasing decisions, including relevant legislation, and state sector procurement rules and guidelines.

The paper is divided into four substantive sections:

- the policy context and government's objectives for primary health care (Section 3);
- the future direction of community pharmacy; (Section 4)
- the legal context (Section 5); and
- options for optimising the purchase of pharmacy services (Section 6).

This paper considers approaches to the definition and purchase of community pharmacy services that will best contribute to optimal outcomes both for individual patients and for the future efficiency, effectiveness and security of primary health care services in New Zealand.

2 Executive Summary

New Zealand's primary health care service is faced by a number of challenges. The demands of an aging population, the growing strain on the primary health workforce and shifts in the occupational preferences of pharmacy and other primary health care professionals present a set of converging problems that, if unaddressed, will threaten the future efficiency, effectiveness and security of primary health care provision.

These same challenges have become an issue for health services in other jurisdictions and it is clear that the any degradation in primary health care services will impact adversely on both secondary and tertiary health care provision.

These risks have been acknowledged by Government, which, in a succession of policy statements, has stressed the importance of health promotion, early intervention and integrated approaches to service delivery by primary health care providers, including community pharmacists.

These themes were articulated most recently in the Government's consultation document, *Towards a New Zealand Medicines Strategy*:

> *Under optimal use: increasing the role of pharmacists in ensuring the best use of medicines, improving information-sharing, including the interface between primary and secondary care, and the availability and quality of information given at the time of dispensing.*
>
> *This document particularly supports the current sector initiatives that aim to improve the optimal use of medicines, and proposes that further action be taken in this area. The public funding of safe and effective medicines cannot achieve the desired health gains if those medicines are not used appropriately and correctly.*

However, whilst these core principles are readily articulated, giving effect to them is constrained by the need to control health expenditure and allocate funds to where the greatest value can be obtained.

That need is, of course, entirely legitimate. However, in practice it has resulted in sub-optimal approaches to the purchase of community pharmacy by DHBs. Some reflect a sophisticated appreciation of the health care needs of the community and what community pharmacy does or can do, and are focussed on getting value for money over the short, medium and long terms.

Other approaches are focussed simply on short term cost savings. These suggest real tensions in how community pharmacy is understood, valued and perceived, and it is these that are least responsive to the objective of fostering a secure, integrated and effective primary health care service.

In the Guild's view, delivering against the objective of an integrated and effective primary health care service requires careful consideration of the scope of services provided by community pharmacy and how these services are purchased. Moreover, that consideration must proceed from an understanding of the changing role of community pharmacists, the surrounding policy and legal frameworks, the nature of the incentives placed on community

pharmacy and the extent to which purchasing arrangements are designed to facilitate the optimal use of primary health care resources in the short, medium and long-term.

2.1 The changing role of community pharmacists

Over time, the role of pharmacists has evolved from that of a referred provider of consumables (prescription medicines) to that of a key health professional standing alongside general medical practitioners and nurses. This changing role is reflected and reinforced by Government policy statements, which stress the importance of community pharmacists in facilitating the optimal use of medicines, as well as more generally contributing to accessible and efficient primary health care services.

This is consistent with both local and international trends. A review of the literature on the evolution of pharmacy services shows two critical drivers:

- the cost, in terms of health outcomes and health budgets, of suboptimal use of medications (including adverse drug reactions, non-adherence and the failure to review long-term medication); and

- the increasing pressures on the primary health care workforce, including both a growing shortage of general practitioners, and the changing composition and expectations of new entrants to community pharmacy.

The policy response both here and overseas has been to more effective management of the primary health care workforce as a whole and, as a corollary, to give greater attention to the use of community pharmacists' skills in:

- managing the costs and effectiveness of medication use in the community (e.g., monitoring adherence/concordance and disease state management, including home visits);

- easing the burden on general practice (e.g., prescribing within a framework set by a GP, typically for repeats where the patient is in a stable long-term condition); and

- improving access to primary health care services (e.g., as a 'first port of call' for advice on minor ailments or injuries as an alternative to visiting a GP).

2.2 Population and workforce trends

One factor in this development is the recognition by governments, both here and overseas, of the impact of an aging population on the demand for health services and on an already strained health workforce. A report by NZIER, commissioned in 2004 by the Ministry of Health, concluded that these demands are likely to increase faster than the population itself, resulting in the risk of labour shortages in health and disability services. This, NZIER concluded, underscores the importance of focusing on how the health and disability services workforce – including community pharmacists – should be educated, trained, developed and deployed.

To this demographic change must be added a number of workforce trends that will require careful management in the interests of maintaining and improving the health status of New Zealanders. They include:

- the increasing professional standards of recent and current graduates and the associated expectation they have of being able to utilise those skills within community pharmacy;

- changing expectations in terms of work/life balance, especially on the part of female graduates (now the significant majority of all pharmacy graduates); and

- reconciling the role of community pharmacy with the need for more effective management of the primary health care workforce as a whole, especially in the context of the workforce issues currently facing general practice.

Moreover, the changes taking place in community pharmacy are not just changes in its role in contributing to health outcomes. There are also quite significant changes in areas such as ownership and management (such as the advent of franchising) that have the potential to change significantly the way in which community pharmacy functions and interacts with the rest of the primary health sector.

2.3 Framework for purchase of community pharmacy services

The funding and provision of pharmacy services in New Zealand is determined by a combination of Government policy, statute, common law and contract. The resulting framework consists of monopsonist Crown entities (DHBs) providing funding to pharmacies that provide pharmacy services. Some of these services are prescribed by statute and a standard sector contractual agreement and some are prescribed in a new policy document (the New Zealand National Pharmacist Services Framework) and are subject to discretionary funding.

Legally, the DHBs may distribute government funding for health services as they see fit, provided they act within their the scope of their statutory functions and objectives, which constrain them in respect of ensuring access and quality of health services. There are, however, a number of other relevant factors that must be considered at the same time. These include:

- Government policy (in the form of national health strategies and procurement guidelines);

- the distinction between pharmacy services falling within the statutory monopoly for pharmacists (and pharmacies) only and other pharmacy services (such as the recently proposed ‘specialist’ services) that could potentially be provided by independent pharmacists (i.e., other than community pharmacists);

- issues that have arisen recently in the analogous laboratory testing services sector (which recently shifted to a tendering model for funding); and

- Competition law implications under the Commerce Act (having regard to the unique competitive environment with significant monopoly pharmacy services and monopsonist purchasers).

All of these factors operate to guide or constrain the DHBs in their actions and are relevant to and, in many respects, support the development of optimal approaches to the purchase of pharmacy services in future.

2.4 Government primary health care policy objectives and community pharmacy services

Particularly relevant to this framework is Government's primary health care policy, which:

- places a continued emphasis on affordability and providing services within available funding, as well as a renewed interest in the concept of "value for money" (obtaining improvements in the quality of outcomes within that funding);
- makes an ongoing commitment to moving away from an individualised fees for services approach to funding and services based on population needs with a focus on health promotion, disease prevention and early intervention; and
- stresses the importance of achieving an integrated approach to the service delivery by primary health care providers, including community pharmacists.

Consistent with Government policy, DHBs are concerned to:

- move away from fees for services to funding and services based on population needs with a focus on health promotion and disease prevention; and
- increase the role of pharmacists in ensuring the best use of medicines, improving information-sharing, and improving the availability and quality of information given at the time of dispensing.

In *Blueprint for the Future* the Guild acknowledged Government and DHB concerns about the open-ended nature of fee-for-service funding. It also noted the need to consider alternative funding approaches that better contribute to achieving optimal outcomes for both individual patients and for the use of primary health care resources.

However, the Guild also notes that current institutional and funding arrangements constrain the extent to which DHBs can seek to improve quality of health outcomes by making trade-offs between expenditure on pharmaceuticals or medication management and expenditure in other areas (e.g., GPs visits or hospital admissions). DHBs are instead compelled to seek savings *within* their pharmaceutical budgets for their communities (e.g., trading off increased expenditure on additional community pharmacy services by decreasing dispensing fees).

This significantly limits the ability to develop an approach to purchasing community pharmacy services that supports the optimal use of medicines and pharmacists' professional services so as to reduce overall health care costs and improve health outcomes for New Zealand as a whole.

This difficulty is illustrated by one DHB's recent discussion document on pharmacist services, which focuses heavily on pharmaceutical spending and believes one of the strategic opportunities to be "reducing costs in the distribution chain and release funding for other value-added services"[1] that "would most likely be linked directly to PHOs rather than part of a comprehensive community pharmacy role".[2]

[1] Tairawhiti District Health, *The Future of Pharmacist Services in Tairawhiti, A Discussion Paper* (July 2007), p. 14.
[2] Ibid., p. 12.

Such an approach - focussed as it is on the dispensing role of community pharmacists - demonstrates a fundamental lack of understanding of the services many community pharmacists currently provide. It also overlooks the importance of the interaction between dispensing and value-add services, and the contribution this makes to primary health care delivery.

Whilst a narrow, cost-reduction approach may provide short term 'benefits' even on that limited criterion, any gains are likely to be short-lived.

Current community pharmacy services include averting the potential for harm resulting from prescriber error, giving patient advice in relation to both prescription and non-prescription pharmaceuticals, acting as a "first port of call" for advice on an ailment or injury, visiting patients (especially older people) at home to monitor medication management and ensure adherence and assisting the work of other primary health care providers (e.g., regular briefings/training sessions with rest home staff, addresses to community organisations on pharmaceutical-related issues, and support for sport and recreation organisations). This role not only relieves the burden on GPs but is also a significant, if largely unrecognised, component in the primary health care system.

Further, while such a cost-reduction approach may provide short term benefits (presuming cost reduction is the key measure of benefit), even on that narrow criterion, any gains are likely to be short-lived. Over the longer term, as market participation becomes untenable for marginal providers, the reduced number of community pharmacies will have greater bargaining power, which has the potential to drive costs up. The unintended consequence will be to leave both DHBs and community pharmacists, as well as primary health care services overall, worse off than they were before - a result entirely inconsistent with the Government policy and the DHB's obligations.

2.5 Optimising the purchase of community pharmacy services

The challenges facing primary health care services and the primary health care workforce in New Zealand point clearly to the need for greater collaboration between DHBs and community pharmacy. An appreciation of the emerging problem and the need to foster additional value from community pharmacy would suggest DHBs should be encouraging community pharmacy to move into a new services environment, rather than focusing on cost-cutting.

At least one DHB already appears to have recognised this and has recently established a project to consider medicines into the future. The approach of the project is to examine what is actually happening in the community and then determine how to get value for money, establish a viable future for community pharmacy and better use of pharmacist skills as medicines experts.[3]

[3] Taranaki District Health Board, *Medicines into the Future – Project Scope* (May 2007), pp. 2 – 3.

However, as noted above, current arrangements constrain the extent to which any individual DHB or group of DHBs can seek to improve quality of health outcomes by making trade-offs between expenditure on pharmaceuticals or medication management and expenditure in other areas. Further, the current national health and disability strategies, population-based strategies and service-based strategies that provide guidance to DHBs about purchasing do not specifically address pharmacy services.

In the face of this the Guild concludes that the crucial issue for optimal purchasing of pharmacy services is not the purchasing approach as such, but rather the criteria to be applied to purchasing decisions - for example, what outcomes is purchasing intended to support and are the purchasing activities of DHBs monitored and evaluated against their contribution to supporting the government's objectives for purchasing policy?

Reviewing the five possible purchasing options (current standard contract, section 88 notice, bulk funding or relational contracting) and noting the way in which community pharmacy contributes to the provision of primary health care services, the Guild proposes a shift to outcomes-based purchasing, guided by a set of explicit criteria. These criteria would include:

- optimal use of medicines (arrangements supporting the prescription, dispensing and administration of medications to ensure that patients have the best possible opportunity of achieving the intended outcome);

- establishment of a set of incentives for the pharmacy workforce that will encourage the recruitment, retention and geographical distribution of the numbers and quality of professional pharmacists (and technicians) required for adequate and timely access to primary health care services;

- provision of adequate and timely access to pharmacy services;

- optimal management of the primary health care workforce (including encouragement of collaboration amongst different primary health care professions and minimisation of undesirable pressure on other primary health care providers);

- encouragement of innovation by community pharmacists in the development of services to meet desired outcomes;

- potential to trade off investment in pharmacy services against other interventions that enhance health outcomes and minimise health care costs over the medium to long-term (enabling trade-offs between current year and future year expenditure, and between different funding components within the health sector); and

- evidence-based understanding of the role and function of community pharmacy and the contributions it can make to improved health outcomes and reduced health sector costs.

Ideally, these criteria would be incorporated into national policy guidance regarding optimal purchasing of community pharmacy services, recognising the current and potential role of pharmacists and their services in contributing to achieving government's objectives for the health sector. Ideally also, separate processes would be adopted for the purchase of base pharmacy services and for enhanced pharmacy services, as is already the case in Australia, is emerging in England and is now being recognized by DHBs themselves.

If adopted by DHBs, the recommended approach (and accompanying criteria) would assist DHBs to avoid unintended and potentially harmful consequences of a purely cost-based approach to purchasing. At the same time, it would allow the use of a range of different purchasing tools, be more consistent with Government's policy objectives for the primary health care services and encourage a higher degree of collaboration between primary health care professionals.

The Guild concludes finally that any change in purchasing approach should be evidence-based. It must be fully informed by knowledge of the New Zealand community pharmacy sector, the role it currently plays in primary health care provision and is likely to play in future, and the potential impact that any change in purchasing approach may have on the viability and effectiveness of community pharmacists as primary health care providers.

Outcomes-based purchasing will assist DHBs in avoiding unintended and potentially harmful consequences of a purely cost-based approach to purchasing, whilst permitting the use of a range of different purchasing tools.

3 Background

Critical to any discussion of funding and provision of community pharmacy services in New Zealand is an understanding of the current approach to and structure of publicly funded health care, including primary health care.

The health reforms of the late 1990s established the following approach:

- government sets out the strategic framework for health and disability services, including primary health care services;
- DHBs fund and provide primary health care services, including community pharmacy services, based on the objectives, outcomes and priorities set by government, within the funding allocated from Vote: Health and in accordance with the Pharmaceutical Schedule managed by Pharmac; and
- PHOs are the principal vehicles for delivery of primary health care services.

3.1 Government objectives and vision for primary health care

The strategic policy framework for health and disability services, within which to consider the purchase of community pharmacy services in New Zealand, derives from several key statutes, in particular:

- the New Zealand Public Health and Disability Act 2000 (PHD Act), the purpose of which is to provide for the public funding and provision of personal health services, public health services and disability support services, and to establish publicly owned health and disability organisations (DHBs), in order to pursue certain stated objectives – such as the

improvement, promotion and protection of the health of New Zealanders – within available funding;[4]

- the Health Practitioners Competence Assurance Act 2003 (HPCAA), which provides for the regulation of the pharmacy profession in terms of registration of pharmacists as health practitioners and established the Pharmacy Council as the registering authority[5]; and
- the Misuse of Drugs Act 1975 (with respect to controlled drugs) and the Medicines Act 1981, which establishes a legal monopoly for pharmacists in respect of the supply of certain medicines and provides further detail on the regulation of the profession (in relation to licensing of the operators of pharmacies and ownership controls).

The strategic policy framework is also comprised of a number of key government policy documents that have been developed over the last decade, including:

- the New Zealand Health Strategy 2000, developed by the Ministry of Health (Ministry);
- the Primary Health Care Strategy 2001 (PHCS), developed by the Ministry;
- the New Zealand Medicines Strategy (Medicines Strategy), currently being consulted on by the Ministry; and
- the Ministry of Health Statement of Intent for 2007-2010 (Ministry SOI); and
- the government's health targets for 2007/08.

3.1.1 Government health sector strategies

The PHD Act established the New Zealand Health Strategy 2000 (NZHS) and the New Zealand Disability Strategy 2001 as the key policy documents for the health and disability sectors.[6] Under these overarching strategies are population-based strategies (e.g., Health of Older People Strategy) and service-based strategies (e.g., the Primary Health Care Strategy).

3.1.1.1 New Zealand Health Strategy

The NZHS, launched in December 2000, emphasises improving population health outcomes and reducing inequalities in health.[7] As noted in the Strategy, "the New Zealand Health Strategy highlights the principles that the health sector will uphold – *within the money available*."[8]

The seven principles outlined in the New Zealand Health Strategy are:[9]

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[4] PHD Act, s 3.
[5] Previously the Pharmaceutical Society of New Zealand (PSNZ) had been both the registration authority and the professional body. PSNZ continues to be a professional body representing the interests of its pharmacist members.
[6] PHD Act, s 8.
[7] Ministry of Health, *New Zealand Health Strategy* (Wellington: Ministry of Health, December 2000), p. 1.
[8] Ibid., p. 2 [emphasis in original].
[9] *New Zealand Health Strategy*, p. vii.

- acknowledging the special relationship between Maori and the Crown under the Treaty of Waitangi;
- good health and well-being for all New Zealanders throughout their lives;
- an improvement in health status of those currently disadvantaged;
- collaborative health promotion and disease and injury prevention by all sectors;
- timely and equitable access for all New Zealanders to a comprehensive range of health and disability services, regardless of ability to pay;
- a high-performing system in which people have confidence; and
- active involvement of consumers and communities at all levels.

3.1.1.2 Primary Health Care Strategy

The Primary Health Care Strategy (PHCS) was released in February 2001. Its vision is that:[10]

> *People will be part of local primary health care services that improve their health, keep them well, are easy to get to and coordinate their ongoing care.*
>
> *Primary health care services will focus on better health for a population, and will actively work to reduce health inequalities between different groups.*

The PHCS provides the strategic direction for the development of primary health care in New Zealand. As stated in the PHCS,

> *This vision involves a new direction for primary health care with a greater emphasis on population health and the role of the community, health promotion and preventive care, the need to involve a range of professionals, and the advantages of funding based on population needs rather than fees for service.*[11]

Primary health care is defined as including "generalist first-level services, such as general practice services, mobile nursing services, community health services, and pharmacy services that include advice as well as medications".[12]

The Primary Health Care Strategy Implementation Work Programme 2006 – 2010 indicates that the 'desired future' (i.e., by 2010) resulting from the PHCS includes:

- "Greater emphasis on the broader multidisciplinary primary care team (doctors, nurses, pharmacists, allied health and disability professionals) having the competencies and skills that provide for the diverse needs of the population served."

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[10] Ministry of Health, *The Primary Health Care Strategy* (Wellington: Ministry of Health, February 2001), vii
[11] Ibid.
[12] *The Primary Health Care Strategy*, p. 1.

- "Services 'joined up' resulting from a more collaborative, seamless, community driven model of care. (The direct employment of health professionals by PHOs is one option for achieving this)."[13]

It is notable that neither the overarching NZHS nor the service-based PHCS explicitly mention pharmacy services. The NZHS refers to "health services", with its key underlying principle being the "timely and equitable access for all New Zealanders to a comprehensive range of health and disability services, regardless of ability to pay". A key purpose of the NZHS is to set out the priorities for funding decisions by the DHBs.

3.1.1.3 New Zealand Medicines Strategy

Recently, the Ministry released a consultation document on a New Zealand Medicines Strategy. The aim of the proposed Strategy is to "identify where improvements can be made within the existing system and broad policy settings to ensure the best health and disability support outcomes from medicines over the coming years."[14]

The consultation document proposes the following objectives for the medicines sector:

- *quality, safety and efficacy of available medicines;*
- *access to medicines that New Zealanders need regardless of an individual's ability to pay; and*
- *optimal use of medicines.*[15]

It also proposes that decisions about the detail of the medicines sector's policies, systems and structures be guided by 6 principles:

- *excellent systems – the systems that support medicines use are people-centred, reflect best practice and ensure safety and efficacy;*
- *equity – New Zealanders in similar need of medicines have an equitable opportunity to access equivalent medicines, and medicines and other resources are allocated in a manner that reduces inequity of outcome between population groups;*
- *effectiveness – the systems are used to ensure the provision of medicines, including the roles and functions of agencies involved, are effective in contributing to the objectives of the strategy;*
- *trust and confidence – the systems are used to ensure the provision of medicines are timely, robust and transparent, and stakeholders (including consumers) understand and have the opportunity, as appropriate, to participate in the decision-making processes used for regulating, funding and managing medicines;*

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[13] Ministry of Health, *Primary Health Care Strategy Implementation Work Programme 2006 – 2010, Working Document for Sector Engagement* (Wellington: Ministry of Health, March 2006), 26 - 27.
[14] Ministry of Health, *Towards a New Zealand Medicines Strategy – Consultation Document* (Wellington: Ministry of Health, December 2006), p. 3.
[15] Ibid., p. vii.

- *value for money – the systems in the medicines sector operate efficiently, and secure the greatest possible value (in terms of efficacy, equity and cost) from medicines, including minimising compliance costs and making choices in a context of acceptance of scarcity and opportunity cost; and*

- *affordability – the medicines used within the health and disability support system and the structures and processes that support their use are affordable for individuals and the community, and are met within the funding available.*[16]

Applying these objectives and principles, the consultation document proposes priority areas where improvements could be made, including:

> *Under optimal use: increasing the role of pharmacists in ensuring the best use of medicines, improving information-sharing, including the interface between primary and secondary care, and the availability and quality of information given at the time of dispensing.*[17]

3.1.2 Minister's priorities

Since 2004 the Minister of Health has taken the approach of identifying priorities as a way of progressing the New Zealand Health Strategy and to guide health sector planning by the Ministry of Health and DHBs.[18] The Minister has identified 10 priorities for 2007 and beyond.

In relation to primary health, now that the low fees funding roll-out for PHOs is about to be concluded, "the focus will shift to the maturation of primary health organisations, the development of new models of service, the involvement of a broader range of professionals, and an improved primary/secondary interface".[19]

In relation to the health sector more generally, another identified priority is "value for money". While acknowledging that the New Zealand health system is one of the most cost-effective in the Western world and good gains continue to be made, the Minister is of the view that there are many opportunities to make further improvements.[20]

It is interesting to note in recent policy documents the repeated use of the newer expression "value for money" as well as the more familiar wording "within available funding". The notion of value for money was rehabilitated by the Ministry of Health and DHBNZ from the pre-health reform days of the Health Funding Authority[21] in a 2005 document concerning

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[16] *Towards a New Zealand Medicines Strategy*, p. vii.
[17] Ibid., p. viii.
[18] Ministry of Health, *Statement of Intent: 2007-2010* (Wellington: Ministry of Health, 2007), p. 22.
[19] Ibid., p. 23.
[20] Ministry of Health, *Statement of Intent: 2007-2010*, p. 23.
[21] Health Funding Authority, *Overview of the Health Funding Authority's Prioritisation Decision Making Framework* (Wellington: Health Funding Authority, 30 June 2000), p. 10.

prioritisation.[22] In discussing the concept, the Ministry of Health makes clear that "Quality improvement is a critical component of value for money."[23]

3.1.3 Health targets 2007-08

In February 2006 Cabinet agreed that a programme of expenditure reviews be undertaken in 2006 with the overall aim to "improve performance and value for money within and across votes". The health sector was to be reviewed with a view to "lifting productivity and improving performance management processes in specific health areas".

One outcome of the health sector review is that the Minister of Health is advancing health sector performance by, amongst other things:

- setting and integrating into the DHB planning processes national health targets to lift outcomes in key priority areas; and
- re-orientating the role of the Ministry of Health to drive 'harder and faster' in priority areas.[24]

In August 2007 the Ministry of Health published the 10 national health targets for 2007-08. The targets of particular significance for pharmacy include reducing avoidable hospital admissions, improving diabetes services and reducing the harm done by tobacco.[25]

In explaining how these targets relate to the indicators and measures that providers and DHBs currently report on as part of their funding agreements, the Minister of Health notes

> *The Health Targets programme pulls out a small set that represent important priorities to the Government for extra emphasis and focus. . . . Health Targets do not replace other priorities or suggest that others are not important – there will be opportunities to review whether we are comfortable with the current set or whether we need to look at others. We need to be mindful that a smaller set helps us keep a sharper focus on those areas where we want to see faster traction.*[26]

3.2 Key government-related entities in primary health care

3.2.1 DHBs and PHOs

DHBs are Crown entities established under the PHD Act. They are responsible for the health of their local populations and for ensuring the needs of individuals and communities are represented at the local level. DHBs fund primary health care services, as well as providing hospital services, for their communities within priorities set by the national, population-based

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[22] District Health Boards New Zealand Inc and Ministry of Health, *The Best Use of Available Resources – An approach to prioritisation* (March 2005), p. iv.
[23] Ministry of Health, *Statement of Intent: 2007-2010*, p. 50. See also p. 10, Health Outcomes Framework, where value for money is linked to efficiency and described as "services deliver relatively large gains in health status for each unit of resource".
[24] Government Expenditure and Administration (EXG) Cabinet Committee: Health Expenditure Review – Progress Report March 2007, para 1.
[25] Ministry of Health, *Health Targets, Moving towards health futures 2007/08*, (Wellington: Ministry of Health), p. 4.
[26] *Health Targets 2007/08*, p. 1.

and service-based strategies, and are allocated funding from Vote Health to do so. As part of their responsibilities, DHBs fund the medicines used by the people in their region, including pharmaceuticals dispensed through community pharmacies, dispensing services by individual pharmacists[27], and hospital pharmaceuticals.

A key part of the PHCS was the formation of new community-focused, not-for-profit organisations (PHOs) as the primary vehicles for DHB funding. PHOs are the delivery arm of the PHCS approach to primary health care; that is, they are responsible for delivering and co-ordinating primary health care services. PHOs are organisations of health care providers who join the PHO as "contracted providers". Traditionally the majority of primary health care services have been provided by GPs. PHOs are intended to generate a more multi-disciplinary approach and bring together doctors, nurses and other health professionals (e.g., dieticians, pharmacists, physiotherapists, midwives) in the community to serve the needs of their enrolled populations.[28] Membership of PHOs is voluntary.[29] Whilst the policy indicates PHOs should be seeking pharmacy membership, the reality has been most are not particularly "community pharmacist" friendly, and the retention of pharmacy contracts under the control of DHBs has given most community pharmacists little incentive to try to become involved. That said, a number of community pharmacists have become involved with some PHOs, with useful results for both parties.

The relationship between individual PHOs and DHBs is regulated by a service agreement entitled the "Primary Health Organisation Agreement, Version 17" (PHO Agreement). This contractual relationship with the DHBs is analogous to that of the pharmacy sector (discussed below).

3.2.2 Pharmac

Pharmac is a Crown entity also established by the PHD Act and directly accountable to the Minister of Health.[30] Its main objective is:

> *to secure for eligible people in need of pharmaceuticals, the best health outcomes that are reasonably achievable from pharmaceutical treatment and from within the amount of funding provided.*[31]

Pharmac is responsible for, among other things, managing on behalf of the Crown the Pharmaceutical Schedule, which lists the medicines that are subsidised for patients.[32] The Pharmaceutical Schedule lists more than 2,600 pharmaceuticals and related products subsidised by the government. Pharmaceutical suppliers may apply to Pharmac to have a medicine listed on the Pharmaceutical Schedule for subsidy, usually following Ministry of Health approval of the product.[33]

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[27] 'Dispensing services' are providing subsidised pharmaceuticals that are listed in the Pharmaceutical Schedule maintained by Pharmac and prescribed by a regulated prescriber, as well as advice on how to use the pharmaceutical correctly. The dispensing fee for most pharmaceuticals is currently $5.16 (GST exclusive).
[28] Ministry of Health's description of primary health care providers on its Primary Health Care website, http://www.moh.govt.nz/moh.nsf/indexmh/phcs-pho-phcproviders.
[29] We understand that only one General Practice has not joined the PHO framework.
[30] PHD Act, s 46.
[31] PHD Act, s. 47(a).
[32] PHD Act, s 48.
[33] www.pharmac.govt.nz.

As part of its management of the Pharmaceutical Schedule, Pharmac is responsible for setting the recommended price and subsidy of government-funded medicines, and the guidelines and conditions under which the pharmaceuticals may be prescribed. Section 23(7) of the PHD Act states that DHBs must not act inconsistently with the Pharmaceutical Schedule in the performance of any functions in relation to the supply of pharmaceuticals.

In September 2001, PHARMAC was authorised by the Minister of Health, under section 48(e) of the PHD Act, to manage the purchasing of hospital pharmaceuticals on behalf of DHBs. This new function is encompassed in the National Hospital Pharmaceutical Strategy, which was approved by the Minister of Health in February 2002.

Consistent with Pharmac's main objective, one of its key areas of performance indicators concerns efficient management of pharmaceutical expenditure, including assessment against quarterly expenditure targets, review of those targets and proposing any adjustments to DHBs, the Ministry of Health and the Minister of Health.[34]

3.3 Summary

A review of government primary health care policy and objectives indicates:

- an integrated approach to service delivery by primary health care providers, including community pharmacists, is essential to government's primary health care strategy;
- over the last seven years pharmacists have moved from being seen as a referred provider of consumables (prescription medicines) to a key health professional providing primary health care services, alongside GPs and nurses. The more recent government policy documents and communications emphasise the important role of community pharmacists, not only in facilitating the optimal use of medicines, but also more generally in contributing to more accessible and efficient provision of primary health care;
- Government is committed to moving away from fees for services to funding and services based on population needs with a focus on health promotion, disease prevention and early intervention;
- Government also continues to be committed to affordability and providing services within available funding, with a more recent emphasis on the revived concept of "value for money"; that is, obtaining improvements in the quality of outcomes within that funding;

Consistent with the PHCS and related government policy, DHBs are concerned to:

- move away from fees for services to funding and services based on population needs with a focus on health promotion and disease prevention; and
- increase the role of pharmacists in ensuring the best use of medicines, improving information-sharing, and improving the availability and quality of information given at the time of dispensing.

[34] *Pharmaceutical Management Agency (PHARMAC) Statement of Intent 2006/07* (Wellington: PHARMAC, 2006), p. 18.

4 Where is community pharmacy headed?

Of particular relevance to any discussion about future purchasing arrangements for community pharmacy services is the changing role of community pharmacists.

This section considers changes that have been taking place, both internationally and domestically, in the understanding and practice of community pharmacy. It draws primarily on material sourced from:

- a literature search of international research and current policy developments drawn from a number of different jurisdictions;
- a questionnaire based survey of a small sample of pharmacists from a range of urban, provincial and rural pharmacies; and
- discussions with and material supplied by senior academics in New Zealand's two schools of pharmacy.

The focus was twofold; namely, what changes are taking place in the nature and practice of community pharmacy and why, and what changes should be expected in the pharmacy workforce relevant to the objective of optimal use of medicines.

4.1 Nature and practice of community pharmacy

Whilst anecdote and experience point to significant change in the role of community pharmacy in New Zealand, there is very little formal investigation into the nature of those changes and the contribution community pharmacy makes to the efficiency of the primary health care service. At best, New Zealand research on matters such as the costs associated with suboptimal use of medications is extrapolated from overseas research. This underscores the need for sound evidence-based material to better inform local decision making on how to optimise health and budgetary outcomes through community pharmacy.

However, given the consistency of international and local experience, as well as the common trends in demographics and workforce characteristics, some ready conclusions can be drawn about the threats to primary health care services and the role of community pharmacy in abating them.

4.1.1 The international trends

Worldwide, the practice of community pharmacy is being affected by two principal trends:

- a growing awareness of the cost to health outcomes and for health budgets of suboptimal use of medications, including adverse drug reactions, non-adherence and the failure to review long-term medication; and
- pressures on the primary health care workforce, including a growing shortage of general practitioners, and the changing composition and expectations of new entrants to community pharmacy.

The related response has been to make better use of the professional skills of pharmacists. This is particularly in two areas;

- monitoring the effective use of medication in the community, especially by identified at-risk groups such as the elderly; and

- disease state monitoring in areas such as asthma, diabetes and hypertension.

A useful example is provided by Australia. The Fourth Community Pharmacy Agreement, which commenced on the first of July 2006, provides $A500 million for professional pharmacy services other than dispensing. In addition to covering home-based and rest home medication reviews, funding will also provide for a diabetes medication assistance service, dose administration aids and medication profiling.

The Australian commitment results from an agreement, in the late 1990s, to fund research and evaluation into community pharmacy services, which enabled the development of an evidence base for the purchase of additional pharmacy services. The provision for research in the fourth pharmacy agreement is $A15 million ensuring that Australian decisions on optimising the contribution of community pharmacy services continue to be evidence-based, and that new services are properly evaluated.

In England, the new community pharmacy contract introduced in 2005 provides not just for essential services (the equivalent of New Zealand's base pharmacy services) but also for advanced services purchased at an NHS level and enhanced services purchased by local NHS primary care organisations.

In the United States, the Accreditation Council for Pharmaceutical Education's standards and guidelines emphasise the necessity for a fourth year Advanced Pharmacy Practice Experience focused on patient care and emphasising the pharmaceutical care model[35].

There has also been a long history in the US of research-based experience with pharmacy interventions covering practices such as medication monitoring, and disease state management. The American College of Clinical Pharmacy has adopted a practice of commissioning, at regular intervals, analyses of the economic benefit of clinical pharmacy services. The most recent report finds that "the economic benefit of clinical pharmacy services across a variety of practice sites and types of clinical pharmacy services reviewed here is well in excess of the cost required to provide those services. For every $1 invested in clinical pharmacy services in the studies reviewed, more than $4 in benefit is expected."[36]

The economic benefit of clinical pharmacy services is well in excess of the cost required to provide those services. For every $1 invested, more than $4 in benefit is expected.

[35] Pharmacy care is defined as "a patient centred, outcomes oriented pharmacy practice that requires a pharmacist to work in concert with the patient and the patient's other health care providers to promote health, to prevent disease, and to assess, monitor, initiate, and modify medication used to assure that drug therapy regimes are safe and effective."

[36] see page 46, Appendix 1.

The now well recognized potential for targeted investment in additional pharmacy services to return several times the cost in terms of reduced costs to health funders is one reason for the increased international interest in making better use of pharmacy skills (improved health outcomes is another).

A further reason is the recognition that pharmacist involvement in areas such as disease state management and monitoring, and prescribing within a framework set by a general practitioner (typically for repeats where the patient is in a stable long-term condition) can reduce the demand for general practitioner services, thus reducing the pressure on the general practitioner workforce.

However, the trend to an increased use of clinical pharmacy services within a pharmacy care model is less pronounced in some jurisdictions versus others. Amongst the factors inhibiting a more widespread adoption are:

- budget constraints. This is particularly the case where the role of purchasing pharmacy services is the responsibility of a subsidiary state owned organisation operating under a fixed annual budget. Primary health trusts in England and DHBs in New Zealand are two examples. With the overriding emphasis on containing costs within the current year's funding, expenditure on enhanced pharmacy services that may save costs "down the track" can be difficult to justify - it increases the current year's expenditure with no or a limited offsetting current year benefit. In contrast, insurance based jurisdictions appear more willing to invest in enhanced pharmacy services because of an interest in avoiding future costs - for them, net present values matter as much as net current expenditure. A good example of this is the initiative recently taken in Germany to introduce what is known as a 'family pharmacy' contract that pays a pharmacy for 'pharmaceutical management' including drug profiles, short medication reviews, counselling and medication reports for asthma and Chronic Obstructive Pulmonary Disease; and

- the attitudes of general medical practitioners. For enhanced pharmacy services to be truly effective there needs to be a collaborative working relationship between the pharmacist and the general practitioner for each patient. There is evidence from research that many general practitioners are resistant to an extension of the pharmacist's role. At the same time, there is also evidence that recognizing this as an issue that needs to be addressed will have positive outcomes – it is essentially a matter of recognizing the role of the pharmacist as part of the primary health care team, and taking a team based approach to managing patient care (including, as Australian research demonstrates, ensuring that incentive and remuneration arrangements support the objective of collaborative working).

Despite the variable nature of the shift to an increased use of pharmacy services, arguably the trend is irreversible. Reasons for this include:

- mounting evidence of the fiscal benefits. As a very simple New Zealand example, medication monitoring, which enables an older person to remain in their own home, rather than being admitted to rest home care, has a clear and substantial fiscal benefit. The barriers, currently, appear to be more institutional than economic, for example, the arguably perverse incentives that result from placing the responsibility for defining and purchasing pharmacy services with an organisation that operates on a fixed annual

budget with no capacity to offset the benefits of the future savings against current expenditure.

- the increasing need to ensure effective management of the primary health care workforce as a whole. This has been an important factor in encouraging the use of pharmacy services that can relieve the burden on general practice.

- the growing awareness that the effective use of pharmacy services in areas such as disease state management is not just a sensible way of managing the primary health care workforce; it also contributes to better access as people find it much easier to drop into the pharmacy (typically with no consultation fee) than make an appointment with their general practitioner.

A more extensive overview of international experience is contained in Appendix 1 to this report.

4.1.2 The domestic experience

The basic understanding of the role of community pharmacy in New Zealand is derived from the definition of base pharmacy services in the standard contract between DHBs and pharmacies.

The focus of that definition is on the function of dispensing medication and advising the patient on the optimal use of the medication, including identifying any contra-indications, allergies etc.

However, the definition captures only a small part of the total activity of the community pharmacist. A more accurate appreciation of what community pharmacists *actually* do is needed. Accordingly, a small sample of pharmacists was surveyed for the purposes of the present discussion and asked to comment on their engagement in activities such as:

- pharmacist interventions (as defined in the Pharmacy Practice Handbook);

- provision of advice to patients in the pharmacy, in respect both of prescribed medications and other medications (pharmacist, pharmacy only and general sale medications);

- patient recordkeeping;

- advice/support to patients in the community; and

- support for other caregivers in the community.

The results of the questionnaire are reported in detail in Appendix 2 to this report. Among the key findings to emerge were the following:

- community pharmacists act as a critical component of the quality assurance process in the effective and appropriate prescribing and dispensing of medication. Reviewing pharmacist's experience from one recent week of dispensing activity, all respondents reported numerous incidents of correcting minor omissions or errors in prescriptions. The majority also reported a range of interventions that averted the potential for serious harm, including life-threatening situations, as the result of prescriber error, patient allergies,

contra-indications (for example warfarin in conjunction with St John's wort, or aspirin) or non-adherence;

- community pharmacists have extensive involvement in advising patients within the pharmacy. For 13% of patients receiving prescription pharmaceuticals, and 18% purchasing non-prescription pharmaceuticals, the pharmacist spent four or more minutes of time giving the patient advice. The time spent with 3% of patients for prescription pharmaceuticals and 2.5% for non-prescription pharmaceuticals exceeded 10 minutes per patient; and

- advice provided on prescription pharmaceuticals typically focused on helping the patient understand the nature of the medication, how to use it, explaining any changes in dosage for long-term patients, and working with the patient to support adherence.

One of the more interesting things to emerge from the survey is the role that pharmacists play for patients who do not have a prescription, but come to the pharmacy as a "first port of call" for advice on an ailment or injury. Pharmacists are clearly playing an important role as a preferred and more convenient alternative to visiting a general practitioner for a range of what patients think of as relatively minor ailments or injuries but are often ones that, if left untreated, could have potentially serious implications. This role not only relieves the burden on general practice (and at some saving to the state) but is also a significant if largely unrecognized component in the primary health care system.

As natural extensions of this role, pharmacists also play a part in supporting patients in the community, and assisting the work of other primary health care providers. Virtually all respondents reported visiting patients, especially older people, in their homes to monitor medication management and ensure adherence - an important factor in allowing older people to remain in their own homes rather than require admission to rest home care. Most pharmacists were also active in a range of support activities for other care providers including regular briefings/training sessions with rest home staff, addresses to community organisations on pharmaceutical related issues and support for sport and recreation organisations.

Also of interest (and, in some cases, concern) were reports of the variability of relationships with other primary health care providers. Rural or provincial pharmacies, especially in towns with only one or two pharmacies, reported very good relationships with general medical practitioners. Often, these were multi-faceted based not just on official contact, but extending to the social and personal spheres.

In contrast, pharmacies from urban centres reported somewhat less satisfactory relationships, especially in relation to minor interventions. General practitioners were quite often formal, and sometimes relatively dismissive, in response to pharmacist queries, for example, seeking additional information required for a patient to receive the correct subsidy.

The inference that can be drawn is that, currently, collaboration between pharmacists and general practitioners is more a matter of situational factors than professional training and commitment. The increased emphasis on the need for collaborative working to ensure optimal outcomes for patients suggests that this is an area for attention.

Similar variability was noted in respect of the quality of and access to patient records. Responses suggested that pharmacists' use of patient records ranges from the comprehensive (with records covering not just prescription medication, but over-the-counter medicines, patient profiles, etc), to minimal compliance with the contractual obligations under the standard contract. Examples given by pharmacists who did keep comprehensive records show the importance of this information in order to identify allergies (common with antibiotics), provide a warning for contra-indications and give some warning on non-adherence or abuse of medication.

A greater emphasis on the optimal use of medication will also focus attention on the quality of and access to a patient's medication records.

4.2 Aging New Zealand and impact on the health workforce

Another shared trend with other developed jurisdictions is the age demographic of the client population. In New Zealand, overall population is expected to increase by nearly one million people by 2051. The mean age will increase and the largest growth in the population of people at retirement age will occur between 2011 and 2037, when those born between 1946-1966 (the so-called baby-boomers) will move into the 65+ age group. A net increase of at least 100,000 in this group is expected every five years.[37]

In 2004 the Ministry of Health commissioned a discussion document by the New Zealand Institute of Economic Research (NZIER) that projected future demand for health and disability support services to 2021 and identified workforce implications.[38] The NZIER Report concluded that the aging of the New Zealand population will mean that the demand for appropriate health and disability services will increase much more rapidly than the size of the population itself (somewhere between 2.5 and 4.3 times). As a result, there is a strong risk of labour shortages in the health and disability services, especially after 2011, unless pre-emptive action is taken, with excess labour demand over supply projected to be equivalent to between 28% and 42% of the 2001 workforce by 2021.

Further, NZIER concluded that the projected labour shortages would not necessarily be avoided by health and disability services being able to increase their share of the total New Zealand workforce. Nor would productivity increases or better health education and monitoring reducing service needs necessarily be a sufficient response. The Report accordingly recommended that planners focus instead on how the health and disability services workforce should be educated, trained, developed and deployed.[39]

4.3 The changing pharmacy workforce

Clearly, one of the questions that needs to be thoroughly addressed, as part of planning how community pharmacy can best contribute both to the optimal use of medicines and the best use of the primary health care workforce, is what this means for the skills, qualifications, experience and numbers of the community pharmacy workforce. Currently, workforce

[37] F. Alpass and R. Mortimer, *Ageing Workforces And Ageing Occupations: A Discussion Paper* (Palmerston North: Massey University, 2007), p. 6.
[38] New Zealand Institute of Economic Research (NZIER), *Ageing New Zealand and Health and Disability Services – Demand Projections and Workforce Implications, 2001-2021*, (Wellington: NZIER, December 2004).
[39] NZIER Report, pp. iii – iv.

planning for community pharmacy is very much in its infancy.[40] There is a general awareness of the potential for a mismatch between requirements and availability but community pharmacy has not had the focus on future workforce requirements that has been a feature of recent debate within general medical practice[41].

However, some inferences can be drawn from the general medical practice debate for the likely pressures on community pharmacy. As with the wider population, the workforce is aging, 33% of current practitioners state they intend to move out of general practice within the next five years. Increasingly, young doctors expect a "normal life" with adequate remuneration. The changing gender balance within the profession is also affecting the number of hours that doctors on average are prepared to work, whilst the proportion of students willing to enter general practice is declining. Changes external to general practice are also impacting on the demand for the services of general practitioners.[42] As discussed earlier, an aging population means that an increasing proportion of people are moving into high user age groups. Reduction in the cost of GP fees is expected to lead to an increase in demand as people perceive that it is now "cheaper" to go to the doctor.

Anecdotal evidence also suggests that a number of these changes are also being experienced in community pharmacy, particularly in respect of changing gender balances and work preferences.[43] Coupled with the demands associated with an aging population, and with the reduction in the cost of primary health care services to the patient, the demand for the services of community pharmacists can be expected to increase above expected capacity. This problem will be exacerbated by the growing recognition of the potential for community pharmacists to, in some cases, substitute for general practitioners.

4.3.1 Intentions of pharmacists in training

Some understanding of the characteristics, intentions and capacity of the future community pharmacy workforce can be found in the observations of senior academics at New Zealand's two schools of pharmacy in Auckland and Otago (see Appendix 3 for details).

The material provided by the schools reflects different aspects of students' preferences and intentions. The Auckland material looks primarily at the nature of the students being recruited into pharmacy study. It supports an inference that the graduates may be disproportionately focused on working in an urban environment and, although in community pharmacy, in a more corporate form. This raises important questions about the future

[40] There is, though, a growing tendency for individual DHBs to recognize the need to take into account pharmacy workforce issues in their own future planning. The following statement from the Tairawhiti District Health Board's consultation document *Development of a Clinical Services Plan,* discussing the primary health care sector, is a recent example: "However, given the backdrop of an ageing workforce (GPs, pharmacists, practice nurses and midwives) and recruitment difficulties, there is potentially a significant problem within the sector, in terms of sustainability and capacity to meet increasing demand".

[41] see, for example, James Reid, *New Zealand's Labour resources in general practice-should we worry?*, The New Zealand Medical Journal 8 September 2006, volume 119 number 1241.

[42] *New Zealand's labour resources in general practice - should we worry?* James Reid, Journal of the New Zealand Medical Association, 08 September 2006. Vol 119.

[43] The Pharmacy Council's Workforce Demographics as at 30 June 2006 indicate 55 percent of registered practising pharmacists are female, but this percentage increases inversely proportional to age; that is, women are making up an increasing proportion of total practising pharmacists. Similarly, a RNZCGP "mini survey" of members in 2006 found that more male GPs are in the older (>50 years) age cohorts than female GPs, but more females GPs are in the younger (<40 years) age cohort than male GPs.

structure of community pharmacy. There is also a separate concern about whether Auckland graduates will meet the needs of rural and provincial pharmacies.

In something of a contrast, the Otago material shows a very positive attitude towards community pharmacy, but based upon a somewhat idealised view of the pharmacist's role. The notion that "pharmacy is … about helping people" is consistent with an interest in the enhanced services role starting to emerge within community pharmacy. This raises the question of what would happen to job satisfaction, and commitment to remaining within community pharmacy, if the shift to a more engaged professional role for community pharmacists does not take place. The Otago material also suggests the need to think about how the pharmacy workforce is managed over time to allow for an increased preference for career breaks/changes.

The feedback from the two schools is significant and warrants further investigation. Certainly, the balance between future needs for community pharmacists, and future supply, must be assessed more closely if New Zealand is to benefit from the potential for community pharmacy to contribute to the better utilisation of medicines and more effective management of the primary health care workforce.

However, one thing that is clear from the information currently available is that there are a number of workforce planning related risks in community pharmacy that require careful management: They include:

- the increasing professional standards of recent and current graduates and the associated expectation they have of being able to utilise those skills within community pharmacy;
- changing expectations in terms of work/life balance, especially on the part of female graduates (now the significant majority of all pharmacy graduates); and
- reconciling the role of community pharmacy with the need for more effective management of the primary health care workforce as a whole, especially in the context of the workforce issues currently facing general practice.

4.4 Pharmaceutical expenditure

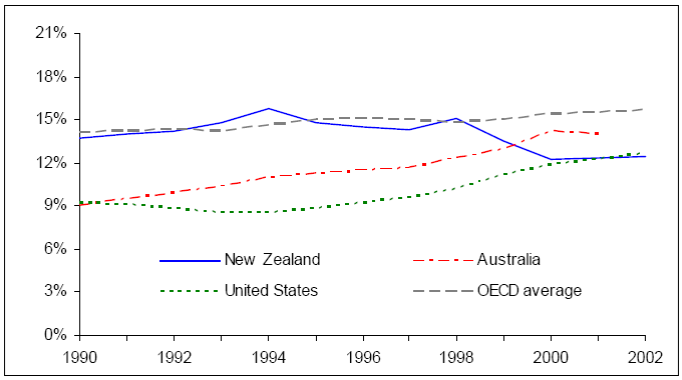
Over the last 10 – 15 years New Zealand has done well in managing both expenditure and volume of subsidised community pharmaceuticals, particularly when compared to other countries.

In October 2005, Pharmac engaged BERL to undertake a review of a report entitled *New Zealand Pharmaceutical Policies: Time to Take a Fresh Look* by Castalia Strategic Advisers. BERL's resulting report[44] noted that:

- in general terms, New Zealand appears to have tracked the OECD average of about 14-15% until the late1990s, when there appears to have been shift to a new stable level at about 12-13%;

[44] Kel Sanderson and Mark Goodchild, *Independent Review of the Castalia Report on New Zealand Pharmaceutical Policies* (Wellington: BERL, October 2005).

Figure 1 Pharmaceuticals as a proportion of total health spending since 1990[45]

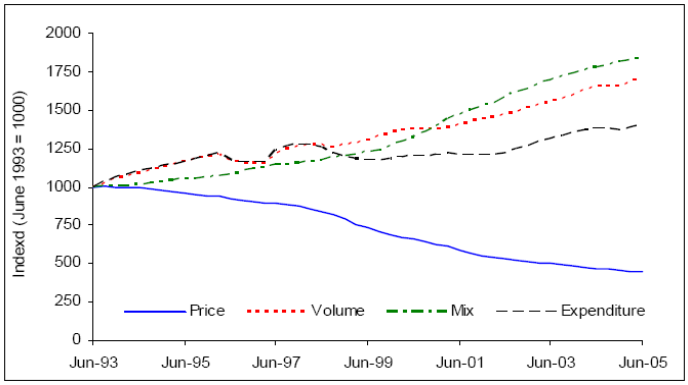


- a review of the historical trend in subsidised pharmaceutical expenditure based on PHARMAC's price, volume and mix indices indicates:

    - the PHARMAC price index has declined on average by 8.5% per annum between 1999 and 2004. This compares to a decline of 6.0% per annum between June 1994 and June 1999;

    - the volume index has risen by 4.8% per annum between 1999 and 2004, compared to 3.6% per annum between 1994 and 1999;

Figure 2 Trends in subsidised pharmaceutical spending



According to Pharmac's 2006 Annual Report:[46]

- expenditure on subsidised community pharmaceuticals for the year ending June 2006 was expected to be $563.45 million, $19.41 million within Pharmac's budget of $582.86 million; and

- there were 28.5 million subsidised prescriptions written during the year ending June 2006 for medicines for at least 2.48 million individual New Zealanders – this was a 4.5% increase in the number of prescriptions compared with the previous financial year.[47]

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[45] Data source: OECD and Ministry of Health. The OECD average is calculated by BERL.
[46] *Annual Report of Pharmaceutical Management Agency (PHARMAC) for the year ended 30 June 2006* (PHARMAC: Wellington, 2006), p. 16.
[47] It should be noted that these data relate to the number of individual medicines written on prescription forms and not the number of items dispensed, which is about 1.5 times this number (the multiple being driven by the

The Community Pharmaceutical Budget for 2006/07 is $600 million (excluding GST). This represents about 3% growth from the 2005/06 budget.[48]

Looking at the data, the New Zealand health system appears to have already achieved considerable efficiency in pharmaceutical expenditure and it is questionable what further efficiencies can be achieved without detriment to health outcomes. This suggests the need to focus more on managing the effectiveness of medication use (e.g., adherence/concordance) and the benefits to be derived from optimal use of primary health care services, including community pharmacy.

The New Zealand health system appears to have already achieved considerable efficiency in pharmaceutical expenditure. It is questionable what further efficiencies can be achieved without detriment to health outcomes.

As compelling as that logic may be, it is notable that, as purchasers, DHBs operate with an incentive to minimise expenditure in the current year, and have limited or no ability to trade off expenditure on pharmacy services against potential savings in other areas of activity. As an example, the significant savings it appears could be generated by more intensive community pharmacy support of medication management for older people in their own homes, thus reducing the need for rest home care, is frustrated by the fact that pharmacy services are paid for by DHBs out of a limited budget, but rest home care is funded directly through Vote: Health.

Also notable is the absence of substantive research and evaluation of the potential for the community pharmacy to abate the avoidable costs associated with the inappropriate use of medication. This is estimated by one New Zealand researcher, extrapolating from overseas data, as being in excess of $1 billion per annum.[49]

These factors are real obstacles to the more efficient and effective evolution of community pharmacy and the primary health care service over the medium and long terms.

4.5 Summary

The practice of community pharmacy is undergoing significant change. Both locally and internationally the drivers of that change include:

- the aging population;
- the recognition of the costs associated with mismanagement of medication;

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dispensing requirements stipulated by the Pharmaceutical Schedule). This dichotomy between the way Pharmac analyses *pharmaceutical trends* and the way DHBs analyse *pharmacy services trends* can lead to confusion and misunderstanding on these inter-related subjects.

[48] PHARMAC Statement of Intent 2006/07, p. 15.

[49] Eagle L. et al(2005), *Cooperation, Compliance and Concordance. Investigating Ways of Improving Adherence to Prescribed Medication.* Massey University technical report 05.01 ISSN-1176-1687

- expectations and career preferences of pharmacy graduates;
- the need for more effective management of the primary health care workforce (particularly to relieve the pressures on general medical practice); and
- community acceptance of the role of community pharmacy as the "first port of call" for dealing with what are perceived as minor ailments and trauma.

Locally and internationally, the primary health care system is evolving in response, with community pharmacy taking a much broader role in the delivery of health care services. However, that adaptation is not always smooth. Inhibiting factors include:

- an inadequate culture and practice of collaboration within the primary health care sector;
- perverse incentives within the current funding arrangements for the purchase of pharmacy services; and
- the lack of substantive research and evaluation in New Zealand on the role and potential benefits of community pharmacy services in abating the costs of inappropriate use of medication.

5 Legal context

The legal framework for the provision and funding of pharmacy services in New Zealand is also important in any consideration of future approaches to funding. This framework is not straight-forward, as it is sourced from numerous statutory, policy and contractual documents.[50]

In addition to DHBs' statutory functions and objectives in respect of ensuring access and quality of health services, there are a number of relevant factors that must be considered at the same time:

- government policy (in the form of national health strategies, and procurement guidelines);
- the distinction between pharmacy services falling within the statutory monopoly for pharmacists (and pharmacies) only and other pharmacy services (such as the recently proposed 'specialist' services) that could potentially be provided by a wider group of health practitioners;
- issues that have arisen recently in the analogous laboratory testing services sector (which has recently shifted to a tendering model for funding); and

[50] These include the New Zealand Public Health and Disability Act 2000; the Health Practitioners Competence Assurance Act 2003; the Medicines Act 1981; the Misuse of Drugs Act 1975; the Health Act 1956; and the Commerce Act 1986; the New Zealand Health Strategy (Ministry of Health); the Primary Health Care Strategy (Ministry of Health); the New Zealand National Pharmacist Services Framework 2007 (DHBNZ); the current Pharmacy Services Agreement (entered into by individual DHBs and pharmacies for the provision and funding of pharmacy services); and, possibly, section 88 notices under the PHD Act that specify the terms and conditions of payment in the case of funding by a DHB. There are also a number of associated regulations with these relevant statutes.

- competition law implications under the Commerce Act, given the unique competitive environment with significant monopoly pharmacy services and monopsonist purchasers.

The following sections briefly explore each of the elements of the overarching framework. The sections also include some discussion of the relevant issues arising for possible tendering processes by DHBs with respect to pharmacy services, recognizing the possibility that the adoption of tendering for one set of referred services (laboratory testing services) may lead to its consideration for the other services such as community pharmacy.

5.1 DHBs

As discussed earlier (see Section 3.2.1 DHBs and PHOs), DHBs are Crown entities established by the PHD Act[51]. As the primary vehicles by which the government funds and monitors public health services, these statutory bodies have a number of prescribed objectives and functions that focus on the provision of health services to the New Zealand public.[52] Broadly, these functions include overall responsibility for assessing the health and disability needs of communities in their regions, and managing resources and service delivery to best meet those needs.[53]

DHBs are able to negotiate, enter into and amend service agreements with a person (or persons) providing services or arranging for the provision of services. Where they have entered into service agreements, DHBs must also monitor the performance of the other parties to those agreements.[54]

There has been considerable criticism of DHBs in the past as to whether or not they are fulfilling their statutory obligation to negotiate under section 25 of the PHD Act. The arguments involved are equivocal and may require further analysis and consideration. We are aware that there are proceedings in the health sector (in relation to aged care funding) that, among other things, may test the scope of the DHBs' obligations under this section.

Section 88 of the PHD Act provides an additional method by which a DHB may contract with service providers. A "section 88 notice" enables a DHB to give notice of the terms and conditions under which it will make payment for services. Once a person accepts payment from a DHB under section 88 terms and conditions, this constitutes acceptance of the notified terms and conditions. It appears that, to date, DHBs have made limited use of section 88 notices for community pharmacy.[55] More generally, it is understood that historically section 88 notices have tended to be used as a payment mechanism for services that fall outside negotiated service agreements and as a means of continuing to pay under an expired agreement while a new one is being negotiated. It is not clear to what extent this approach to section 88 notices will continue into the future.

[51] PHD Act, s 19.
[52] We note that research on relevant case law relating to DHBs and their powers under the PHD Act has not discovered many cases. The cases cover employment, defamation, property and recovery of payments made under a section 88 notice, all of which are not relevant to the present inquiry.
[53] PHD Act, ss 5(3) and 23.
[54] PHD Act, s 25.
[55] Anecdotal information indicates that the only formal section 88 notice in relation to pharmacy services in place now or since the enactment of the PHD Act is that covering the data specification for pharmacy claims.

One argument that may develop in this area is that the DHBs are, in fact, utilising a "section 88 process" (without the attendant process protections) through a section 25 process which is supposed to be a genuine negotiation.

5.2 National health strategies

As noted previously under Section 3.1.1 Government health sector strategies, the New Zealand Health Strategy (NZHS) and the Primary Health Care Strategy (PHCS) set the health sector on a new path in terms of how primary health care services were to be delivered and, importantly, funded by the government.

It is notable that the NZHS and the PHCS do not explicitly mention pharmacy services. The NZHS refers to "health services", with its key underlying principle being the "timely and equitable access for all New Zealanders to a comprehensive range of health and disability services, regardless of ability to pay". The key plank of the NZHS is to set out the priorities for funding decisions by the DHBs.

5.3 Community pharmacy services

Community pharmacy services are funded by the government via a standard services agreement (Agreement) entered into by each DHB and service provider (i.e. pharmacy), and re-negotiated every three years.

The current Agreement came into effect on 1 March 2007 and has a set termination date of 28 February 2010 (subject to any variation or earlier termination in accordance with the Agreement's provisions). The Agreement covers the provision and funding of base pharmacy services (dispensing of pharmaceuticals and provision of advice and counselling, as well as maintaining service user records, reporting, and administration[56]), as well as certain other specified pharmacy services (e.g. Nicotine Replacement Therapy).

To date, it is our understanding that at least two thirds to three quarters of community pharmacies have signed the Agreement, and the remaining pharmacies will continue to be paid according to the terms of the new contract.[57]

The Agreement specifies that funding for these services is on a fee-for-service basis.[58]

5.4 New optional services with discretionary funding

In March 2007, DHBNZ published the New Zealand National Pharmacist Services Framework (Pharmacist Services Framework). In addition to the standard Agreement, the Pharmacist Services Framework sets out new additional services that pharmacies may choose to offer, with the key difference being that the DHBs have a discretionary funding decision with respect to these new services. These new services are:

- information services:
    - health education

[56] Agreement, Schedule C1, cl 7.
[57] Andrew Svendsen, "Talks end and $5.16 remains" (*Pharmacy Today*, June 2007).
[58] Agreement, Schedule H1, cl 2.

- medicines and clinical information support; and

- medicines review services:
  - medicines use review
  - medicines therapy assessment
  - comprehensive medicines management.

These new services represent the 'new age' of pharmacy specialist services. A key difference between the services funded under the Agreement, and the new services proposed under the Pharmacist Services Framework is that the DHBs have a choice as to whether they will fund the new services.

Another distinction is that many of the new services can be offered by independent pharmacists (i.e., other than community pharmacists), as these services do not fall within the statutory monopoly framework. This is a key distinction as it could be relevant to considerations with respect to moving the current funding model towards a different approach such as bulk funding or tendering (i.e. a bulk funding or tendering model could be used only for these new services).

5.5 Laboratory testing services - High Court decision

Diagnostic laboratory and pathology services are analogous to pharmacy services in many ways. These service providers also exist outside of the PHO framework, however the funding model has recently been significantly overhauled so that tendering has become the most preferred method of funding. This has resulted in major changes to the sector, with many providers facing elimination from the market, or forced joint venture operations.

The High Court has recently had the opportunity to review the changes in this industry in *Diagnostic MedLab Limited v Auckland DHB, Waitemata DHB, Counties-Manukau DHB*[59]. The resulting decision provides a thorough analysis and blueprint for the pharmacy sector in relation to providing further insight as to how pharmacy services may be viewed within the overall Health and Primary Health system.

In this case, the High Court was required to review three heads of claim. The most relevant claim for the pharmacy services sector was the DHB's failure to consult adequately with relevant stakeholders during the tendering process. Asher J confirmed that laboratory services were "an integral part" of the care provided to patients by GPs.[60] As such, GPs were directly affected by the relevant DHBs' purchasing decisions. Accordingly, the Judge considered whether the DHBs had a duty to consult with PHOs over possible changes to the provision of community laboratory services and, if so, whether the DHBs had discharged their duty to do so.

His Honour confirmed that the PHD Act imposes a duty on DHBs to foster community participation in significant changes to the provision of services, and this included providing for

[59] *Diagnostic MedLab Limited v Auckland DHB, Waitemata DHB, Counties-Manukau DHB* (High Court, Auckland, CIV 2006-404-4724, 20 March 2007) per Asher J.
[60] *Diagnostic MedLab Limited*, above, paras 251 and 265.

consultation on strategic planning.[61] Furthermore, the NZHS states at clause 43 that DHBs should consult with those who use services that "could be changed as a result of a decision". The DHBs were bound to adhere to the terms of the NZHS as the funding agreement between the Crown and DHBs contained a provision requiring this. Consequently, His Honour held that the PHD Act and associated documentation created "a legal duty on the party of DHBs to consult with those sections of the community who may be affected by a contemplated *significant* change to health services."[62]

Following analysis of the facts, His Honour went on to find that the overall effect of the contemplated changes to the methods of funding laboratory services, and the conducting of tenders, was significant.[63] The question arose, therefore, whether the required adequate consultation had taken place with relevant stakeholders. In this case, it was found that there had not been adequate consultation undertaken by the DHBs with relevant stakeholders such as the PHOs.[64] Consequently, the tender decision was held to be ultra vires.[65]

This decision has resulted in a major 'wake-up' call for the DHBs with respect to how they carry out their funding role. A key message is that any significant change to the structure of services, and how they are funded, must only occur after comprehensive consultation with all stakeholders.[66] Ultimately, as Asher J confirmed, "at issue here is good decision-making in the interests of the public".[67]

5.6 Analogies with the laboratory testing sector

Although very similar in nature, the pharmacy services and laboratory testing services sectors have some key differences. Pharmacy services have a number of distinct 'special' characteristics.[68]

Due to the 'care element' in particular, the pharmacy services sector would appear to be in a more favourable position than that of the laboratory testing sector with respect to any proposed changes to the funding framework. The consultation principles and indications from the *Diagnostic MedLab* decision send a clear signal to the DHBs that they must undertake comprehensive consultation with all stakeholders in the design of any significant change to the system.

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[61] *Diagnostic MedLab Limited*, above, paras 253-254. Reference to PHD Act, ss 3(1)(c) and 22(1)(h).
[62] *Diagnostic MedLab Limited*, above, paras 259 and 264.
[63] *Diagnostic MedLab Limited*, above, para 268.
[64] *Diagnostic MedLab Limited*, above, paras 289-290 and 300.
[65] *Diagnostic MedLab Limited*, above, para 300.
[66] It is noted that the Ministry of Health has developed the "Service Planning and New Health Intervention Assessment - Framework for collaborative decision-making" guidelines (January 2006), www.moh.govt.nz. These guidelines provide clear guidance to DHBs regarding the process to be followed (including consultation) when proposals are made for changes in the health system. "The Framework will (also) ensure that individual DHBs are not inappropriately compromised by the decisions of other DHBs."
[67] *Diagnostic MedLab Limited*, above, para 374.
[68] For example, pharmacists are often the first contact point for patients with health issues; pharmacists have direct contact with patients who are referred by a GP (compared to pathologists who have direct contact with GPs rather than patients, and whose patients interact mainly with phlebotomists and administrative staff); there is a "care relationship" between a pharmacist and patient, with elements of advice and counselling required; pharmacists, like GPs, are faced with ambiguity in relation to illnesses presented to them and, therefore, there are higher elements of risk; and certain professional skills required (compared to pathologists who are required to analyse and interpret the data presented to them).

5.7 Competition law framework

An essential part of the governing legal framework for pharmacy services is the competition law regime set out in the Commerce Act 1986 (COMA). The purpose of the COMA is to promote competition in markets for the long-term benefit of consumers within New Zealand.[69]

The COMA is particularly relevant to the pharmacy services sector given that pharmacies enjoy a statutory monopoly in relation to the dispensing and management of certain medicines, as well as the ownership structure of pharmacies. In addition, a monopsony exists whereby each regional DHB is the only purchaser of the majority of pharmacy services. This provides a unique competitive environment.

In the present case, it is difficult at this early stage to canvass the competition law issues arising from a possible change in DHB purchasing methods to a tendering model for pharmacy services because the parameters are too abstract and uncertain. For example, it depends on whether all DHBs, or some DHBs, or even one DHB moved to tendering. Similarly, it depends on whether all pharmacy services (including the new proposed services), or just some of the available pharmacy services, were tendered. And, in each region, the pharmacy services market is different depending on the community served and the number of pharmacies and pharmacists operating in that market. Accordingly, as these parameters become more certain, a more comprehensive analysis can be undertaken.

5.7.1 Monopsony

Although PHARMAC has a statutory exemption from COMA's application[70], to the DHBs and other Crown entities in the health sector do not have such cover.[71]

As a monopsony, DHBs enjoy the privilege of being the only purchaser in a market with many sellers. This practice is not directly restricted under the COMA and relevant health sector legislation. However, it raises significant supply side implications in the relevant market/s. These implications are related to the overarching competition *policy*, rather than legal, framework. Notwithstanding this, the policy implications lead to legal concerns in the long-term where the result of policy is the diminution of a competitive market. For example, if one DHB chooses to go out to tender for pharmacy services in a community, and as a result, one services provider is chosen, the remaining services providers may be eliminated from that market. Then, in future, when that contract comes up for renewal, if market participants are reduced, competitive tendering will be constrained. Accordingly, creating competition tension now by moving to a tendering model may, in the end result, damage the relevant market/s in the long term.

5.7.2 Restrictive trade practices

The COMA prohibits the entering into, or giving effect to, any contract, arrangement or understanding substantially lessening competition in a market.[72] This key provision is the

[69] Commerce Act 1986, s 1A.
[70] PHD Act, s 53.
[71] Although we note that it was originally contemplated that the DHBs would have the same exemption as Pharmac under the Commerce Act in relation to pharmaceutical arrangements (per the Minister of Health's memorandum to Cabinet, "Statutory Form of the New Zealand Blood Service and Pharmac", 2000).
[72] Commerce Act 1986, section 27.

most likely to be triggered by a change in funding arrangements to a tendering model for pharmacy services. This is because an arrangement within a specific region for one provider to provide pharmacy services (depending on which services) could have the likely effect of substantially lessening competition in that regional market due to other pharmacies withdrawing from the market.

The unusual competitive environment of pharmacy services providers (with a monopoly on most services) and monopsonist purchasers has to date been untested in the Courts. However, it is our view that there are sufficient concerns existing in this sector to potentially trigger the COMA if the DHBs were to change their procurement model to tendering.

Similarly, the COMA prohibits a person (including companies) with a substantial degree of market power in a particular market from taking advantage of that power for certain purposes.[73]

This is a more narrow provision that requires a person to have *the purpose* of preventing competition or eliminating another person from the market. It has the potential to be triggered, however, with a change to a tendering model for the funding of pharmacy services.

5.8 Summary

The legal framework for pharmacy services in New Zealand is derived from various sources within statute, government policy and contractual agreements. The resulting framework consists of monopsonist Crown entities (DHBs) providing funding to pharmacies that provide pharmacy services, some of which are prescribed by statute and a standard sector contractual agreement, and some of which are prescribed in a new policy document and are subject to discretionary funding.

Ultimately, the DHBs may distribute government funding for health services as they see fit, provided they act within their statutory functions and objectives, which constrain them in respect of ensuring access and quality of health services. There are, however, a number of relevant factors that must be considered at the same time:

- government policy (in the form of national health strategies, and procurement guidelines);
- the distinction between pharmacy services falling within the statutory monopoly for pharmacists (and pharmacies) only and other pharmacy services (such as the recently proposed 'specialist' services), which could potentially be provided by a wider group of health practitioners;
- issues that have arisen recently in the analogous laboratory testing services sector (which has recently shifted to a tendering model for funding); and
- competition law implications under the Commerce Act, given the unique competitive environment with significant monopoly pharmacy services and monopsonist purchasers.

All of these factors operate to constrain the DHBs in their actions and will be relevant considerations with respect to optimising the purchase of pharmacy services in future.

[73] Commerce Act 1986, section 36.

6 Optimising the Purchase of Pharmacy Services

The convergence of demographic and workforce trends, the need to address risks to the security, efficiency and effectiveness of primary health care services, and the obligation to give effect to government health policy all point to the need for an optimised approach to the purchase of pharmacy services.

Approaches based on short term cost cutting that have no regard to the nature and potential role of community pharmacy is no longer supportable. Purchasing decision making must respond to a wider set of needs.

Acknowledging that, the Guild is focussed on the identification of an optimal purchasing model that supports the achievement the best outcomes for individual and primary health care service as a whole.

6.1 Adopting purchasing criteria

Section 4 of this report (Where is Community Pharmacy Headed?) describes the changing nature of community pharmacy and the underlying drivers of that change. Taken as a whole those changes reflect a growing appreciation of the potential of community pharmacy in delivering desired health outcomes and increasing the effectiveness of health sector spending. Section 3 (Background) indicates the extent to which this changing nature of community pharmacy is coming to be reflected in government's objectives and vision for primary health care. This is discussed further in Section 5 (Legal Context), where government policy is identified as one of the considerations that DHBs' must take into account in their approaches to purchasing.

What falls naturally out of these issues and objectives is a set of purposes or criteria that any purchasing regime for community pharmacy services should be designed to support. They include:

- the optimal use of medicines (arrangements supporting the prescription, dispensing and administration of medications are designed to ensure that patients have the best possible opportunity of achieving the intended outcome);

- establishment of a set of incentives for the pharmacy workforce that will encourage the recruitment, retention and geographical distribution of the numbers and quality of professional pharmacists (and technicians) required to ensure that New Zealanders have adequate and timely access to pharmacy services;

- adequate access to pharmacy services, recognizing the statutory obligations on DHBs to enable equal access to services for all New Zealanders;

- the optimal management of the primary health care workforce, requiring:

    - that purchasing arrangements are designed to encourage collaboration amongst different primary health care professions; and

  - realisation of the potential to minimise undesirable pressure on other primary health care providers;

- the encouragement of innovation by community pharmacists in the development of services to meet desired outcomes;

- the ability to trade off investment in pharmacy services against other interventions with the objective both of enhancing health outcomes, and of minimising health care costs over the medium to long-term. A specific objective for this purpose is to enable trade-offs between current year and future year expenditure, and between different funding components within the health sector; and

- the development of an evidence-based understanding of the role and function of community pharmacy within New Zealand, and the contributions it can make to improved health outcomes and reduced health sector costs.

Taken together, these criteria are intended to overcome shortcomings within the current purchasing arrangements for pharmacy services including:

- inadequate funding to support adherence once a medication has been dispensed and the patient has left the pharmacy. This is contrary to the growing body of international evidence that highlights the significant costs and adverse health outcome consequences resulting from non-adherence;

- recruitment and retention. These are increasingly serious issues across the primary health care sector. Although evidence for community pharmacy is somewhat less substantial than for general practice, there are early signs that purchasers of pharmacy services should recognise and reflect in their approach to community pharmacy;

- a focus on purchasing individual service packages. General practitioner services through PHOs and pharmacy services (through a separate pharmacy contract) have militated against purchasing to optimise the use of the primary health care workforce, such as by purchasing disease state management services from community pharmacy to minimise the demands on general practice;

- disincentives to purchasing pharmacy services (or other primary health care services). DHBs currently purchase pharmacy services out of an annual budget that is fixed for the year of purchase. There is no incentive to purchase additional services with the objective of minimising potentially more expensive secondary care or other institutional treatment, for the same patient, in future years. Similarly, the arrangements for funding rest home care provide no incentives for DHBs to purchase additional pharmacy services as a means of maintaining people in their own homes; and

- lack of encouragement for innovation. Community pharmacy, patients and DHBs are all worse off as a result, as the cost-based focus on outputs minimises the potential for the skills and insights of community pharmacy to be applied to innovative ways of delivering better health outcomes and potentially at a lower cost to the health system overall.

6.2 Approaches to purchasing

Five possible approaches to purchasing pharmacy services are considered from the perspective of how they could best contribute to satisfying the criteria for optimising the purchase of pharmacy services. They are the current approach (the standard contract negotiated between DHBs and the Guild), section 88 notices, bulk funding, tendering and, within that, relational contracting.

Before considering each of these in turn, three important points need to be made.

6.2.1 Policy and operational levels to purchasing

The first point is that the purchasing role needs to be considered at two different levels:

- the policy level – determining the objectives that the purchase of pharmacy services is intended to achieve and ensuring that effective means are in place for monitoring the outcomes of purchasing activity. This policy responsibility belongs to the Minister and the Ministry; and

- the operational level – this is the role undertaken by DHBs when purchasing pharmacy services within ministerially approved budgets to achieve outcomes set by the Minister.

The major gap in current purchasing policy for pharmacy services is precisely the absence of ministerially determined outcomes to guide DHBs in their operational role of purchasing pharmacy services. This can be seen as the principal reason why the purchasing of pharmacy services appears to be focused on minimising current year cost within a fixed budget, rather than on maximising health outcomes and minimising total health sector costs over time.

Determining the outcomes expected from the purchase of pharmacy services falls squarely within the purpose of ministerial strategies, such as the recently announced health targets initiative. Pharmacy services are a vital part of the provision of pharmaceuticals, and pharmaceuticals are a very important medium for the delivery of primary care. While government has explicit strategies for primary care in general and pharmaceuticals in particular, the pharmacy component of primary delivery has gone largely unremarked, as if it were of no significance whatsoever.

However, for DHBs pharmacy services are a major item of expenditure. Further, previous work undertaken by the Guild indicates pharmaceuticals under-deliver because of the problem of adherence. The recent national medicines strategy initiative is an attempt to redress this gap, but even there the support service component of the proposed strategy appears as an apparent afterthought.

The need for national, ministerially determined outcomes for the purchase of pharmacy services goes hand in hand with the need for defined purchasing criteria that consider more than just the cost of the service.

6.2.2 The nature of pharmacy services being purchased

The second point is that international experience (see Appendix 1) suggests there is merit in drawing a distinction between base pharmacy services or their equivalent, and enhanced or additional pharmacy services.

Base pharmacy services are currently the core business of community pharmacy. In principle, the service is highly standardised in the sense that there is a well-known series of steps to be gone through each time a pharmacist receives a script for dispensing. Precisely what happens will vary from case to case (as is very apparent from the questionnaire responses summarised in Appendix 2), but over time there is a measure of predictability about the variability itself - which could be enhanced if service purchasers adopted the practice of evaluating base pharmacy services.

The consequence is that base pharmacy services, generally, are treated by service purchasers more or less as though they are a standardised commodity. The main tension between purchasers and service providers is how much service the purchaser gets for what the purchaser is prepared to spend. As noted elsewhere in this report, there is evidence that purchasing down to a cost does have consequences in terms of quality, simply because service providers themselves need to earn an adequate return. A recent report prepared for the Royal Pharmaceutical Society of Great Britain on how pharmacists can contribute to the care of people with long-term medical conditions comments that "in seeking to develop a strategy to make the maximum use of the community pharmacy contribution it will be important to recognize that community pharmacy is a business, in which decisions about investment and deployment will be made on that basis."[74]

Enhanced pharmacy services, such as medication use reviews, medication management, or disease state management come into a somewhat different category. There is no triggering event that is the equivalent of a specific script. Internationally, decisions by pharmacists to become engaged in the provision of enhanced pharmacy services are typically discretionary, as is the decision in any individual patient case to provide/access the service.

As a consequence, the preferred approach is for enhanced pharmacy services to be purchased under separate arrangements from those for the purchase of base pharmacy services. The most obvious example is Australia, where the fourth pharmacy agreement has set aside a specific sum ($A500 million through the term of the agreement) to fund the purchase of enhanced pharmacy services, and also set aside a specific sum for research and evaluation.

This report assumes that a similar approach would be taken in New Zealand.[75]

6.2.3 Outcomes-based purchasing

The third point is the impact of a shift to outcomes-based purchasing. This would break the current impasse between DHBs and community pharmacy, which is a consequence of the

[74] Long-term conditions: Integrating community pharmacy's contribution, Report 3, Blenkinsop & Celino. Webstar Health, August 2006,

[75] The DHBNZ document New Zealand National Pharmacist Services Framework suggests DHBs themselves accept the need to separate purchasing arrangements for base pharmacy services from purchasing arrangements for enhanced pharmacy services.

focus on purchasing down to a cost. Most of the concerns that community pharmacy has about the current approach to the purchase of pharmacy services is that it is a cost-based approach very substantially divorced from any consideration either of the contribution that community pharmacy can make, or of the gap between what is currently achieved with the use of medicines in a community setting, and what could be achieved.

6.2.4 Possible approaches to purchasing

Before discussing the potential of the available purchasing approach to contribute to the criteria for optimised purchasing, the characteristics of each is usefully outlined:

Current approach. The standard contract is negotiated triennially between the DHBs as a group, and the Guild as the representative of community pharmacy. It is an output-based contract that sets a standard price per script for each script dispensed. It can be characterised as a commodity-based approach to pharmacy services. Once negotiated, the contract is then available for signature between individual DHBs and community pharmacies. There is no discretion to vary its terms.

Section 88 notices. Under section 88 of the PHD Act, a DHB may give notice of the terms and conditions under which it is prepared to make payment to any person. Acceptance of payment is acceptance of the terms and conditions. In effect, this provision allows a DHB to unilaterally establish the terms and conditions on which it will deal with service providers.

Bulk funding. This is a funding system under which a service provider is paid a sum based on the number of persons for whom it provides a defined service or a set of services to defined standards (typically the number is established by registration with the service provider). It is usual for the terms and conditions to be subjected to some measure of negotiation with representatives of the provider sector. This system is normally used when a purchaser wishes to risk share with a provider and/or to give the provider discretion in determining how it meets the purchaser's outcome requirements, for example, in how it sets priorities amongst different members of the group to be served.

Tendering. This is a potentially flexible approach to purchasing. Under a tendering system an intending purchaser can bid for services on an exclusive provider basis or a non-exclusive basis. It can choose whether it accepts the lowest or any bid. It may purchase down to a cost, or on the basis of quality rather than cost. It is free to define the range of services, service specifications and standards, potential recipients, and any other characteristics it regards as relevant. A tendering process may be run with the objective of accepting one or more bids. It may be run purely for the purpose of identifying one or more parties with whom the tenderer then wishes to enter into negotiations on specific details. It may be used as a search process to identify whether there are parties interested in providing services of the nature or on the basis that the purchaser seeks. Within the health sector, some constraints exist in terms of obligations to consult with persons affected by whatever decision the purchaser takes but otherwise the purchaser has considerable discretion. It is this very flexibility and discretion that means tendering has the potential to be used effectively or misused and ineffective.

Relational contracting. This is subsidiary of the tendering approach. It emphasises the importance of mutuality, and of the value that each contracting party expects to build up over time in terms of institutional knowledge, trust, and the certainty and stability required for long-

term investment in specific assets. It is an approach that could support the development of a standard contract between one or a group of purchasers and one or a group of providers, or the development of different contracts with different providers within the same broad service category.

6.3 Contribution to optimised purchasing

The assessment of the strengths and weaknesses of each of the five approaches as a means of optimising the purchasing of pharmacy services depends crucially on the underlying assumptions about the purchaser's objectives. As already noted, a persistent concern with the current purchasing approach is that because DHBs are purchasing within a fixed annual budget, their incentive is to purchase on an output basis and down to a cost.

The approach proposed in this report is a shift to outcomes-based purchasing against a set of criteria focused on factors such as optimal use of medication, workforce management, effective management of the primary health sector resource as a whole, the encouragement of innovation and the ability to trade off current expenditure against future savings. Ideally, the purchasing policy would be set at a ministerial level, and effective monitoring (evaluation) would be in place to measure the extent to which implementation of the purchasing policy by DHBs was supportive of the objectives determined by the Minister (ideally a set of criteria of the type outlined above). However, DHBs could adopt an outcomes-based approach, using the criteria discussed above, while such a policy is being developed.

As part of such an approach this report also proposes separate processes for purchasing base pharmacy services, and enhanced pharmacy services, following the practice that is now well established in Australia, emerging in England, and signalled by DHBs themselves in New Zealand. The comments that follow apply equally to purchasing both base pharmacy services and enhanced pharmacy services with the exception that the current contract approach, which is specifically for base pharmacy services, and intended to be signed by every community pharmacy, is not seen as relevant for purchasing enhanced pharmacy services. In contrast, the section 88 notice approach could be used for enhanced pharmacy services, provided the terms and conditions were designed appropriately, including a focus on remuneration and incentives to encourage collaboration between different primary health care providers.

The potential impact of any of the five approaches should be fundamentally different if there is a shift from an output to an outcomes basis. As an example, the concern with tendering against an output based approach where the incentives are to purchase down to a cost is that tendering will be used to force restructuring community pharmacy with fewer and larger pharmacies, but a less effective service and poorer health outcomes.

A shift to an outcomes basis, using a set of criteria such as those suggested above, would direct attention much more closely to the way in which community pharmacy supports patients, works with other primary health care providers, and is able to deal with recruitment and retention (the incentives for entering and remaining in community pharmacy appropriate for this purpose).

One district health board provides a good example of the importance of taking a holistic approach to considering the impact of purchasing strategies. In a document considering the future of pharmaceutical services in Tairawhiti the board identified what it saw as the

potential for reducing costs in the distribution chain to free up funds for value-added services. However, in another document considering the development of a clinical services plan, the same board noted problems with an aging primary care workforce, including pharmacists, and associated difficulties of recruitment and retention, difficulties that would hardly be eased by reducing pharmacist remuneration.

Evaluating the impact of any of the five approaches needs also to assume that DHBs act as intelligent purchasers. This assumes in turn that DHBs themselves will have developed their own views on how best community pharmacy can meet desired outcomes.

Intelligent purchasing should also take a medium to long-term perspective on the future implications of present actions and how community pharmacy can best contribute to meeting health needs, rather than focusing purely on the current year's outturn. Community pharmacy itself needs to understand this and accept that the dialogue with DHBs should encompass which options for the future configuration of community pharmacy will best meet the needs of the primary health care sector.

The changes taking place in community pharmacy are not just changes in its role in contributing to health outcomes; there are also quite significant changes in areas such as ownership, management and the development of support services for community pharmacy itself. The mere fact that there has been a long-term attachment to a particular model of pharmacist ownership (one or a group of pharmacists plus one pharmacy) does not of itself mean that this is the optimal model for pharmacy ownership in the context of changing demands on community pharmacy. Developments such as franchising have the potential to change very significantly the way in which community pharmacy functions. It is very possible that an intelligent purchaser would see encouraging developments of this kind as entirely consistent with the criteria for the purchase of pharmacy services developed in this report, and shape its purchasing strategy accordingly.

6.3.1 Current approach and section 88 notices

Under an outcomes based approach, using the criteria proposed in this report, or a similar set, both the current contracting approach, and the section 88 notice approach, would need a shift in focus from a cost based output purchasing approach. An outcomes based approach will highlight the fact that different patients will have different needs and that this will not just be a matter of individual variation. It will also in part at least be a function of ethnicity, location or age to mention just three factors. This could provide a very real opportunity for pharmacists who wish to maintain independent ownership of their businesses but at the same time recognize the very real gains that could be achieved through collaboration with other pharmacists on matters where economies of scale can provide real benefit for the profession.

This suggests that the use of either of these two approaches would need to involve much more in-depth consideration of the outcomes that purchasers required at the level of individual patients or at least patient groupings. This might also lead purchasers to conclude that they needed to distinguish between services that should be relatively homogenous at the patient level, and services that should vary in response to factors of the kinds just mentioned.

6.3.2 Tendering

Tendering for pharmacy services on an outcomes basis would be required to take account of the impact on outcomes both of the tendering process itself, and of the nature of the service provision landscape that resulted. This could be entirely consistent, however, with encouraging the emergence of one or more as yet unformed groups of like-minded pharmacies to do particular things jointly to improve the way they can deliver services to DHB specifications, if the purchaser considered that this would facilitate efficiencies in back-office services, specialisation to support enhanced pharmacy services, or other objectives that a purchaser might legitimately have.

It might also offer considerable benefits to pharmacies that currently operate on a stand-alone basis, for example, in the development of locum services, support for ongoing professional development, and facilitating a move to enhanced pharmacy services.

The Pharmacist Services Framework assumes that enhanced pharmacy services will be purchased by DHBs on a discretionary basis, but also sets out clear guidelines on payment. The framework clearly contemplates that DHBs, if they decide to purchase enhanced pharmacy services, will stipulate the number of such services. The approach thus recognizes that engagement by pharmacies will be discretionary on both sides (or indeed, that services could be provided by independent professional pharmacists operating without the base of a retail pharmacy).

Tendering has the potential to be an alternative approach for at least two reasons. The first is that tendering is a conventional search process when a purchaser is unsure who amongst potential providers will be prepared and able to offer the service. The second is that, in the absence of established experience, there is a case for enabling community pharmacists themselves to put forward different options for meeting service requirements (this might for example allow the emergence of collaborative approaches involving not just community pharmacists, but other primary health care providers).

6.3.3 Bulk funding

This is an approach that seems certain to be considered, if only because general practice is now funded essentially on a capitation basis with purchasing through PHOs. There is also some experience internationally with bulk funding for pharmacy services, typically for specific groups, for example, Medicaid beneficiaries in the US, or patients in residential care.

An important feature of capitation funding for general practice is the registration of patients with individual general practitioners. An issue to consider is whether for bulk funding to work within a community pharmacy environment, patient registration would also be necessary or whether some other basis could be determined.

The key issue is finding a reliable means of defining the patient group for which funding has been capitated. In British Columbia PharmaCare (the funder for pharmacy services) purchases pharmacy services for patients in long-term residential care on a capitation basis with the fee currently set at $C35 per month per occupied bed, a figure that is relatively easy to determine and monitor. In the United States, pharmacists are reimbursed for services to Medicaid entitled beneficiaries on a capitation basis.

In Scotland the Minor Ailment Service (MAS), introduced in June 2006, is also capitated. Patients who are registered with a GP service, not required to pay for prescription pharmaceuticals, and not in long-term residential care, may register for the MAS with a

community pharmacy. The service entitles them to advice on minor ailments. The pharmacist may also give them an appropriate non-prescription medicine free of charge. Pharmacists are reimbursed monthly for the capitation count, and for any medicines dispensed.

It is not clear that the general registration approach, which has been readily accepted for general practice, would work with community pharmacy. The nature of the attachment between patient and doctor is inherently different from that between patient and pharmacist. There is a widely accepted recognition of the importance, for general practitioner services, of the understanding of the patient's medical history that the general practitioner builds up over time. There does not appear to be any equivalent understanding of the importance of a long-term relationship between a patient and a pharmacist, at least in the majority of cases (there is anecdotal evidence that some categories of patient, such as older persons on multiple medication, value the benefits of dealing with the same pharmacist). Indeed, New Zealand research cited elsewhere in this report suggests that a very significant proportion of patients appear relatively unconcerned about which pharmacist they go to when next they need a prescription or advice.

If bulk funding, supported by registration, is to be effective it would almost certainly require financial incentives to encourage patients to use the same pharmacist, as with the Scottish Minor Ailment Service although this is targeted to a minority of the population. One possibility might be to provide that patients should be required to use the pharmacy with which they were registered if they wished to receive subsidised pharmaceuticals. However, that could pose real difficulties for people who travel much, or who need a prescription dispensed at a time when their normal pharmacy is closed. It may also be seen as an unreasonable intrusion on people's rights to choose their provider, unless it was made relatively easy for people to change their pharmacy of registration. That, however, could come with significant administrative costs.

Another possibility might be to identify the capitated patient group not by registration, but retrospectively by patient NHI number. Rather than a dispensing fee, pharmacists would be paid a monthly sum for each patient dealt with during that month. If a patient attended more than one pharmacy, the bulk funding amount would be amended accordingly (one issue that would need to be addressed is the time period over which bulk funding payments were assessed to recognize the fact that many people attend a pharmacy only infrequently).

This approach has the potential to be quite compliance intensive and may also be seen as unattractive from a pharmacist perspective, given the tendency of many patients to use more than one pharmacy. On the other hand, it might give pharmacists an incentive to devise strategies to encourage patient loyalty - as it should be simple for pharmacists to identify which patients had, in previous months, been to more than one pharmacist.

A potential advantage from an approach encouraging patients to use a single pharmacy if at all possible, would be to increase the comprehensiveness of individual pharmacies' patient records.

In New Zealand, bulk funding may be more acceptable, and administratively feasible, for specific groups such as long-term residential care patients, or older patients on multi-medication, who were prepared to register with a single pharmacy. This could apply either to the base pharmacy service, or to enhanced pharmacy services or both. The use of bulk

funding will require DHBs and community pharmacy to work on a much more collaborative basis, particularly to ensure that outcomes are well defined and understood and that each side knows both what the potential is, and what the constraints may be, for delivering the desired outcomes within the available funding. Indeed, this point applies more generally to any well-managed outcomes-based purchasing process.

From a public interest perspective, provided that the purchasing approach is outcomes grounded, and accompanied by adequate research and evaluation, there may be little to choose amongst the five different approaches.

It is arguable that in terms of outcomes such as optimal use of medicines, and equitable access to pharmacy services, the purchaser could still use a tendering approach as a de facto means of seeking to restructure community pharmacy. It would do this by specifying the outcomes it sought and inviting proposals to meet its requirements in the hope that this would encourage what it would regard as innovative responses.

Even this would be crucially dependent on the nature of the outcomes specified. Issues such as effective workforce management (recruitment and retention) and collaboration within primary health care would still make a forced restructuring through outcomes-based tendering difficult to implement because of the potentially negative impacts on those outcomes.

This report concludes that the crucial issue in terms of optimal purchasing of pharmacy services is not the purchasing approach as such but rather the purchasing criteria – what outcomes is purchasing intended to support and are the purchasing activities of DHBs monitored and evaluated against their contribution to supporting the government's objectives for purchasing policy?

This approach is already embedded in the Australian National Strategy for Quality Use of Medicines (QUM). This document sets out the responsibilities of the key partners it has identified as contributors to QUM:

All partners are responsible for:

- improving medication use by recognising when and where problems exist, identifying factors that contribute to those problems, initiating interventions to improve medication use, and evaluating outcomes;
- enhancing understanding of the risk and benefits associated with the use of all medicines;
- fostering informed debate about the role of medicines in health care; and
- working in partnership to achieve quality use of medicines (QUM).

Health care funders and purchasers are responsible for:

- funding or purchasing services that support QUM; and
- providing appropriate funding mechanisms that give consumers and health practitioners incentives to support QUM.

6.4 Summary

Given the demonstrated need for more optimal approaches to purchasing, the Guild considers that the critical issue is not the purchasing approach as such, but rather the purchasing criteria – what outcomes is purchasing intended to support and are the purchasing activities of DHBs monitored and evaluated against their contribution to supporting the government's objectives for purchasing policy?

The potential impact of any of the five possible purchasing approaches (current standard contract, section 88 notice, bulk funding, tendering or relational contracting) would be fundamentally different, depending on whether the focus was on outputs and cost-reduction within the pharmaceutical budget alone or on an outcomes basis. As an example, the concern with tendering against an output based approach where the incentives are to purchase down to a cost is that tendering will be used to force restructuring community pharmacy with fewer and larger pharmacies, but a less effective service and poorer health outcomes. A shift to an outcomes basis could direct attention much more closely to the way in which community pharmacy supports patients, works with other primary health care providers, and is able to deal with recruitment and retention (the incentives for entering and remaining in community pharmacy appropriate for this purpose).

The approach proposed in this report is a shift to outcomes-based purchasing against a set of criteria focused on factors such as optimal use of medication, workforce management, effective management of the primary health sector resource as a whole, the encouragement of innovation and the ability to trade off current expenditure against future savings.

Outcomes-based purchasing will assist DHBs in avoiding unintended and potentially harmful consequences of a purely cost-based approach to purchasing. It will also allow the use of a range of different purchasing tools and be more consistent with Government's policy objectives for the primary health care service.

National policy guidance regarding optimal purchasing of community pharmacy services is required, recognising the current and potential role of pharmacists and their services in contributing to achieving government's objectives for the health sector. Determining the outcomes expected from the purchase of pharmacy services falls squarely within the purpose of ministerial strategies such as the recently announced health targets initiative. The absence of ministerially determined outcomes to guide DHBs in their operational role of purchasing pharmacy services can be seen as the principal reason why the purchasing of pharmacy services appears to be focused on minimising current year cost within a fixed budget, rather than on maximising health outcomes and minimising total health sector costs over time.

While ideally purchasing policy would be set at a ministerial level, and effective monitoring (evaluation) would be in place to measure the extent to which implementation of the purchasing policy by DHBs was supportive of the objectives determined by the Minister, there is nothing to prevent DHBs from adopting an outcomes-based approach, using the criteria discussed above, while a national purchasing policy is being developed. Such an approach would assist DHBs in avoiding unintended and potentially harmful consequences

of a purely cost-based approach to purchasing. DHBs could use a range of different purchasing tools (the standard contract for base pharmacy services, tendering or bulk funding, primarily for enhanced pharmacy services), provided those different purchasing tools were utilised in accordance with a set of criteria of the type developed in this report, and the impact of purchasing activity was itself the subject of ongoing evaluation and monitoring, with an emphasis on determining the potential gains, both fiscally and in health outcomes, from a greater and more collaborative use of pharmacy services.

Finally, as part of this outcomes-based approach, it is recommended that separate processes be adopted for the purchase of base pharmacy services, and enhanced pharmacy services as is already the case in Australia, is emerging in England and is now being recognized by DHBs themselves as a desirable approach.

7 Conclusion

New Zealand's primary health care service is confronted by a converging number of challenges. Changing population demographics and related health care needs, strain on the primary health workforce and forecast problems in the future supply and deployment of primary health care professionals are all issues demanding careful consideration by health planners, health purchasers, and by the primary health care professions themselves. Unaddressed, these issues have the potential to impact significantly not only on the efficiency of the primary health care service, but also its effectiveness and security over the long-term.

Government has recognised the implications of these changes and its health policies have placed a growing emphasis on the role of community pharmacy as a key agent in the delivery of primary health outcomes. The contribution of community pharmacy to the abatement of avoidable costs arising from the inappropriate use of medicines is also receiving growing recognition.

The focus on short-term cost savings highlights very real tensions in how community pharmacy is understood, valued and perceived. This approach is least responsive - and most damaging - to the objective of fostering a secure, integrated and effective primary health care service.

Within the constraints of policy and statute, DHBs may distribute government funding for health services as they see fit. Accordingly, they are well-positioned to support the changing role of community pharmacy and give effect to Government policy.

However, current institutional and funding arrangements constrain the extent to which DHBs can seek to improve quality of health outcomes by making trade-offs between expenditure on pharmaceuticals or medication management and expenditure in other areas (e.g., GPs visits or hospital admissions). DHBs are instead compelled to seek savings *within* their pharmaceutical budgets for their communities (e.g., trading off increased expenditure on additional community pharmacy services by decreasing dispensing fees).

The result has been sub-optimal approaches to the purchase of community pharmacy by DHBs. Certainly, the indicative positions taken by some DHBs suggest a more sophisticated appreciation of the health care needs of the community and what community pharmacy does or can do, and appear to be focussed on getting value for money over the medium and long terms. However, others remain focussed simplistically on short-term cost savings. The latter highlight very real tensions in how community pharmacy is understood, valued and perceived, and it is these approaches to purchasing that are least responsive - and most damaging - to the objective of fostering a secure, integrated and effective primary health care service.

Whilst the Guild is critical of the attitudes that may, on occasion, lie behind perceptions of the value of community pharmacy, it also acknowledges that community pharmacists are not passive actors. They have a role to play in collaborating with DHBs to enhance health and policy outcomes through support for optimal purchasing models and the move into a new or enhanced services environment.

Accordingly, the Guild recommends a shift to outcomes-based purchasing, but concludes that this should be done against a set of criteria that highlight and take account of factors such as optimal use of medication, workforce management, effective management of the primary health sector resource as a whole, encouragement of innovation and the ability to trade off current expenditure against future savings. Ideally, too, separate processes would be adopted for the purchase of base pharmacy services and for enhanced pharmacy services.

The Guild considers that this approach would assist DHBs in avoiding unintended and potentially harmful consequences of a purely cost-based approach to purchasing. It would also allow the use of a range of different purchasing tools, at the same time as being more consistent with Government's policy objectives for the primary health care service. Further, by focussing attention more closely on the way in which community pharmacy supports patients beyond routine dispensing, the approach will encourage a higher and necessary degree of collaboration between primary health care professionals.

Appendix 1: International Trends

The focus of this Appendix is on international evidence on the changing role of pharmacy services in supporting the optimal use of medicine.

A review of the literature on the evolution in pharmacy services shows two separate streams of activity developing. The first is pharmacist involvement in disease state management and monitoring and the second pharmacist support for concordance, especially for older people.

There is a growing body of research supporting the proposition that an increased use of pharmacy services, properly targeted, is both cost-effective and leads to improved health outcomes.

A major factor in the growing interest in what are commonly described as cognitive pharmacy services is the research evidence establishing the impact of factors such as inappropriate prescribing, misuse of drugs, and non-adherence and the associated costs. Two examples, one from Canada, and the other from the United States show the extent to which these problems are now recognized, at least within the research community. Both reference research in support of the statements they make:

Canada

The following two paragraphs are extracted from a 2002 article describing clinical homecare services provided by Canadian pharmacists.

> *In Canada, expenditures for publicly funded home care programs more than doubled in the 1990s as a result of the increasing deinstitutionalization of health care. This doubling of expenditures, however, has not kept up with demand and, as a result, ensuring access to publicly funded home care programs, particularly for the frail elderly, has become problematic. In 1997 the Canadian government identified home care as a priority area for health care reform.*
>
> *Elderly patients are the predominant users of home care in Canada. In 1998-1999 fewer than 1% of adults under 65 received publicly funded home care services, compared with 12% of those over the age of 65. In addition, the elderly are the major users of medications. Elderly residents make up 9% to 12% of the population of industrialized countries and use 25% to 30% of the prescribed drugs. Unfortunately, there is ample evidence of inappropriate prescribing and misuse of drugs in the elderly, with serious adverse consequences for health and for health care utilization. Research on drug use in the home care population has been very limited; however, a recent U.S. study of 6,718 patients over the age of 65 in two urban home health care agencies found evidence of potential medication problems in nearly one-third.*
>
> (MacKeigan et al, 2002)

United States

The United States example is taken from a 2006 article in the American Journal of Pharmaceutical Education, *Enhancing Community Pharmacy Through Advanced Pharmacy Practice Experiences*. The article discusses the role of advanced pharmacy practice

experiences as part of the fourth-year training of pharmacy students as a means of preparing them for the pharmaceutical care component of pharmacy practice.

The rationale it gives for the increased emphasis on pharmaceutical care is based on the cost of medication-related morbidity and mortality. It observes:

> *The transition to pharmaceutical care has been driven by many factors. Perhaps the most influential factor is the recognition of the impact of medication-related morbidity and mortality. Among ambulatory patients, medication-related morbidity and mortality contributes to 3%-10% of hospital admissions, half of which are caused by preventable medication-related errors. In 2000, the estimated cost of preventable medication-related morbidity and mortality among ambulatory patients was $177 billion. By preventing medication-related problems through pharmaceutical care, pharmacists can play a valuable role in reducing patient risk. Therefore, an important outcome for pharmacy graduates hinges on their ability to provide pharmaceutical care.* (Dugan, D. 2006).

There is no equivalent body of New Zealand research identifying the costs within our own health care system of drug related problems. However, a recent paper (Eagle et al 2005) states "the cost of medication non-compliance in New Zealand, in direct hospital or related nursing-home expenditure and productivity/mortality costs but excluding ambulatory (i.e. costs relating to outpatient rather than in patient or hospital clinic periods) can be crudely estimated, from 1990 USA data at approximately $NZ700 million. Using 1995 Canadian data and including ambulatory costs, it can be estimated to be over $NZ1.3 billion."

Coverage

Against that background, the remainder of this part of the report considers emerging trends in the increased use of pharmacy services in England, Scotland, Germany, Canada, the United States and Australia. It then considers a joint World Health Organisation/EuroPharm Forum publication as further evidence of current trends in the role of pharmacy and finally draws out the implications for New Zealand.

England

In 2003 the Department Health released *A vision for pharmacy in the new NHS* which foreshadowed a new community pharmacy contractual framework intended to improve access the pharmacy services. Associated with that has been an increased emphasis on how to contain the cost of health care for groups such as the elderly, with a growing recognition of the implications of a rapidly aging population. This underpinned the increased emphasis on the potential for pharmacy services in managing both the costs and effectiveness of medication use in the community. The rationale for this is well set out in the following paragraphs from a 2004 article outlining the purpose of the then forthcoming study "Randomised Evaluation of Shared Prescribing for Elderly people in the Community over Time".

> *The UK is facing unprecedented growth in the number of elderly people. So the Department of Health has prepared the National Service Framework for the Elderly to improve health care for elderly people. In May 2000 research funders including the Department of Health, Medical Research Council, Biotechnology Biological Sciences Research Council and Engineering and Physical Sciences Research Council announced plans to develop a coordinated approach to aging research by forming the Aging Research Funders Forum. The Forum intends to stimulate and facilitate multi-disciplinary research to improve the health of elderly patients.*

The Royal Pharmaceutical Society of GB [RPSGB] and the UK Clinical Pharmacy Association [UKCPA] both recommend that UK pharmacists provide 'pharmaceutical care' for their patients. More specifically the Crown report recommends that pharmacists take on the extra role of looking after the long-term drug treatment of patients. Although the pharmacy profession has started to adopt this extended role, there is insufficient rigorous evidence to substantiate this practice. Hence the proposed trial will be important in underpinning these political and professional initiatives.

Most recently the Department of Health has proposed that Primary Care Trusts (PCTs) across England should invest in pharmaceutical care services giving patients access to more help from pharmacists in using their medicines. Consequently pharmacy practice in the community may be completely transformed by 2004. Hence there is a 'window of opportunity' for a randomized trial to evaluate the effectiveness and cost-effectiveness of pharmaceutical care provided by community pharmacists.

(I Wong et al, 2004)

In 2005 the NHS introduced a new community pharmacy contract which provides for essential services (the equivalent of the dispensing component in the New Zealand contract), for advanced services purchased at an NHS level and enhanced services purchased by local NHS primary care organisations. The purpose of the new contract is to make maximum use of the skills of community pharmacists within the NHS and to ensure the best possible standards of patient care.

The following material taken from a presentation to the EuroPharm Forum Annual Meeting Riga, Latvia in October 2005 by the Director of Pharmacy Practice at the National Pharmacy Association provides an overview of the new contract.

New contract - structure **Advanced services**	
Accreditation requirements: • Training for pharmacists • Premises (consultation area)	Current services: • Medicines use review (MUR) • Prescription intervention

New contract-structure **Enhanced services**
Supplied by pharmacies that are commissioned by local NHS primary care organisations (PCOs)
National specifications are set but price for delivering the service is agreed at local level
PCOs and pharmacy owners will continue to be able to develop new, innovative services to meet local needs

Examples of enhanced services	
• Supervised administration • Needle and syringe exchange • On-demand availability of specialist drugs • Stop smoking • Care homes	• Medicines assessment and compliance support • Medication review • Minor ailments service • Out-of-hours • Supplementary prescribing by pharmacists

The initial expectation for the extent of enhanced services was quite upbeat. The NHS Confederation publication *Community Pharmacy Briefing* for November 2004 had this to say:

> *By commissioning enhanced services from community pharmacies, PCOs (Primary Care Organisations) can address the health priorities set out in the NHS Improvement Plan developed nationally as a guide to some of the most commonly commissioned services in this category. PCOs will be able to modify these model specifications to meet particular needs and negotiate these locally, as the recommended prices are benchmark only and can be changed to suit local circumstances. PCOs can also develop other enhanced services to meet their needs over and above those already identified.*

By 2006, at least from the perspective of community pharmacy itself, the outlook for enhanced services was looking distinctly gloomy, largely because of funding difficulties very reminiscent of the experiences of community pharmacy in New Zealand in negotiating for the funding of pharmacy services. Essentially, the message is that purchasers facing a combination of tightly constrained funding, and excess demand for existing services, will be very reluctant purchasers of new services. An April 2006 briefing from the Pharmacy Services Negotiating Committee (the national body which negotiates on behalf of community pharmacy) for Local Pharmacy Committees had this to say:

> *Unlike the GMS contract, there is no funding allocated in the pharmacy contract for commissioning enhanced services. This was our decision, primarily because any such funds could not be securely ring fenced for pharmacy. The GMS sums are protected only to the extent that GPs must be able to bid for any services. PSNC's decision in the negotiations was that the money needed to provide fair funding for the NHS pharmacy service must come from national pharmacy funding; it was unacceptable to have delivery of essential income dependent on local NHS bodies.*
>
> *The NHS is experiencing extreme financial difficulty, and the result of this has been that, faced with budget deficits, many PCTs have not commissioned enhanced services.*
>
> *LPCs recognize that, in order for pharmacies to compete effectively for provision of services, in such a difficult financial climate, LPCs will need to develop compelling cases for the provision of services. The services will*

need to be directly relevant to key priorities for the PCT, and community pharmacy will need to offer the best value, including not just price, but outcomes from the service.

Scotland (and a commentary on patient registration using New Zealand research)

Health care within Scotland is developing along somewhat different lines from health care within England as the consequence of devolution of powers to the Scottish assembly. The new pharmacy contract in Scotland provides for a "chronic medication service" defined as:

> *The pharmaceutical contribution to the management of long-term conditions allowing continuity of pharmaceutical care between the patient and their general practitioner, their practice team and their community pharmacist.*

This is an evolution from pharmaceutical care model schemes (PCMS) which were introduced in 1999 with the following framework:

Pharmaceutical care model schemes Steps Framework

Preparing your practice (Step 1)	The pharmacist discusses with the patient how access to medicines and information can be improved, checks the patient's understanding of their medicines, assesses compliance, provides health promotion, and improves communication and integrated teamwork.
Targeted interventions (Step 2)	Pharmacists provide targeted pharmaceutical care interventions and introduce care planning, eg pain management for palliative care patients, falls and hip fracture prevention assessment.
Holistic medication review (Step 3)	Pharmacist assesses the patient's medicines to ensure all are appropriate in terms of indications, safety, efficacy and convenience

Based on learning from PCMS, schemes for asthma and epilepsy have been developed using pharmaceutical care needs assessment tools to support this at the point of dispensing. In 2005-6 pharmacists were paid 250 pounds for 10 assessments over a 12 month period of any mix of asthma and epilepsy.

Most Scottish health boards initially focused on PCMS for the frail elderly with medication reviews taking place in the pharmacy. Almost half the issues identified related to compliance and estimated cost savings from stopping medicines no longer required and dose optimisation were 42 pounds per patient per year.

> *The chronic medication service (CMS) in the new pharmacy contract will require patients to register with a pharmacy and will enable a pharmacist to manage a patient's long-term medication for up to 12 months. The intention is that a patient can have their medicines supplied, monitored, reviewed and where the pharmacist is qualified to prescribe, adjusted as part of a shared care agreement between the patient, the GP and the community pharmacist. CMS will include components of the pharmaceutical care model schemes, serial dispensing and prescribing.*

> *Payment will be on a capitation basis (Bellingham 2005). 'Delivering for Health', the new Scottish Health Plan, made a clear commitment to involving pharmacists in long term conditions care through the new contract and service redesign including prescribing (Scottish Office 2006). There are also many pharmacists working in GP practices on a full-time or part-time basis and involved in providing care for people with long term conditions.*
>
> (Blenkinsopp, A. & Celino, G., 2006)

The current expectation is that funding for the introduction of the chronic medication service will be included in the Scottish NHS budget for 2007/2008 (Pharmaceutical Journal 10 February 2007).

The registration requirement is a particularly interesting one. The clear intention is that the pharmacist will have an overview of all of the medication which the patient is taking.

There is a strong view within New Zealand community pharmacy that patients, especially patients with long-term conditions, have a high degree of loyalty to individual pharmacies so that even under current arrangements, pharmacists are well placed to monitor the patient's total medication profile including over-the-counter and pharmacist only medicines. This may not be the case. Research reported in the Journal of the New Zealand Medical Association for 7 October 2005 "capturing data on medicines usage: the potential of community pharmacy databases" observes that "at the community level, it cannot be assumed that customers go to the pharmacy in the immediate vicinity of their dwelling; nor can it be assumed that customers are loyal to one pharmacy". (Ryan, K. et al, 2005)

The research involved using Geographic Information Systems technology (including the tabulating, geocoding, and mapping functions) to analyse the information that is held in community pharmacy databases. It strongly suggests that simply relying on patient self-selection combined with comprehensive pharmacist recordkeeping as a means of providing an effective overview of a patient's medication profile may not be adequate. One possible option is a national medication database by NHI number, but costs and complexity may rule this out. Another is registration which is an emerging practice internationally. The following figures illustrate their findings:

Figure 2. Pharmacy customer loyalty in a single municipality.

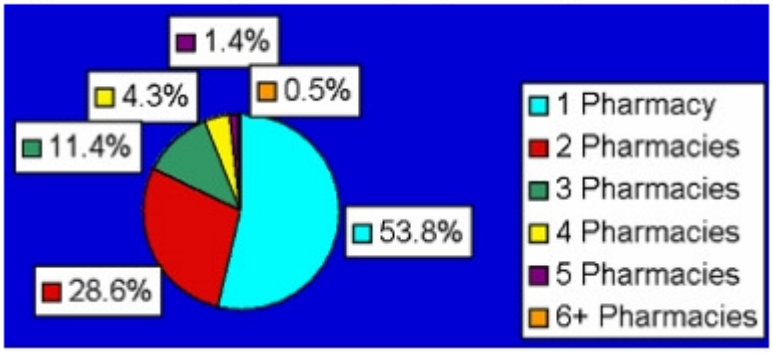
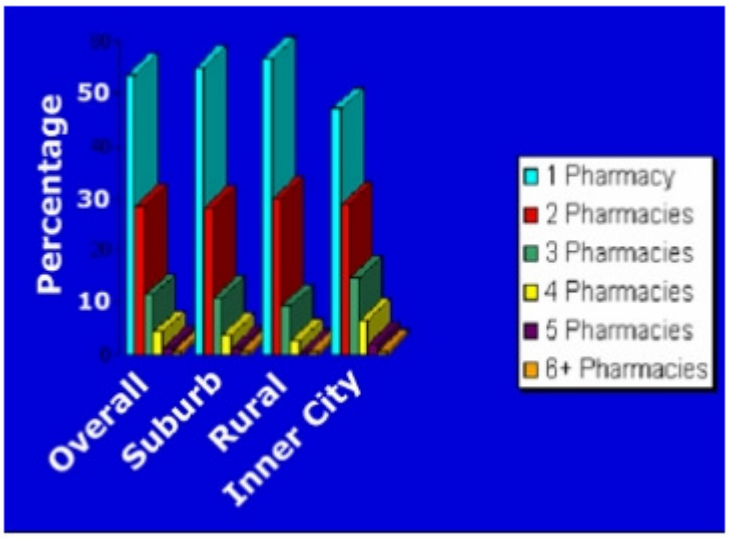


Figure 3. Customer loyalty by category of pharmacy.



Germany

Germany has been experimenting with what is known as a 'family pharmacy' contractual agreement with some of its statutory health insurance companies. The first and most successful has been with BARMER Ersatzkasse, Germany's largest health insurance fund covering 7.2 million of the country's 82 million population.

This contract followed a series of studies of the efficacy and effectiveness of community pharmacy services (pharmaceutical care) for asthma patients. About a year later in December 2004, a trilateral contract was signed between Germany's general practitioner (GP) association, community pharmacy owners association (DAV) and BARMER. Under this contract patients choose both their GP and their community pharmacy. By October 2005, 83 % of pharmacies, 60 % of GPs and 20 % of the insurance fund's members had joined the contract (Eickhoff & Schulz 2006).

Under the family pharmacy contract the pharmacy can be paid for 'pharmaceutical management' incorporating drug profiles, short medication reviews, counselling and medication reports for asthma and COPD (Chronic Obstructive Pulmonary Disease) as well as drug-related problems (DRP) detected and communicated to the prescriber in general i.e., independent of the indication. Pharmacists have to use specific pharmaceutical care software in providing these services. Patients sign up for a set term which is usually at least a year. The service comprises:

- Individual counselling on drug-related problems, e.g. inhaler technique
- Continuing generation of drug profiles to check for compliance, duplicate prescribing, incorrect dosing etc
- Regular checks for contra-indications, interactions etc
- Quarterly medication reports for patient and doctor

Pharmacies providing additional pharmaceutical management (APM) for asthma/COPD patients receive a monthly payment of 5 Euro per patient. As part of the trilateral contract pharmacists can charge 8 Euro per quarter for up to 10 % of BARMER-insured patients for contacting the prescriber to deal with DRPs.

At January 2007, a total of 18,700 (of 21,450 or 87 %) community pharmacies, 38,000 GPs (nearly 75 %) in 31,200 GP surgeries and 1.73 million patients (> 28 %) were participating in the family physician/family pharmacy contract. (Berger, K. et al, 2007)

Germany also provides a useful research example of a pharmacist intervention in disease state management, in this case asthma with a study over 12 months. Pre-post-design with repeated measurements at 6 (t2) and 12 months (t3). At baseline (t1), 39 community pharmacies and 183 patients (18-65 years) diagnosed with asthma participated. 33 pharmacies (85 %) with a total of 128 patients (70 %) completed the study. In co-operation with the physician in attendance, five meetings between pharmacists and patients were scheduled (at baseline and at 2, 4, 6, and 12 months). The stated objective of the study was:

Objective

The aim of this intervention study was to evaluate the effectiveness of pharmaceutical care with regard to clinical, humanistic, and health economic outcomes in adult asthma patients.

Outcome Parameters

Clinical Outcomes

- Asthma severity
- Degree of dyspnea
- Lung function (FEV_1, VC, peak-flow)

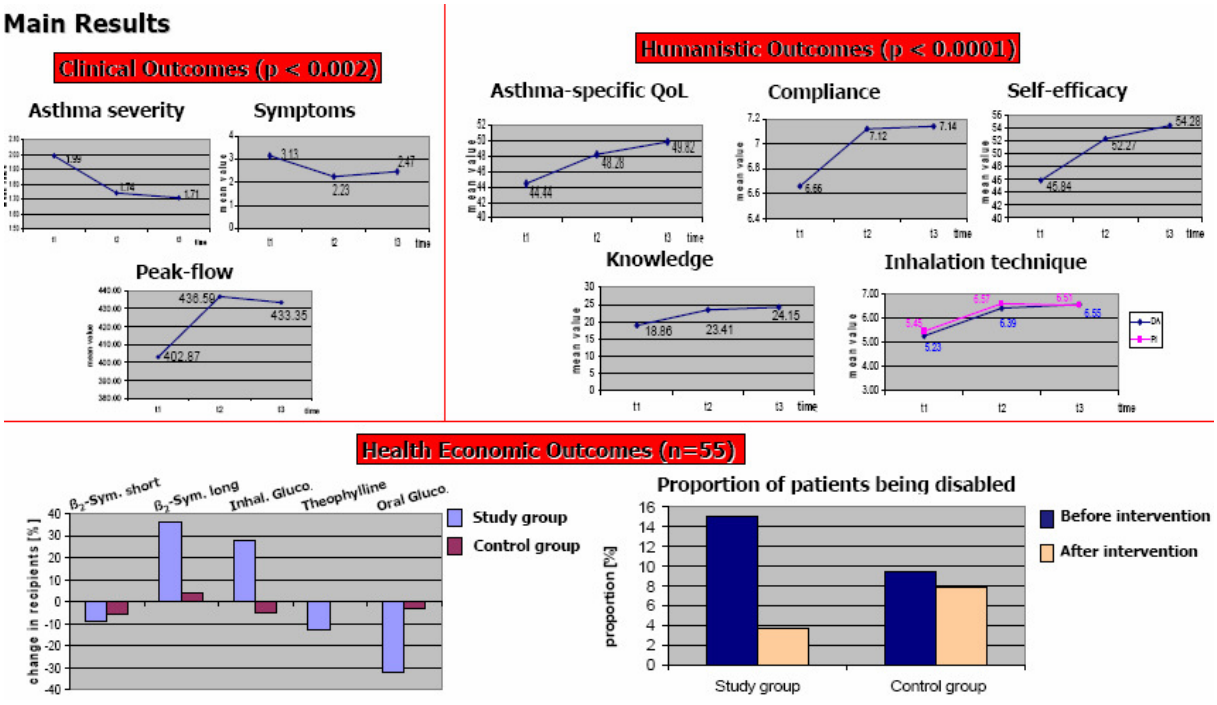
Humanistic Outcomes

- Asthma-specific quality of life (QoL, Hyland)
- Inhalation technique (7-point checklist)
- Knowledge
- Self-efficacy
- Compliance (Morisky)

Health Economic Outcomes

- Drug consumption
- Disability days
- Hospital admissions

The outcomes of the study were measured over three dimensions, clinical, humanistic (behavioural and attitudinal changes) and health economics. The findings represented in diagrammatic form were:



Although this is only one study, it provides useful evidence of the benefits of pharmacist intervention, especially where physicians are involved. In this respect it is worth noting that, under the German "family pharmacy" model, the patients choose both the GP and the community pharmacy. A broadly similar situation will exist in Scotland. Although the registration requirement under the chronic medication service applies only in respect of pharmacies, the capitation funding arrangements within the National Health Service effectively mean that patients are also registered with a specific practice.

Canada

Developments in Canada are considered through two research studies, the first examining clinical pharmacy services in the home and the second pharmaceutical care in community pharmacies.

As a New Zealand, the consequence is that innovation in pharmacy services depends at least partly on persuading government funders to reimburse community pharmacists for additional services.

The focus of the first study was the provision of clinical pharmacy services to elderly patients in receipt of publicly funded homecare through provincial home care programmes none of which cover clinical pharmacy services beyond the basic counselling that would accompany the dispensing of a prescription drug.

The researchers found that the most important barrier to homecare practice was lack of reimbursement. They have this to say in respect of reimbursement as a barrier and on strategies to address it:

> *Not surprisingly, pharmacists in this study perceived reimbursement as the most important barrier to home care. Furthermore, when asked what strategies they had found successful in overcoming barriers they had identified, no respondent identified a successful strategy for obtaining reimbursement. Importantly, none of these practices had a contract to provide pharmaceutical services to a home care agency, and none consistently charged the patient or third party payer a fee for all home services rendered. Similarly, a 1999 survey of licensed pharmacies in North Carolina found that few of the pharmacies that provided pharmaceutical care services billed for them. In our study, home services were subsidized in other ways, none of which are desirable in the long term because of the risk that the sources of subsidy might not continue and because failure to charge a fee for services rendered sends a message that either the amount and value of the resources consumed in the delivery of the service are trivial or the service provides insufficient benefit to the recipient to warrant payment. Therefore, pharmacy advocacy groups should give priority to developing, in cooperation with patients, home care agencies, and third party payers, a rational reimbursement strategy for home care services. In the meantime, as has been suggested for pharmacists' cognitive services in general, pharmacists providing this type of service should consider billing clients even if payment is subsequently waived. Creating awareness of the cost of a service rendered prepares the client mentally for a service charge at a subsequent point in time.* (MacKeigan, op. cit.).

The focus of the second study was on the provision of pharmaceutical care in community pharmacies. The study found that "the implementation of pharmaceutical care in Canadian community pharmacies continues to become more widespread. However, barriers to the provision of pharmaceutical care still exist, including the current shortage of pharmacists and lack of reimbursement systems for cognitive services. Evidence of the value of pharmaceutical care in Canadian community pharmacies has been supported by several

pharmacy practice research projects. The pharmacist's role in patient care is expected to continue to expand."

United States

A distinguishing feature of the American health system is its plurality of funders with somewhat more than half of all health costs being met through the private sector (principally through the employer funded contributions to health insurance programmes). The majority of the balance is met through federally funded programmes such as Medicare and Medicaid.

Dugan (op. cit.) has already been quoted on the factors influencing the transition to pharmaceutical care. The main focus of the article is on the role of advanced pharmacy practice experiences as an integral part of the training of pharmacy students and thus the importance of existing community pharmacists being prepared to act as preceptors. An important factor in this is that the Accreditation Council for Pharmaceutical Education standards and guidelines emphasise the necessity for fourth-year APPEs, which focus on patient care and emphasise the pharmaceutical care model. Dugan also cites a paper by McDonough et al, *Obstacles to the implementation of pharmaceutical care in the community setting.* It is likely the same factors or many of them will be relevant for New Zealand community pharmacy. The relevant material reads:

> *The article cites the following factors: resource-related constraints (time, space, personnel, funding), system-related constraints (reimbursement, patient demand, provider acceptance), pharmacist concerns regarding a lack of advanced practice skills, and fear of change. Concern for these constraints and a perceived lack of clinical knowledge, skills, or abilities, coupled with unease over new responsibilities, may be some of the causes of normal and expected anxiety surrounding the implementation of pharmaceutical care in the community setting. McDonough states, "fear of change is a particularly important obstacle to pharmaceutical care because of the difficulty of implementing this philosophy in one's practice." Without a model to follow a clear set of guidelines, community practitioners may find it easier to continue practising within the existing framework.*

The second American source is a report reviewing published research, *Evidence of the Economic Benefit of Clinical Pharmacy Services: 1996-2000,* prepared for the American College of Clinical Pharmacy. The report was the third prepared for the college on that theme; previous reports had covered, respectively, pre-1988 studies and studies undertaken between 1988 and 1995.

The report accepted some 56 studies as appropriate for inclusion (the study describes the quite detailed methodology used to determine eligibility). There are some qualifications to its conclusions focused on matters such as possible selection bias (for example, would studies showing positive results be more likely to be accepted for publication in study showing a good result?) but the main emphasis is more on the need to continue to improve methodology than on doubts about the general direction of the findings. The following paragraph provides an overview of these:

> *Most studies identified in the current review reported a positive economic impact of clinical pharmacy services, and in all cases those studies using better economic methodologies demonstrated positive results. The benefit: cost ratios of applicable articles included in appendix 1 [the 56 studies accepted for inclusion] are comparable to those of the previous review. Although the mean benefit: cost ratio in the previous review (16.70:1) was*

much higher than that reported in the current review, the median values are similar (4.68:1 for the current review versus 4.09:1 for the previous review). The mean value reported in the previous review was skewed upward by a single study. Regardless, the economic benefit of clinical pharmacy services across a variety of practice sites and types of clinical pharmacy services reviewed here is well in excess of the cost required to provide those services. For every $1 invested in clinical pharmacy services in the studies reviewed, more than $4 in benefit is expected.

The two American papers cited samples from a much wider literature the general theme of which is both a growing recognition of the economic and health benefits from pharmaceutical care, and the increased emphasis on pharmaceutical care as part of the core training of pharmacists.

Australia

The emphasis in Australia on the involvement of community pharmacists in the care of patients with long-term conditions has principally been through medication review. Two separate programmes operate. The home medicines review which is initiated by a doctor referring a patient to an "approved" pharmacy, and residential medication management in which a pharmacist conducts a medication review when a patient is admitted to a nursing home or other facility, and then at regular intervals on request.

Pharmacies are required to register as providers of home medicine review, and pharmacists who undertake the reviews must be accredited. Just over half of reviews have been carried out by an external consultant with pharmacy owners, and employees, each conducting around 20%.

Among the factors which have contributed to the programme's uptake are:

- The appointment of 115 facilitators working in Divisions of General practice, overseen by eight regional coordinators. Wherever possible, facilitators are qualified pharmacists.

- Payment of fees both to the pharmacist (initially $140 but increased in 2006 to $180) and the doctor ($120). This was supported by a research study on the role of professional incentives.

According to Prof Charlie Benrimoj, a key factor in Australia's commitment to pharmaceutical services was the agreement reached between the Australian Guild and the Department of Health and Aging for the provision in the third community pharmacy agreement of $15 million for research in priority areas in community pharmacy service provision. As an example the priority areas for 2003 were:

- Quality use of medicines.

- Continuing care across the health system.

- Evaluation and further development of existing community pharmacy services and programmes.

- Development of new cognitive services.

- Harm reduction for drug dependent people.

- Facilitating change processes within pharmacy practice and the health system to deliver high-quality and cost-effective pharmacy professional services.

- Pharmacy workforce.

The third pharmacy agreement provided a total of $400 million over five years for professional pharmacy services other than dispensing. The fourth pharmacy agreement which commenced on the first of July 2006 increased this provision to $500 million. Three new professional pharmacy services have recently been approved within that funding. They are:

- **Diabetes medication assistance service** which will assess the broader introduction into a greater number of community pharmacies of the diabetes service investigated under the third committee pharmacy agreement research and development programme.

- **Dose Administration aids** which will investigate the funding of medicine adherence devices from community pharmacies to eligible patients to assist in better medication management.

- **Medication profiling** which will investigate the funding of the provision of medication history profiles from community pharmacies to eligible patients to assist in better medication management and understanding.

Australia appears to have gone furthest down the road of investing in pharmacy services with a recent paper lead authored by Charlie Benrimoj observing that "although accounting for 10% of remuneration for community pharmacy, the provision of cognitive pharmaceutical services represents a significant shift in focus to view pharmacy as a service provider[76]. Delivery of CPS through the community pharmacy network provides sustainability for primary health care due to improvement in quality presumably associated with a reduction in health care costs".

However, there is much ground still to cover. A 2004 paper co-authored by Charlie Benrimoj and seven colleagues notes the strong focus on the provision of CPS by community pharmacists but then observes:

> *The benefits of these services have been well documented, yet their uptake appears to be slow. Various strategies have been developed to overcome barriers to the implementation of CPS, with varying degrees of success, and little is known about the sustainability of the practice changes they produce. Furthermore, the strategies developed are often specific to individual programmes or services, and their applicability to other CPS has not been explored. There seems to be a need for a flexible change management model for the implementation and dissemination of a range of CPS, but before it can be developed, a better understanding of the change process is required.*

One issue which is still being addressed in Australia, and is clearly an issue in other jurisdictions, is the clear specification of individual pharmacy services. A 2006 article by a group of Australian pharmacists "evaluating outpatient pharmacy services: a literature review of specialist heart failure services" sought to identify appropriate methods to evaluate a specialist pharmacy service for heart failure patients in an ambulatory care setting. Its key

[76] The contrast is with relying on mark-ups on pharmaceuticals themselves, or standard dispensing fees, to reliance on a specific fee for a defined and quite intensive service.

findings included “six studies were identified evaluating outpatient pharmacy services for heart failure. The pharmacy services provided in the settings were not well defined.” The review concluded “specialist ambulatory care pharmacy services have not been well-defined or evaluated in the literature. Limited randomised controlled data exists.”

Another factor which is clearly still an issue in Australia is the relationship between pharmacists and general practitioners. A recent English paper reviewing international experience with integrating community pharmacy “long-term conditions: integrating community pharmacy’s contribution” (Blenkisopp & Celino op. cit.) had this to say of collaboration between the two professions in Australia:

> *There is also the question of how to achieve collaborative working between community pharmacists and general practices. An Australian study found that GPs were keen to receive information from pharmacist medication review about side effects and contra-indications to prescribed medicines, but not about the reason a medicine was being used, or whether another medicine might be more appropriate.*
>
> *“The majority of GPs consider the pharmacist was intruding on their clinical judgement when asking questions on the reason for use (of a medicine) or appropriateness of therapy” (Smith et al 2000)*
>
> *Evaluations of services in other countries have shown that building collaborative working between community pharmacy and general practice is a challenge. While in the long term community pharmacy services might reduce GP workload, in the short to medium term such services are likely to generate workload. This is particularly the case for medication review type services where pharmacists review the treatment of people with multiple morbidities and multiple medicines.*
>
> *“Pharmacists will become disillusioned if their GPs constantly reject their suggestions and make it difficult to communicate” (Smith et al 2000)*
>
> *For services which have taken as their focus building patients’ involvement in medicines taking the challenge has been to have GPs recognise the value of this approach. To accept this proposition GPs would need to recognise that pharmacists’ involvement brought something new to the treatment of the patient, that this made a contribution to the outcome and that this did not duplicate or conflict with the GP’s work.*

World Health Organisation

2005 saw the publication of *Pharmacy Based Hypertension Management Model: Protocol and Guidelines.* This project was a joint initiative of the World Health Organisation’s Countrywide Integrated Noncommunicable Diseases Intervention Programme and the EuroPharm Forum.

The document was produced to improve hypertension control at the community level and has addressed mainly to community pharmacists. It provides substantive recognition of the role and benefits of pharmacy care in disease state management. In a section dealing with adherence to long-term therapies it observes:

> *Pharmaceutical care is an effective approach to improving adherence to long-term therapies. Advice, information and referral by community*

pharmacists have been demonstrated to significantly improve adherence to antihypertensive therapy and improve blood pressure control.

Pharmacists are also involved in giving information and service to patients with hypertension. It has been shown that after having provided appropriate health education and monitoring services to patients with hypertension, primary care pharmacists managed to get patients to use less expensive antihypertensive medication. Patients with hypertension received pharmaceutical care from community pharmacies comprehending education, assistance to reach compliance in recommendations to the GPs regarding drug therapy. In several studies the intervention group showed a significant decrease in mean blood pressure.

The implications for the current study

There are a number of implications which we can draw from the material surveyed.

The first is the general trend internationally to move to making better use of the professional skills of pharmacists particularly in two areas; monitoring the effective use of medication in the community, especially by identified at risk groups such as the elderly, and disease state monitoring in areas such as asthma, diabetes and hypertension.

The second is both the emphasis on research and evaluation, and a recognition that insufficient investment has yet been made in these areas. From a policy perspective, to a certain extent even jurisdictions such as Australia where there has been quite significant investment in research and evaluation are still to a degree “flying blind”. This seems to be especially the case in terms of change management.

The third is the importance of seeing increased use of pharmacy services not as something which takes place in isolation, but as part of a comprehensive/collaborative approach to health care management within primary health care. Two quotations from the English paper “long-term conditions: integrating community pharmacy’s contribution” make the point:

It is clear that community pharmacy services for people with long-term conditions cannot be developed separately from wider primary care services. Therefore any discussions about mainstreaming [the focus of the paper] need to involve key stakeholders in the two primary care contractual frameworks.

Experience from the UK and other countries shows that general practice will need to be incentivised to work more closely with community pharmacy.

The fourth point is that remuneration matters. Australian experience shows that getting the engagement not just of pharmacists, but of GPs, was critically dependent on paying what the professionals concerned regarded as adequate remuneration for the time involved.

The fifth point is the importance of ensuring that GPs accept the involvement of pharmacists as members of the primary health care team and do not treat pharmacist advice as a threat to their own professional status (note that there is an imbalance in the selection criteria for engagement in cognitive pharmaceutical services as between pharmacists and GPs. Pharmacists will become engaged because they have made the positive decision to work in that area of pharmacy and have undertaken the necessary accreditation. GPs will become engaged because it is their patient who is in need of the service and not because of any positive choice that this is an area in which they wish to specialise).

The sixth point is how to ensure that pharmacist monitoring of the medication profiles of, especially, high risk groups is comprehensive. The New Zealand research cited above suggests that loyalty is much less extensive than commonly believed. The emerging practice of patient registration may be worth considering. If it is considered, it should be taken seriously by ensuring that there are incentives in place which will encourage patients both to register, and to remain with the same pharmacy during the period of registration (an alternative is to include means of ensuring, if a prescription or other medication is obtained from a different pharmacy, that fact is picked up by the pharmacy of registration). Rather than requiring all patients to register, registration might simply be a pre-condition to receiving an enhanced pharmacy service.

The seventh point is the importance of understanding the change management process. Although there appears to be much support for the concept of pharmacy services within New Zealand community pharmacy, the acid test is what happens when attempts are made to recruit pharmacists for new services. Experience in Australia and elsewhere suggests the likelihood of considerable reluctance on the part of many pharmacists.

As a final observation, it is worth considering the apparent different approaches between countries where the purchase of pharmacy services is essentially government funded, in countries where the private sector in some form is a considerable funder.

Although there are no jurisdictions which have readily and easily embraced extensive funding of pharmacy services, the greatest difficulty has been encountered in some of the state funded jurisdictions (England, Canada, and New Zealand). In contrast, jurisdictions where private sector funding has been involved have displayed a greater willingness at least to experiment (Germany, the United States where the Medicare Modernisation Act of 2003 has paved the way for the recognition by Medicare of pharmacists as providers of medication therapy management services).

Although the judgement is speculative, rather than research based, it does seem that there is an important difference between the two types of jurisdiction (although Australia and to a lesser extent Scotland can be seen as exceptions). Within state funded jurisdictions the purchase of pharmacy services is typically undertaken by funders who themselves are operating within fixed a tightly constrained budgets with a focus on short-term cost control. In jurisdictions where the private sector has a strong involvement, typically through insurance-based arrangements entitling people to treatment appropriate to their needs (although often limited by conditions within policy arrangements themselves), the emphasis is much more on risk management, making it rational to invest short-term in measures which may produce longer-term benefits but a positive net present value.

This comment is not a judgement about the superiority or otherwise of public versus private funded health care. Rather, it is a judgement that extending investment in pharmacy services in state funded jurisdictions such as New Zealand will require a particular focus on the constraints and incentives facing funders to ensure that they do not themselves become barriers to an otherwise desirable development.

Appendix 2: Community pharmacists' roles and relationships

Community pharmacy within New Zealand has not been a major focus of research activity. As a consequence, much of what is known or claimed about the performance of New Zealand community pharmacy is substantially anecdotal.

There have been some recent endeavours to fill this gap. Jensen & Kairuz (2006) present the results of a study undertaken of two community pharmacies in Auckland based on processed prescriptions for a one-month period in 2005. The principal conclusion is that "pharmacists play a role in assisting patients to save money on the cost of medicines. Many of the interventions made by community pharmacists in New Zealand are of a bureaucratic nature, but pharmacists can make a significant contribution to improved patient health outcomes."

With the purpose of shedding some additional light on the role which community pharmacists play, how they work with other primary health care professionals, and the impact which they can have on health outcomes, 26 community pharmacies, selected to provide a cross-section of urban, provincial, and rural, were asked to complete a questionnaire covering five separate areas of activity:

- prescription interventions as defined by the pharmacy practice handbook;
- patient record keeping;
- Patient advice within the pharmacy;
- Patient advice/support in the community (that is outside the pharmacy); and
- Support for other service providers;

Respondents were also asked to comment on a possible initiative which had recently been canvassed in the media; a further "rationalisation" of community pharmacy with a focus on replacing smaller and less economic pharmacies with medicine depots.

12 completed responses were received. They came from a mix of rural, provincial and urban so that the coverage broadly reflected the coverage of the total number of pharmacies asked to participate. Non-respondents were followed up by telephone. The predominant reason given for non-completion was workload, with a number of pharmacists describing workloads well in excess of a normal working week.

The questionnaire should not be seen as a substitute for properly designed and administered research. Rather, its purpose was simply to provide an overview of how community pharmacy functions in relation both to the communities it serves, and to other primary health care professionals. It was undertaken with the intention that its findings, as well as shedding additional light on a little understood area, would help make the case for more robust research.

The remainder of the section provides an overview of responses, by area of activity.

Prescription interventions

The primary activity of any pharmacist, in that capacity, is the dispensing of pharmaceuticals. With a small exception, a pharmacy engaged in dispensing does so under a contract with its local DHB, a contract that is in standard form across New Zealand (the exception is those few pharmacies which have declined to sign a contract with their DHB but instead provide services under what is referred to as a section 88 notice; a statutory instrument which allows DHBs to set out the terms under which they will procure services. Generally the terms are the same as would apply under the contract). It is this contract which sets the framework for the relationship of pharmacists to prescribers (primarily general practitioners but also specialists, midwives, opticians, dentists and other health-care providers with authority to prescribe). Pharmacists are remunerated on the basis of a dispensing fee currently set at $5.16, including GST, for each prescription dispensed. Although the fee is formally paid in respect of the dispensing activity, the contract requires pharmacists to undertake a range of associated services which, together with dispensing, are collectively referred to as Base Pharmacy Services. The main part of the definition of Base Pharmacy Services, from the standard contract, follows as it sets the context for much of the intervention work which pharmacists undertake:

Base Pharmacy Services

(a) **Dispensing of Pharmaceuticals**

Dispensing will comply with the Pharmaceutical Schedule, all legislation and regulations applicable to the practice of Pharmacy in New Zealand, the New Zealand Code of Good Manufacturing Practice for Manufacture and Distribution of Therapeutic Goods 1993: Part 3 Compounding and Dispensing (Ministry of Health), the Code of Ethics 2001 and any other professional requirements which may be specified by the Pharmaceutical Society.

The Dispensing process includes:

- ensuring the completeness of information on the Prescription Form, e.g. Service User details, legibility and legal requirements;
- verification of the appropriateness of the prescribed Pharmaceutical using any relevant available information, e.g. suitability of the prescribed medicine, dosage and possible interactions; checking acquired medication history for consistency of treatment, possible interactions and evidence of non-compliance or misuse.

(b) **Provision of advice and counselling**

You agree to provide essential professional advice and counselling and to take all reasonable steps to ensure that Service Users have sufficient knowledge to enable optimal therapy. Provision of essential advice and counselling includes:

- directions for the safe and effective use of the Pharmaceutical;
- the expected outcomes of therapy;
- what to do if side-effects occur;
- storage requirements of the Pharmaceutical;
- disposal of unused Pharmaceuticals.

In addition to sub-paragraphs (i) to (v) above, you will make available to any person, written information about:

- the needle syringe exchange scheme, whether or not you participate in this scheme, and a list of providers of the needle syringe exchange scheme in your local area;

- the safe disposal of used syringes, needles and other skin piercing devices, including a list of places where a person may take used syringes, needles and other skin piercing devices for safe disposal.

(c) **Maintaining Service User Records**

You agree to maintain Service Users' Records and other required information in accordance with statutory requirements. You further agree to maintain a Service User medication profile, being an individual Service User profile that lists, to the best of your knowledge:

- the prescribed Pharmaceuticals that the Service User is currently receiving; and

- other relevant information, such as previous Pharmaceuticals taken, reactions to any Pharmaceuticals and other medicines of which you are aware the Service User is currently taking and which may influence the Service User's Pharmaceutical management at that time.

(d) **Reporting**

You agree to report any significant findings to the Prescriber. As a guide this may include, among other things, notifying the Prescriber of any problems which are apparent with a particular Prescription, if you have reasonable grounds to suspect that a Service User may be abusing the prescribed Pharmaceutical or that it could be detrimental to the Service User's health.

The definition is complemented by the Pharmacy Practice Handbook which sets out six different categories of pharmacist interventions:

Grade 1: bureaucratic - non-compliance with subsidy or legislative requirements.

Grade 2: saved patient money by generic substitution or similar intervention.

Grade 3: clarified or interpreted prescriber's instructions.

Grade 4: optimised drug therapy such as by improving compliance or patient lifestyle.

Grade 5: prevented a moderate to serious threat to health.

Grade 6: prevented a potentially life-threatening incident.

Pharmacists were asked to select a recent week and state how many interventions they handled in that week divided into two sets, grade 1-3 and grade 4-6. In respect of each set of interventions, they were asked to describe how they were handled, how contact with the prescriber was managed, how effective that was in terms of a better working relationship for the patient, and the nature of the pharmacist/prescriber relationship.

All pharmacists reported a significant number of interventions in the first group, grade 1-3. The interventions ranged from contacting the prescriber to complete missing details in the script, to substituting an alternative (primarily to save the patient money), to substituting

drugs which were no longer available, to clarifying the intended dosage. The responses identify particular problems with patients who had been discharged from hospital - lack of detail in hospital scripts and/or problems arising from hospital discharge medications being different from pre-admission medications, and lack of coordination between the hospital and GP.

Not all interventions required contact with the prescriber. For example, if the pharmacist has an agreement with the prescriber enabling substitution, that will take place without immediate reference back to the prescriber.

Where reference back to the prescriber was required, overwhelmingly this was by phone. One of the factors being looked for from the responses was the quality of the relationship between the pharmacist and the prescriber.

There is research evidence that general practitioners, whilst welcoming advice on side-effects and contra-indications, may be resistant to questions or advice from pharmacists which might seem to challenge their professional competency. As an example, an Australian study of experience within the Nursing Home Medicines Review programme found that "the majority of GPs considered the pharmacist was intruding on their clinical judgement when asking questions on the reason for use (of a medicine) or appropriateness of therapy" [77]

The majority of responses in respect of grade 1-3 interventions reported generally or always positive relationships, with general practitioners both cooperative and appreciative of the pharmacist intervention. A minority reported a more variable quality of relationships with doctors sometimes irritated to be contacted, somewhat offhand, arrogant or formal in the dealings with the pharmacist.

Those reporting generally or always positive relationships were all rural or provincial pharmacies, in some but not all cases the only pharmacy in the area. Positive relationships were clearly a function of the necessarily close-knit nature of the local health care environment, coupled with the fact that the relationships between the pharmacists and the general practitioners were often multi-faceted, extending beyond the professional to the personal and social.

The minority reporting somewhat less satisfactory relationships were all in urban environments where there were both multiple pharmacies and multiple practices.

A somewhat different picture emerged for grade 4-6 interventions, consistent brought with the potentially greater risk for harm to the patient if the intervention had not taken place. The interventions varied quite widely. Dealing with them drew on a combination of the pharmacist's own knowledge of the patient's medication history (typically from the pharmacy records), understanding of contra-indications, empathy with patient need and understanding of the appropriate dosages (amount, timing). Following are some examples from the questionnaires:

- a dentist had prescribed Augmentin for a patient. The pharmacist's records showed that several years ago the patient had recorded a severe allergic reaction to Synermox (a genetic brand of Augmentin). The dentist had questioned the patient about previous reactions, but neither the dentist nor the patient realised that Augmentin and Synermox were essentially one and the same.

[77] Smith, M. et al (2001), Attitudes to Nursing Home Medication Reviews by Pharmacists. Australian Pharmacist volume 20 number 3: 191-5.

- prescriber had advised a patient to commence using St John's wort. The patient takes digoxin and warfarin which are contraindicated. Another pharmacist queried brand and strength of warfarin. Patient required Coumadin not Marevan. Clarification with the prescriber avoided potentially serious harm for the patient. In a third pharmacy, a patient brought in a script for both aspirin and warfarin. She had previously been taking aspirin; the warfarin prescription was new. The prescriber had not realised the failure to stop aspirin (the combination presents a serious risk of bleeding).

- an elderly patient on multiple medications and using a blister pack was still not coping. The prescriber agreed to the pharmacist organising medication oversight. The patient is now monitored daily.

- the most common example of a grade 4-6 intervention is in response to an error in the amount or timing of medication dosage. As examples, one pharmacy reported a prescriber writing a methotrexate script 'for daily dosing', a potentially fatal dosage. On intervention it was changed to weekly. Another reported several examples including a starting dose of insulin prescribed 70 units daily rather than seven, Minirin spray at 10 times the correct dosage (putting the decimal point in the wrong place appears to be a relatively common error), and a case in which the selected name in the surgery computer history was wrong resulting in prescribing the wrong person's medication for the patient.

- a script for Glipazide written as Gliclazide and the dose seriously astray. The pharmacist assessed the risk as potentially fatal.

All of these interventions averted potentially serious consequences for the patient. Some, apart from the seriousness, appeared to be relatively routine - for example picking up the fact that the decimal point had been put in the wrong place, with the prescribed dosage 10 times greater or lesser than intended, confusing daily and weekly or accidentally selecting the wrong drug amongst two with similar names.

Other interventions relied heavily on the pharmacist's specialist knowledge of contra-indications, or the patient's medication history.

Whatever the nature of the intervention, the picture which emerges is of a critically important quality assurance process role standing between the prescriber and the patient.

General practitioner reactions, to grade 4-6 interventions, as reported in the questionnaires were generally very positive. Those pharmacies which had reported neutral or negative responses for grade 1-3 interventions, were more positive regarding prescriber reaction to grade 4-6 interventions. It is a reasonable inference, (which a number of pharmacists actually drew in their responses) that general practitioners, and other prescribers, were very relieved that a potentially serious error was picked up before any harm could come to the patient.

The inference which can be drawn from the different quality of the relationships between pharmacists and general practitioners, especially in respect of grade 1-3 inventions, is that the quality of the relationship is strongly influenced by situational factors, with the relatively close-knit nature of smaller communities (and the relative lack of choice of primary health care providers) creating a strong bias towards collaborative relationships.

From the perspective of the effective management of primary health care in the interests of the patient, this is a useful but not optimal situation. The majority of patients live in urban areas where there are multiple practices and multiple pharmacies so that situational factors are likely to play a much less significant role. This raises the question of whether and how

pharmacists and general practitioners develop, as part of their professional training and ethos, the skills and commitment to working collaboratively.

There is at least an inference from the questionnaire responses that the interests of patients are not being as well served as they should be because of the way that the relationships between at least some pharmacists and some general practitioners and other prescribers actually work. Addressing this is not a matter of trying to find fault. Rather it is a matter of:

- undertaking further and in-depth research to determine the nature and quality of the working relationship between general practitioners, other prescribers, and community pharmacists; and

- based on that research, determining what measures may be needed to improve the quality of interaction and reinforce what needs to be a team-based approach.

Patient record keeping

Patient record keeping is one of the obligations which pharmacists have as part of providing base pharmacy services. All pharmacies who responded to the questionnaire record details of prescriptions in the dispensary database. Recording of other medications varies. Of the 11 pharmacies who answered the question in respect of the patient record keeping, seven also kept records of pharmacist only medicines in the same database. The remaining four recorded pharmacist only medicine details in a manual database. One pharmacy also recorded pharmacy only medications in the same database and another recorded details of pharmacy only medicines which could present a problem for the patient in a book kept at the counter.

One recorded allergies, sensitivities and previous interventions. Another kept a full patient history together with “useful notes”. Patient records were used to answer patient and doctor queries, and to check medication on admission to a discharge from hospital (especially to ensure that the regular prescriber was aware of any changes).

The clear impression from the some of the responses is that keeping patient records can compete with other demands on the pharmacist’s time. It was clear that at least some respondents recognized that it would be beneficial to record more detail than is actually done but the time involved was seen as excluding this.

The presumed intent of requiring pharmacists to keep patient records is to ensure that there is a comprehensive record of the different medications which a patient is currently using, or has previously used, and any allergies, adverse reactions or other factors which should be taken into account when new medications are dispensed. The variable approach, with some pharmacists recording only the minimum details required of them, and others seeking to maintain a more comprehensive database, does mean that patient records will be less satisfactory than could be the case.

Another factor which impacts on the usefulness of patient records is the extent to which patients may use more than one pharmacy. Section……. below discusses a New Zealand study looking at patient loyalty to community pharmacies. It suggests that a significant proportion of patients use more than one pharmacy so that even a comprehensive record will not hold all of information regarding that patient’s medication history.

One possible response, which is emerging internationally and is discussed in more detail elsewhere in this report, is to require patients to register with a single pharmacy. Another may be the initiative currently under consideration by the three Auckland DHBs of developing a comprehensive database for medications dispensed within their districts, and accessed by

patient NHI so that, wherever medication is dispensed within the district of those three boards, there will be a single record and patient history.

Another issue which clearly needs consideration is the purpose of the patient record and, associated with that, the time and cost involved in maintaining a suitable record. If it is simply to track prescribed medications, then maintaining a record is relatively straightforward and the time involved is subsumed within the dispensing process. If it is to track other medications (pharmacist and pharmacy only) and, perhaps, herbal remedies at least to the extent that they present an interaction risk (as with St John's Wort and warfarin), and patient characteristics such as allergies, then consideration should be given both to developing a standard "good practice" for record keeping and to the time and cost involved.

Patient advice within the pharmacy

In order to understand how much time pharmacists spent providing advice to individual patients, the sample was asked provide numbers for the amount of time spent over a typical week with individual patients giving them advice on the proper use of pharmaceuticals, providing separate numbers for prescription and non-prescription pharmaceuticals. Six usable responses were received for prescription pharmaceuticals and seven for non-prescription pharmaceuticals. The following table shows the distribution of time spent:

Percentage of patients by time spent

Time spent in minutes	Prescription pharmaceuticals	Non-prescription pharmaceuticals
>1	37%	25%
1-2	28%	29%
2-3	15%	15%
3-4	7%	13%
4-5	6%	8%
5-10	4%	7.5%
10-15	2%	1.5%
15-20	1%	1%

Of particular interest is the percentage of patients with whom pharmacists spent five or more minutes of time. To get an understanding of why this amount of time was being spent with individual patients, pharmacists were asked to provide examples for both prescription and non-prescription pharmaceuticals explaining the nature of the interaction with the patient, including why the patient needed this amount of time and the benefits the pharmacist believed the patient gained from the advice. A sample of examples from the responses follows:

Prescription pharmaceuticals

- the prescriber for a patient on long-term medication prescribed stronger tablets and offset this by reducing the number the patient was required to take so as to maintain the same dosage level. The pharmacist spent time working with the patient explaining the nature

of the change, and that following the new instructions meant getting the same level of treatment thus avoiding the risk of the patient overdosing by taking the same number of tablets;

- a patients' inhaler therapy was changed. The pharmacist checked the inhaler technique with the patient and recommended and explained changes to improve the therapy and increase the patient's understanding resulting in improved self-management of the patient's condition;

- a newly diagnosed diabetic needed help with testing procedures. The pharmacist worked with the patient to increase their understanding and thus their self-management of the condition;

- new Performa test strips were giving higher readings, different to the expected discrepancy. This required testing of strips and of the machine including several phone calls and a referral to the doctor. The patient who had been concerned and upset left feeling more confident with the new testing regime;

- the patient had been prescribed a pharmaceutical to which the patient was allergic (sulphur). The pharmacist undertook the literature research on the composition of the drug and to explore other options. A non-allergic pharmaceutical was identified;

- a baby was prescribed 1 g of paracetamol. The pharmacist intervention resulted in a change to the appropriate dose. Time was spent with the mother discussing dose levels so that she could understand what was involved;

- a patient had been prescribed a drug for hypertension treatment. The patient wanted to know what the options were. In a lengthy consultation the pharmacist reviewed options both for treating and monitoring, and discussed with the patient which options would best suit the patient's lifestyle.

Non-prescription pharmaceuticals: patient consultation

Many of the examples given in response to the question about patient advice on non-prescription pharmaceuticals show the pharmacist acting very much as a health adviser on a wide range of ailments. There is an inference that people have preferred to come to the pharmacist, rather than go to the doctor, as a "first port of call" to get advice on possible treatments. The following examples will illustrate this:

- the patient presented with a sore eye. She was advised to consult a doctor but took some convincing. She finally did so and returned with a prescription. She had been told by the doctor that she had a severe infection of her eyelid;

- the patient presented requesting a first-aid dressing for a post-operation wound. The pharmacist assessed the wound, obtained the history of the wound from the patient, selected an appropriate product and advised the patient on dressing use and ongoing wound care (other pharmacists gave similar examples of people seeking treatment for wounds such as cuts or burns);

- the patient wanted to choose cold remedies for the whole family. The pharmacist spent time getting profiles of family members, determining symptoms, and selecting the most cost-effective products.

- the patient was an athlete wanting nutrition advice. This involved a lengthy discussion on current nutrition, exercise levels and nutrition needs;

- the patient was seeking weight loss treatment (Xenical - one of several examples). The pharmacist measured and weighed the patient so that the Body Mass Index could be calculated, explained to the patient how Xenical works and recorded patient details;

- the parent was seeking treatment for a child's head lice. This involved a discussion of head lice products. The combination of a complex range of products and specific patient requirements necessitated a lengthy consultation;

- the patient had been on HRT treatment for two years, taking oestrogen. After consultation the pharmacist identified as suitable alternative product;

- the pharmacist (in a rural, one doctor town) reports that he frequently offers a generous amount of time sorting out conditions and medications. He will make appointments for long consultations at 5 PM or 5:30 PM and if necessary may stay on for as much as an hour. Examples of the conditions he deals with in this way include skin conditions, pregnancy and breast-feeding advice, treatment of head lice, and backache.

Comment

It is important to acknowledge that the material in this section of this report should be seen as indicative rather than definitive of the range and nature of activities which community pharmacists undertake in association with the dispensing/sale of prescription and non-prescription pharmaceuticals. However what it does do is indicate the wide range of activities which community pharmacists undertake both in supporting the effective use of medication (extensive advice in a number of cases on the use of prescription pharmaceuticals) and in acting as a "first port of call" in dealing with a wide variety of minor and occasionally not so minor ailments. Typically these would otherwise require the involvement of a general practitioner (with the further alternative of the ailment not being treated, if going to the doctor were seen as a barrier, potentially resulting in a more serious and expensive to treat condition).

Arguably, pharmacists indirectly receive some remuneration for the extensive advisory activity they undertake in relation to prescription pharmaceuticals, as this can be seen as incorporated within the base pharmacy service. Any pharmacist, though, would argue that they go well beyond what could reasonably be expected in return for the amount of the dispensing fee - the motivation is often that of acting as a community professional, rather than the monetary reward (as one pharmacist commented "in the early days, I was brought up to put people before profit - and it largely has stuck").

Much of the activity pharmacists undertake as "first port of call" is clearly more in the nature of a service that is undertaken because they are there, rather than a profit earning activity in its own right. Obviously, it can only be undertaken because they are in the community pharmacy business (profession) so, in one sense, it can be seen as indirectly supported by, and supportive of, the income earning activities of the pharmacy (including the sale of any non-prescription pharmaceuticals or other items as a consequence of the consultation).

There is at least a presumption that this type of activity on the part of community pharmacy is both an essential part of the primary health care system, and an important means of relieving the pressure on other parts of the system, including general practice. There appears to be no New Zealand-based research identifying the benefits both to patients themselves, and to the taxpayer, of this role of community pharmacy. This is an important gap which should be filled, if only in order to minimise the risk that a lack of awareness of the extent and importance of this role could result in changes being made to the funding of community pharmacy which might make it financially more difficult for pharmacists to continue this aspect of their work.

Indeed, there is a case that research is required not just to minimise the risk of damaging an important service, but as one contribution to optimising the use of resources within the primary health care sector through enhancing the role of community pharmacy.

Patient advice/support in the community

Pharmacists were asked to select a typical month and report on ways in which they had supported patients in the community (that is interactions with patients outside the pharmacy). The majority of respondents reported a range of activities including home visits, delivery medications, monitoring medication use, and operating an after-hours service.

Typical examples include:

- we spend a lot of time doing this [supporting patients in the community] for especially elderly and immobile patients. We deliver daily, organise blister packs, liaise with their doctors etc. We hold weekly consultations for weight management;

- in a week we would deliver 10-15 non-rest home deliveries. These often involve a phone conversation with the pharmacist and appropriate over-the-counter medication prescribed or advice on how to take prescribed medication. The pharmacy tends to be used as a call centre in many situations for advice and side-effects, illness, interactions etc;

- we have about 100 community patients whose medication is blister packed and monitored. Most of these packs are collected. 10 to 15 deliveries to private homes are done each week. Some blister packs, some ordinary prescriptions, some nutritional products. Helps people remain independent in their own homes;

- we do not do home visits as this is a sole charge pharmacy so I am not able to leave the building during working hours. We do provide a limited outside hours emergency service for weekends and holidays unfunded;

- of our 35 blister packs weekly, about 10 are delivered personally at the moment by my wife or myself or the district nurse. We monitor use and have often advised the doctor when patients did not seem to be coping - saving hospitalisation;

- I have my Wednesday night round in which I have delivered up to 12 trays weekly. Several of these elderly people have been supported in their homes by the pharmacy. For example I found an elderly diabetic had totally unstable sugar readings and the nurse only came at 11 a.m., three days a week. As an extension to deliveries I did four blood readings a day for two weeks without charge - until as a result she was stabilised by her doctor;

- once a week a technician delivers medico packs to 60 patients and this is often an opportunity to voice concerns and help them in their homes;

- occasional delivery of prescriptions to patients homes. Approximately 3-4 times per month. I am “on call” 24/7. I get phone calls most weekends and 50:50 am able to send a patient to see a doctor. I would probably have to attend the pharmacy twice a month outside work hours pursuant to a specific out of hours request;

- deliver medications weekly and use this opportunity to talk and observe how patient is at home. Total of six deliveries per week.

- during one month six home visits to blister pack patients. Four visits were to set up and educate housebound patients and two visits to sort out medication issues of other housebound patients.

Comment

The predominant activity identified by respondents was supporting elderly and immobile patients in their homes, delivering medication, often in blister pack form, and monitoring the patient's use of medication.

This parallels an Auckland example used by the Guild in its submission on the national medicine strategy. The Auckland pharmacy had been the site of an intensive study of pharmaceutical interventions and, as the submission reported, "has been involved in another initiative which highlights both the potential gains from pharmacist interventions, and the budgetary issues which stand in the way of their widespread adoption. Its principal undertakes weekly dispensing for a number of potential rest home patients who are still living in their own homes. He makes up a blister pack for seven days. The blister pack is delivered and exchanged for the previous week's pack which should be empty. If it is not, that is a signal of a need to do something."

The Auckland pharmacist's motivation had been to support people living in their own home thus avoiding the need to be admitted to a rest home earlier than necessary. The benefits included a better quality of life for the patient, and significant savings to the state which would otherwise have been paying rest home subsidy for most of the patients concerned.

The same pattern comes through in the responses in this study. Essentially what they're doing is voluntarily monitoring medication usage so that people are able to remain living in their own homes. The potential savings to the state through avoidance of rest home care (or simply delaying the need for admission) will be substantial.

It is a small example of the type of enhanced pharmacy services which are now increasingly seen as an important part of the contribution which community pharmacy can make both to improving health outcomes, and to the more cost-effective use of the human and other resources within the health sector.

Support for other service providers

To round out the overview of the role of community pharmacy, respondents were asked to outline the nature and purpose of the support which they provide for other community-based health care providers.

A common pattern emerged in all of the responses. Each pharmacy was involved to a greater or lesser degree in providing advice and support for local rest homes, and training for rest home staff. Most were also involved with a range of other local organisations including sporting groups, mental health workers and with occasional talks/presentations to a wide range of groups on pharmacy related matters.

Virtually all of the pharmacist who responded appeared to accept that they had an inherent obligation as part of the community to make their professional knowledge available. One expressed it in the following terms:

We are part of our community. We foster support and advise our local doctors, podiatrists, IHC homes, schools, sports clubs, marae groups like COPD, people living in the community with mental health issues - most of this is done for nothing. We do it because we care.

Community pharmacy restructuring: an option

Not long before the questionnaire was being drafted the possibility was floated of further restructuring of community pharmacy to "rationalise" the number of community pharmacies and replace them with medicines depots. The opportunity was taken to test pharmacists' views on what this could mean for health outcomes in their area. The full text of what was put to pharmacists was:

> *Recently, the media discussed one possible suggestion for restructuring the community pharmacy sector. The suggestion was that New Zealand needed fewer but larger pharmacies. The inevitable result would be the withdrawal of service from a number of localities which currently have their own pharmacy. Most of these would be in rural and provincial New Zealand (but some might be in urban centres). From your knowledge of your own patient base, and the way in which primary health care services work in your area, would you please comment on the likely impact on health outcomes in your area if the service provided by your pharmacy were replaced by a medicine depot. If you can, please give specific examples.*

The responses fell into two categories; in the first category were pharmacists who had no personal experience of working with depots, but had views on what might happen. The second category (two pharmacies) currently operate depots and so have practical knowledge of what is involved.

No personal experience of medicines depots

This group of pharmacists based their responses on what they expected to happen, drawing on their knowledge of the current interactions which patients have with various health care providers. Their concerns about the shift to a depot approach included:

- patients would lose the opportunity they currently have to call into the pharmacy for informal advice and consultations of the type reported above. There would be an increased risk of minor conditions becoming serious health problems before the patient sought treatment from a general practitioner;

- many, especially elderly, patients rely on their personal contact with the pharmacy for health advice. This is very dependent on a relationship of trust which would be lost through a depot arrangement to the detriment of the patients concerned;

- it would become more difficult to recruit general practitioners if there were no pharmacy in the area;

- urgent dispensing would become more difficult as would the delivery of programmes such as methadone and needle exchange;

- it would further undermine the viability of, especially, small rural communities as people shifted to the closer to the health services they need.

Personal experience of medicines depots

One of the two pharmacies with depot experience provided relatively brief comment as follows:

- we operate five depots already due to pharmacy closures. This has a negative impact as clients have less face-to-face contact with the pharmacist and consultations etc are all phone-based. Goods/medicines are still efficiently distributed but the extra advice and counselling is sometimes lacking.

The other pharmacist provided a more comprehensive response. Amongst his comments were:

- rural towns suffer a blow when their pharmacy closes. A depot is a poor substitute. No pharmacist - no immediate supply of medicines - inevitable downgrading of retail stock - loss of a professional inhabitant - hastens a decline of local shopping as more people travel to the city to shop. Doctor loses a professional colleague. Surgery tends to decline. Doctor tends to feel less secure. Value of pharmacy building, surgery and even houses tends to decline. Old people tend to retire elsewhere. Town goes down in prestige as a centre. Summary: it starts mini tail dive which in my experience people still resent;

- patient care suffers. Less services. Even district nurse may live outside the town. The best trained depot staff are not a substitute for a trained pharmacist. Can't handle inter-actions and therapy problems. Pharmacist home visits are more difficult. Lose speakers on health, ambulance trainers, committee members with health knowledge;

- remote areas often have dangerous occupations that after an accident have a long recovery time. Continual reliance on the depot is most unsatisfactory for these patients who are caught out in pain.

Comment

The general burden of the comments, both from those with experience of depots and those without, is that the shift from a pharmacy to a depot both significantly reduces the quality of health care, and has collateral impacts on the viability of the local community.

Again, the qualification must be made that these views could to a degree be seen as self-interested. They are, however, comments from a range of experienced health professionals with a genuine concern for the quality of health care within the areas they serve. At the very least, they strongly suggest that any change in the delivery of pharmacy services should be very carefully evaluated, in advance, in order to determine likely impacts, what the overall costs and benefits might be (saving of a few dispensing fees, at the cost of increased hospitalisation, for example, might not be a sound investment).

Finally, any such change should also be considered in the light of the obligations on DHBs. As an example, section 22 of the New Zealand Public Health and Disability 2000 sets out the objectives of DHBs. They include:

- to promote effective care or support for those in need of personal health services and disability support services;

- to exhibit a sense of social responsibility by having regard to the interests of the people to whom it provides, or for whom it arranges the provision of common services;

- to foster community participation in health improvement, and in planning for the provision of services and for significant changes to the provision of services;

Conclusion

Although the questionnaire responses on which the section of this report is based cannot be seen as themselves constituting rigorous and definitive research, they do provide extremely useful information on the role of community pharmacy, and its potential to contribute both to better health outcomes and more effective management of the primary health care sector. At least the following influences can be drawn from the responses.

The scope of activity undertaken by community pharmacists is clearly much wider than simply “popping pills in bottles” or, for that matter, routine dispensing with a relatively minimal advisory role in assisting patients with medication.

Pharmacists are a critical element in quality assurance in the prescribing and dispensing of medication, frequently intervening to correct minor errors or omissions in prescriptions and less frequently, but more significantly, applying their knowledge to prevent serious or life threatening outcomes from inappropriate medication.

They also play an important front-line role as a first point of contact for a wide range of ailments, and for treatment of minor trauma (cuts, burns etc). As well, they support especially elderly patients in medication management thus enabling them to remain living in their own homes.

Much of this activity is “beneath the radar screen” as the full scope of community pharmacy’s potential to improve health outcomes, reduce the cost to the state of the health care system, and enable better management of primary health care resources generally has been the subject of only minimal research. There is a clear and immediate need for significant investment in research and evaluation as a basis for more informed decision-making on how community pharmacy can best contribute both to the optimal use of medicines, and to the more effective management of primary health care needs.

Appendix 3: New Zealand pharmacy student aspirations

New Zealand has two schools of pharmacy which provide graduate and postgraduate training for students contemplating a career in pharmacy, the National School of Pharmacy at the University of Otago and the School of Pharmacy at the University of Auckland. Graduates from the two schools represent the principal source of additions to the New Zealand pharmacist workforce. Accordingly, any consideration of the future development of community pharmacy should include some understanding of the preferences and likely intentions of graduates from the two schools.

Undergraduate entry into the Bachelor of Pharmacy degree is handled differently within the two institutions. Auckland emphasises recruitment of students as school leavers, believing that in doing so they will recruit students who have made a positive decision that they wish to take up a career in pharmacy (it does also admit students who already have some tertiary experience).

At Otago, most students are admitted at the end of a common health sciences first year. They may apply for entry to one or all of four health science programmes - dentistry, medicine, pharmacy and physiotherapy. Some may be accepted by their programme of first choice. Others may not and, if they wish to continue studying in the health sciences area, may need to accept a place on a programme that "might lead them to a career about which they currently know very little and for which they may have little enthusiasm. This is the situation with a number of those who enter the School of pharmacy." (Extract from an unpublished paper, *A Comparison of Student Attitudes and Intentions at the Start and End of their BPharm Degree Programme*, Capstick, S. and Beresford, R.).

A senior academic staff member from each school was approached with a request for information on what they knew about the preferences and likely intentions of their graduates. Both welcomed the opportunity to contribute from their knowledge and put some considerable effort into assembling information and explaining its significance.

Auckland

Auckland places considerable emphasis on the way in which recruits students. First, it only accepts students who are New Zealand residents (with a very minor exception under a programme for Maori and Pacific students under which a small number of places are reserved for priority admission for students who have satisfied the academic criteria for admission). Secondly, as already noted it places a strong emphasis on recruiting students who are school leavers.

In a typical year, the number of applicants who meet the school's academic entry requirements will be approximately 3 times the number of places available. Selection includes a detailed interview process designed to provide a good assessment of the student's suitability for a career in pharmacy. As an example, one of the five areas covered during the interview is communication style, recognizing the importance this has for a career which involves dealing face to face with a large number of people, listening to them described their concerns/conditions, and explaining often relatively complicated material to them.

As part of the admission process, the school collects quite detailed information on characteristics of the applicant cohort including gender mix, self-declared ethnicity (remembering that all of these students are New Zealand residents) and place of origin of applicants. 520 applied at the end of 2005 to commence study in 2006 (a little under half of

these did not satisfy the academic requirements for entry). Of the 520, two thirds were female, 62% identified as Chinese, Indian or other Asian, and only 14% as New Zealand European/European/Pakeha (18% identified as "other" or "no response" which may have included students who did not wish to identify their ethnic origin).

Of the 266 students who met the academic requirements for entry, 226 came from Auckland, 33 from across the rest of the North Island, and 7 from the South island.

These proportions carried through into the actual intake. To summarise, of the students commencing the bachelor of pharmacy degree at Auckland, virtually all are New Zealand residents, the majority are female (something which has been the case with pharmacy students for at least 20 years), identify as of one or other Asian ethnicity and are overwhelmingly of Auckland origin (and primarily from a relatively small group of elite state and private schools).

The school does not yet have any formal process for determining student intentions although the faculty of medical and health sciences of which it is part has recently introduced a "tracking" programme designed to track students through their professional careers. The faculty hopes ultimately to be able to use the information it gains as a feedback mechanism for determining the relationship between courses, course content and career choices.

Informal information gleaned from discussions with students suggests that most wish to get some overseas experience but contemplate returning to New Zealand (typically, their immediate families are in New Zealand so that there is a strong family tie). Their preference may be for working in more of a corporate than a sole proprietor or partnership environment reflecting a combination of factors including their awareness of the changing structure of community pharmacy and their perception of the current pressures on pharmacist owners gleaned when on placement in pharmacies. Another important factor is that the students are overwhelmingly urban in origin and appear urban in their orientation. In support of this, of the 82 Auckland graduates from 2005 who took up internships, 63 were placed in the Auckland region.

This latter factor may be of particular concern. Whilst in part it reflects the geographical distribution of pharmacies prepared to take on interns, it also reflects an attachment to an urban environment. This suggests that rural and provincial pharmacies may be less appealing, something which should both be further explored, and, if it turns out to be the case, addressed through measures designed to encourage young pharmacists to consider rural and provincial pharmacies as a career option.

Otago

The National School of Pharmacy has no equivalent of the Auckland policy of careful selection assisted by a comprehensive interview process with the purpose of selecting students who, as far as possible, are genuinely committed to a career in pharmacy. Instead, as already noted, pharmacy may not be the student's first choice, but simply the offer the student received at the end of their health sciences year.

The paper already cited reports research undertaken to compare student attitudes at the beginning and end of their pharmacy course. Students were surveyed at the start of their first lecture in February 2004. The same cohort was surveyed at the start of the final lecture during their penultimate week of lectures in October 2006. The same anonymous questionnaire was used on both occasions, but with the addition of several extra questions in 2006. Students were given 15 minutes to complete the survey and asked to do so in silence and without reference to their neighbours.

Most questions were multiple choice requiring respondents to rate statements on a one to five scale. Overall, the study found that students' attitudes became more positive. A strong interest in ownership was seen with the report noting "the level of entrepreneurial intent started high and remained high, a finding aligned with other research that has indicated pharmacy ownership to be the 'top ambition' for students."

The study's discussion of findings places some weight on students' perceptions of the role of community pharmacy, with an increasing weight on helping people as can be seen from the following extract:

> *This study does not support the notion that empathetic or altruistic attitudes decline over pharmacy students' course of study. The degree to which students' motivations to practise pharmacy were related to "a desire to care for/ help people" remained virtually unchanged when comparing ratings given at the start and end of their BPharm course; furthermore this motivation persisted as students' self-reported primary motivation to work as health professionals. Indeed, the difference between the importance placed on altruistic and financial motivations doubled between 2004 and 2006. In addition, aspects of practice relating to direct patient care, such as counselling people, "interviewing people about their illness" and "listening to patients" remained at a similar level from the beginning to the end of their studies. The character of numerous responses given to the questionnaire's open-ended questions reinforced these results with students towards the end of their degree indicating a range of beliefs that can be summarised in the statement by one individual that "pharmacy is… about helping people".*

Elsewhere the discussion comments on the combination of the proportion of students wanting to become a pharmacist, and the career intentions associated with that:

> *That the proportion of students stating they 'want to become a pharmacist' increased significantly over the course of study is in keeping with findings from the UK which have portrayed pharmacy students as developing strong levels of career commitment (Seston et al., 2006). With high proportions of students intending to take career breaks, many of these to start a family, it is likely that part-time and interrupted career pathways will continue to emerge as a factor in professional practice in New Zealand. In New Zealand, as elsewhere, females now make up the majority of students and graduates (Pharmacy Council of New Zealand, 2005) and thus emerging preferences for part-time work patterns may present the profession with supply problems in future (Hassell, 2006a,b). Whether pharmacy's flexible work arrangements will be able to accommodate the growing number of individuals aspiring to work part-time and intermittently remains to be seen.*

Otago require students in the final year of their bachelor's course to undertake a compulsory one week externship in a rural community pharmacy. The purpose is to raise the students' awareness of rural practice, particularly those students with an urban origin.

An evaluation of the 2006 placements concluded:

> *This targeted, experiential intervention affected perceptions of rural practice in a positive direction among urban-origin students by raising awareness and challenging their preconceptions of rural pharmacy practice. Further research is required to see whether this will affect recruitment and to investigate what appears to be a particular effect on female students (i.e., a*

marked increase in the willingness of female students to consider working in rural pharmacy).

Comment

The Auckland and Otago material focus on different aspects of students' preferences and intentions. The Auckland material looks primarily at the nature of the students being recruited into pharmacy study. It supports an inference that the graduates may be disproportionately focused on working in an urban environment, and although in community pharmacy, in a more corporate form, raising some questions about the future of the present structure of community pharmacy. There is a separate concern about whether Auckland graduates will meet the needs of rural and provincial pharmacies.

The Otago material shows a very positive attitude towards community pharmacy but based upon a view of the role of the pharmacist which may be somewhat idealised. The emphasis that "pharmacy is … about helping people" is consistent with an interest in the enhanced services role starting to emerge within community pharmacy. This raises the question of what would happen to job satisfaction, and commitment to remaining within community pharmacy, if the expected shift to more of an emphasis on the professional role of pharmacy does not take place. Separately, the Otago material also suggests the need to think about how the pharmacy workforce is managed over time to allow for an increased preference for career breaks/changes.

The Otago findings based on the evaluation of the compulsory rural externship suggest that one means of increasing the probability of graduates to consider working in a rural environment is to give them some experience during their training. Another factor, emphasised in discussion with the Auckland academic, may be encouraging students at secondary schools particularly in rural and provincial areas to consider pharmacy as a career. As noted, the Auckland student body is dominated by students from the Auckland area. Otago students are not so overwhelmingly from Dunedin, but the significant majority nonetheless come from an urban environment.

In summary, both the schools of pharmacy, but in different ways, report positive attitudes towards pharmacy, and especially community pharmacy, as a career. Auckland does so as the result of a quite comprehensive selection process. The Otago evidence comes from a longitudinal study of student intentions.

Both highlight risks which the pharmacy profession itself and government (the DHBs) should all be concerned about. The first is the potentially changing match between student preferences, and the workforce needs of community pharmacy. The second is the expressed student interest in the professional side of community pharmacy. This suggests that a failure to build on the current momentum for increased reliance on the professional skills of pharmacists could risk turning significant numbers of new entrants away from the profession. Again, this is clearly a matter which requires further research from a workforce perspective as well as into the costs and benefits of enhanced pharmacy services themselves.

Appendix 4: Legal Framework for Community Pharmacy Services

Introduction

This paper provides a comprehensive overview of the legal framework governing the community pharmacy services industry in New Zealand.

This review is being carried out as a result of concerns that the District Health Boards ("**DHBs**") may be moving away from fee-for-service funding towards tendering for pharmacy services in the future.

The legal framework is not straight-forward as it is sourced from the following numerous statutory, policy and contractual documents:

statutory:[78]

a. the New Zealand Public Health and Disability Act 2000 ("PHD Act"), which established the DHBs as part of the Labour Government's new health system framework;

b. the Health Practitioners Competence Assurance Act 2003 ("HPCAA") which provides for the regulation of the pharmacy profession and established the Pharmacy Council;

c. the Medicines Act 1981, which establishes a legal monopoly for pharmacists in respect of the supply of certain medicines, and provides further detail on the regulation of the profession (in relation to ownership controls);

d. the Misuse of Drugs Act 1975 (with respect to controlled drugs);

e. the Health Act 1956 (with respect to personal health information); and

f. the Commerce Act 1986.

policy:

a. the New Zealand Health Strategy, developed by the Ministry of Health ("**Ministry**");

b. the Primary Health Care Strategy, developed by the Ministry;

c. the New Zealand National Pharmacist Services Framework 2007 ("**Framework**"), developed by DHBNZ;

contract:

a. the current Pharmacy Services Agreement entered into by individual DHBs and pharmacies for the provision and funding of pharmacy services; and

b. possibly, section 88 notices under the PHD Act that specify the terms and conditions of payment in the case of funding by a DHB.

[78] It is noted that there are also a number of associated regulations with these relevant statutes (although not necessary to be explored in detail in this paper).

Ultimately, the DHBs may distribute government funding for health services as they see fit, so long as they act within their statutory functions and objectives which constrain them in respect of ensuring access and quality of health services. There are, however, a number of relevant factors which must be considered at the same time:

a. government policy (in the form of national health strategies, and procurement guidelines);

b. the distinction between pharmacy services falling within the statutory monopoly for pharmacists (and pharmacies) only and other pharmacy services (such as the recently proposed 'specialist' services) which could potentially be provided by a wider group of health practitioners;

c. issues which have arisen recently in the analogous laboratory testing services sector (which has recently shifted to a tendering model for funding); and

d. competition law implications under the Commerce Act, given the unique competitive environment with significant monopoly pharmacy services and monopsonist purchasers.

The following sections explore each of the elements of the overarching framework, including the relevant issues arising for the present inquiry into possible tendering processes by DHBs with respect to pharmacy services.

District Health Boards

DHBs are Crown entities established by the New Zealand Public Health and Disability Act 2000 ("**PHD Act**")[79]. As the primary vehicles by which the government funds and monitors public health services, these statutory bodies have a number of prescribed objectives and functions which focus on the provision of health services to the New Zealand public.

Broadly, these functions include overall responsibility for assessing the health and disability needs of communities in their regions, and managing resources and service delivery to best meet those needs.[80]

Each DHB is responsible for a geographical region specified by the Act.[81]

DHBs are able to negotiate, enter into and amend service agreements with a person (or persons) providing services or arranging for the provision of services. Where they have entered into service agreements, DHBs must also monitor the performance of the other parties to those agreements.[82]

There has been considerable criticism of DHBs in the past as to whether or not they are fulfilling their statutory obligation to negotiate under section 25 of the PHD Act. This is an area which may require further analysis and consideration. We are aware that there are proceedings in the health sector (in relation to aged care funding) which, among other things, may test the scope of the DHBs' obligations under this section.

Section 88 of the PHD Act provides an additional method by which a DHB may contract with service providers. A "section 88 notice" enables a DHB to give notice of the terms and conditions under which it will make payment for services. Once a person accepts payment

[79] New Zealand Public Health and Disability Act 2000, s 19.
[80] New Zealand Public Health and Disability Act 2000, ss 5(3) and 23.
[81] New Zealand Public Health and Disability Act 2000, s 19(1).
[82] New Zealand Public Health and Disability Act 2000, s 25.

from a DHB under section 88 terms and conditions, this constitutes acceptance of the notified terms and conditions.

One argument that may develop in this area is that the DHBs are, in fact, utilising a "section 88 process" (without the attendant process protections) through a section 25 process which is supposed to be a genuine negotiation.

In addition to the statutory obligations above, the government provides guidelines and priorities for the DHBs in the New Zealand Health Strategy and Primary Health Care Strategy (discussed further below). The Minister of Health also sets out key priorities for DHBs each year in the Minister's "Letter of Expectations". The current letter for 2006/07 places importance on collective DHB relationships and encourages to collaborative arrangements:

> *For DHBs, relationships with one another, and with other relevant entities, are a powerful tool to plan improved services, reduce transaction costs and much besides. In some cases, including human resources/industrial relations, procurement or new interventions, there are more gains to be secured.*

DHBNZ

District Health Boards New Zealand ("**DHBNZ**") is a national umbrella organisation formed by the DHBs to assist them in meeting their objectives and accountabilities to the Crown by coordinating strategic activities on a national level (e.g. collective procurement programme; health sector conferences; and human resources and training programmes). We note that DHBNZ is not a statutory entity itself.

DHBNZ works in partnership with the Ministry of Health to provide input into policy advice and development. It also interacts with other national health sector organisations. As such, DHBNZ plays a key role in national administration and contract negotiations with organisations representing service providers.

DHBNZ is responsible for the *Service Planning and New Health Intervention Assessment: Framework for Collaborative Decision-Making* paper ("**Collaborative DHBs paper**"), published in January 2006. This document is focused on the provision of new health interventions and services (as opposed to funding per se). It seeks to "ensure that individual DHBs are not inappropriately compromised by the decisions of other DHBs."[83]

In addition, the DHBs have collectively agreed at the end of 2006 to a *DHB Collective Operational Activity Through DHBNZ* paper. This paper allows DHBNZ to establish a collective process for the following areas:

a. strategy development;

b. policy input;

c. legislative change;

d. portfolio activity;

e. joint working;

[83] DHBNZ "Service Planning and New Health Intervention Assessment" (January 2006), 1.

f. programme management;

g. contract negotiation; and

h. project management.

These papers are a key part of the present review as they set out the collective philosophy that has been adopted by all 21 DHBs in relation to how and when they will act consistently on a national basis.

Pharmac

Pharmac is a Crown entity also established by the PHD Act, and directly accountable to the Minister of Health.[84] Its overall objective is to secure for eligible persons in need of medicines the best health outcomes that are reasonably achievable from pharmaceutical treatment, and from within the funding provided.[85]

Pharmac is responsible for managing the Pharmaceutical Schedule for the Crown.[86] The Pharmaceutical Schedule lists more than 2,600 pharmaceuticals and related products subsidised by the government. Pharmaceutical suppliers may apply to Pharmac to have a medicine listed on the Pharmaceutical Schedule for subsidy, usually following Ministry of Health approval of the product. Pharmac's decisions are made with due reference to Pharmac's Decision Criteria.[87]

As part of its management of the Pharmaceutical Schedule, Pharmac is responsible for setting the recommended price and subsidy of government-funded medicines, and the guidelines and conditions under which the pharmaceuticals may be prescribed.

In September 2001, PHARMAC was authorised by the Minister of Health, under section 48(e) of the PHD Act, to manage the purchasing of hospital pharmaceuticals on behalf of DHBs. This new function is encompassed in the National Hospital Pharmaceutical Strategy, which was approved by the Minister of Health in February 2002.

Section 23(7) of the PHD Act states that DHBs must not act inconsistently with the Pharmaceutical Schedule in the performance of any functions in relation to the supply of pharmaceuticals.

National Health Strategies

Following the enactment of the PHD Act, the Ministry of Health launched the New Zealand Health Strategy ("**NZHS**") in December 2000. This was closely followed by the release of the Primary Health Care Strategy ("**PHCS**") in February 2001. These Strategies set the health sector on a new path in terms of how primary health care services were to be delivered and, importantly, funded by the government.

In the PHCS's foreword, then Minister for Health, Hon Annette King, stated:[88]

> *District Health Boards will be guided by this Strategy in how to organise and fund the provision of services to meet local needs…*

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[84] New Zealand Public Health and Disability Act 2000, s 46.
[85] New Zealand Public Health and Disability Act 2000, s 47.
[86] New Zealand Public Health and Disability Act 2000, s 48.
[87] www.pharmac.govt.nz.
[88] Ministry of Health, *The Primary Health Care Strategy* (February 2001), iii.

> *A strong primary health care system means community involvement so that local people can have their voice heard in the planning and delivery of services.*
>
> *Doctors, nurses, community health workers and others in primary health care will work together to reduce health inequalities and to address the causes of poor health status. Services will be readily available at a cost people can afford. High quality care will ensure coordination over time and across the different providers needed to deal with a wide range of problems.*

A key plank of the Strategy was the formation of new community-focused, not-for-profit organisations as the primary vehicles for DHB funding. These Primary Health Organisations ("**PHOs**") are organisations of health care providers (including doctors, nurses and community workers) who join the PHO as "contracted providers". Membership of PHOs is voluntary.[89]

The Strategy sets a number of minimum requirements to be met before a PHO can be established. Individual DHBs decide whether an organisation meets the minimum requirements, both in terms of services delivered and its overall structure and governance, before allowing it to become a PHO. These requirements include:[90]

a. PHOs will aim to improve and maintain the health of their populations and restore people's health when they are unwell. They will provide at least a minimum set of essential population-based and personal first-line services;

b. PHOs will be required to work with those groups in their populations that have poor health or are missing out on services to address their needs;

c. PHOs must demonstrate that they are working with other providers within their regions to ensure that services are coordinated around the needs of their enrolled populations;

d. DHBs will use a formula to fund PHOs according to their enrolled populations. PHOs will use a national enrolment system to enrol people through primary providers;

e. PHOs must demonstrate how all their providers and practitioners can influence the organisation's decision-making; and

f. PHOs are to be not-for-profit bodies with full and open accountability for the use of public funds and the quality and effectiveness of services.

The relationship between individual PHOs and DHBs is regulated by a service agreement entitled the "Primary Health Organisation Agreement, Version 17 ("**PHO Agreement**"). This contractual relationship with the DHBs is analogous to that of the pharmacy sector.

PHOs are effectively vehicles created for delivering the NZHS. The close link between PHOs and government policy is notable, and in particular, as is the significant element of control that DHBs have over PHOs in terms of their establishment and ongoing funding (e.g. "District Health Boards will work through Primary Health Organisations to achieve health goals locally"[91]). So, although PHOs are non-statutory, private bodies, they are sufficiently linked to the government that, legally, they face public law issues that may arise. This is

[89] We understand that only one General Practice has not joined the PHO framework.
[90] Ministry of Health, *Minimum Requirements for Primary Health Organisations* (November 2001).
[91] Ministry of Health, *The Primary Health Care Strategy* (February 2001), viii.

significant for discussion on the future funding and strategic role of pharmacies and their services (given that pharmacies may fall within the PHO framework in the future).

It is notable that the NZHS and the PHCS do not explicitly mention pharmacy services. The NZHS refers to "health services", with its key underlying principle being the "timely and equitable access for all New Zealanders to a comprehensive range of health and disability services, regardless of ability to pay". The key plank of the NZHS is to set out the priorities for funding decisions by the DHBs.

In 2001, following the launch of both strategies, the Minister of Health made the following comments to a pharmacy forum which provide further insight to the Ministry's views on pharmacy's role:[92]

> *I believe there are some very positive opportunities presented by the Primary Health Care Strategy for pharmacy. We want primary care to move from a GP dominated sector, to one based on teamwork and a population focus - the right professional at the right time is the goal…*
>
> *In relation to pharmacy, there is a range of option that PHOs can take up, including having pharmacists as members, sub-contracting pharmacy, and employing pharmacists for services like pharmaceutical review and medicines management for patients with chronic conditions.*
>
> *The Government is not dictating what happens. The Primary Health Care Strategy does not specify just one model, as one size does not fit all. Instead the emphasis is on developing workable models of teamwork and recognising the complementary skills of others, as well as a willingness to share power in order to achieve group goals.*

Community pharmacy services

Community pharmacy, as a profession, comprises four key areas:

a. Professional (i.e. licensing, professional standards, operation/control of pharmacies);

b. pharmaceuticals (prescription and over-the-counter ("**OTC**"));

c. retail sale of non-pharmaceutical goods and services (e.g. beauty and health care); and

d. pharmacy services.

Professional and pharmaceuticals

Community pharmacies have a statutory monopoly for the retail supply of many pharmaceutical products. The relevant legislation is:

Health Practitioners Competence Assessment Act 2003:

a. this Act establishes the **Pharmacy Council** which is responsible for the regulation and licensing of the pharmacy profession; and

Medicines Act 1981 and Misuse of Drugs Act 1975:

[92] Hon Annette King, "New Zealand Pharmacy Forum panel discussion" (21 April 2001), www.beehive.govt.nz.

a. the sale and distribution of pharmaceuticals is controlled principally via these Acts (and associated regulations);

b. section 3 of the Medicines Act defines three categories of medicines which are declared by regulation or by notice given under section 106. These categories are:

    i. prescription medicines (can only be supplied pursuant to a prescription by an authorised medical practitioner);

    ii. restricted medicines (can only be supplied by a pharmacist in a pharmacy or hospital); and

    iii. pharmacy-only medicines (can only be sold in a pharmacy or hospital);

c. section 42 of the Medicines Act restricts authorised prescribers holding interests in pharmacies;

d. sections 55A-55G of the Medicines Act provides criteria, conditions and restrictions on pharmacists operating pharmacies. These include: (with minor exceptions)

    i. a qualified pharmacist must be in effective control of the pharmacy if it is owned by a company (and the pharmacist must own more than 50 percent of the share capital)

    ii. no person may be granted a licence to operate a pharmacy, or hold a majority interest, unless the person is a pharmacist;

    iii. no company may operate more than 5 pharmacies; and

    iv. no person may operate or hold a majority interest in more than 5 pharmacies.

Many **OTC pharmaceuticals** can be sold directly to consumers without the need for a prescription by retail pharmacies, supermarkets and some consumer goods stores. Some OTC pharmaceuticals are classified as "pharmacy-only" however, requiring them to be sold by retailers holding a pharmacist's licence. Most OTC products are not subsidised.

Pharmacy services

Community pharmacy services are funded by the government via a standard services agreement ("**Agreement**") entered into by each DHB and service provider (i.e. pharmacy), and re-negotiated every three years.

The current Agreement came into effect on 1 March 2007 and has a set termination date of 28 February 2010 (subject to any variation or earlier termination in accordance with the Agreement's provisions). To date, it is our understanding that approximately two thirds of community pharmacies have signed the Agreement, and the remaining pharmacies will continue to be paid according to the terms of the new contract.[93]

Although the standard template agreement has been developed so that there is national consistency across all DHB regions, the Agreement contains a mechanism for specific terms and conditions to be agreed to that are departures from, or additions to, the standard terms of the Agreement. Part P of the Agreement allows a DHB and individual pharmacy to

[93] Andrew Svendsen, "Talks end and $5.16 remains" (*Pharmacy Today*, June 2007).

contract separately under different terms and conditions, and these provisions take precedence over other conflicting provisions in rest of the Agreement.[94]

The Agreement covers the provision and funding of the following services:[95]

a. **base pharmacy services** to enable eligible persons[96] appropriate access to pharmaceuticals and advice services that are responsive to the health needs and priorities of service users and communities. Base pharmacy services include:

    i. dispensing of pharmaceuticals;

    ii. provision of advice and counselling;

    iii. maintaining service user records;

    iv. reporting;

    v. administration;

    vi. dispensing of pharmaceuticals pursuant to Practitioner Supply Orders (to prescribers);

    vii. dispensing of pharmaceuticals on Bulk Supply Orders (e.g. private hospitals); and

    viii. rest home services (including long-stay care hospitals);

b. Methadone services (via a Variation to the Agreement);

c. Nicotine Replacement Therapy ("**NRT**") services;

d. Monitored Therapy - Clozapine (via a Variation to the Agreement);

e. Syringe Driver Services (via a Variation to the Agreement); and

f. any other pharmacy services specified in each individual contract.

The Agreement specifies that funding for these services is on a fee-for-service basis.[97]

Other than for non-performance and dispute reasons (in which case standard termination procedures apply), the Agreement is able to be terminated by either party by giving six months' written notice.[98]

As an alternative to termination of the entire Agreement, either party may terminate the provision of any particular service/s and associated funding, by giving six months' written notice.

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[94] Agreement, cl A5 and P1.2.
[95] The following associated documents also form part of the Agreement: the Pharmaceutical Schedule (managed by PHARMAC); the Pharmaceutical Transactions Data Specification; and the Pharmacy Procedure Manual.
[96] "Eligible persons" are defined in cl 4 of the 2003 Direction of the Minister of Health, "Relating to Eligibility for Publicly-Funded Health and Disability Services in New Zealand". Broadly, the definition includes all New Zealand citizens and those people ordinarily resident in New Zealand (and their children).
[97] Agreement, Schedule H1, cl 2.
[98] Agreement, cl O9-O10.

New optional services with discretionary funding

In March 2007, DHBNZ published the New Zealand National Pharmacist Services Framework ("**Framework**"). In addition to the standard Agreement, the Framework sets out new additional services that pharmacies may choose to offer, with the key difference being that the DHBs have a discretionary funding decision with respect to these new services.

The services are:

a. information services:

    i. health education;

    ii. medicines and clinical information support;

b. medicines review services:

    i. medicines use review;

    ii. medicines therapy assessment; and

    iii. comprehensive medicines management.

These new services represent the 'new age' of pharmacy specialist services. A key difference between the services funded under the Agreement, and the new services proposed under the Framework is that the DHBs have a choice as to whether they will fund the new services.

Another distinction is that most of the new services can be offered by health practitioners other than pharmacists - as these services do not fall within the statutory monopoly framework. This is a key distinction as it could be relevant to considerations with respect to moving the current funding model towards tendering (i.e. a tendering model could be used only for these new services).

Laboratory testing services

Diagnostic laboratory and pathology services are analogous to pharmacy services in many ways. These service providers also exist outside of the PHO framework, however the funding model has recently been significantly overhauled so that tendering has become the most preferred method of funding. This has resulted in major changes to the sector, with many providers facing elimination from the market, or forced joint venture operations.

The High Court has recently had the opportunity to review the changes in this industry. The resulting decision provides a thorough analysis and blueprint for the pharmacy sector in relation to providing further insight as to how pharmacy services may be viewed within the overall Health and Primary Health system. This is reviewed below.

Since the 1950s, diagnostic laboratory testing in New Zealand has been fully funded by the government with no charge to the patient.[99] Testing is divided into 2 categories: "schedule tests" (per the Diagnostic Laboratory Schedule) and "non-schedule tests".

[99] R Boswell and A Tie, "All change for the New Zealand laboratories" (NZ Medical Journal, Vol 119, 13 October 2006).

Historically, schedule tests were funded fee-for-service in most community laboratories, while most non-schedule test specimens were collected by those laboratories and transferred to a public hospital where the analyses were performed.

The testing service would be funded by the regional DHB if the test was requested by a doctor, the patient was not an in-patient in a public hospital, and the test was for diagnosis (and not for immigration, industrial, research or insurance purposes).

In 2002, DHBNZ commissioned a paper by Simon Terry Associates Limited entitled "Options for Reform of Diagnostic Laboratory Services Markets". This paper led DHBNZ to conclude that because the competition was for market share (given a fee-for-service funding contract), it was perceived to drive up laboratory utilisation and, therefore, overall cost.

The outcome of this review was reflected in the subsequent contracting round involving most DHBs around the country:

a. Auckland region: the new contract for pathology services was awarded via a tender process to a completely new provider, thus eliminating the long-standing incumbent (and leading to the High Court proceedings);

b. Wellington/Hutt Valley: the contract was awarded via a tender process to a joint venture between two private providers (with Commerce Commission approval) who previously competed against one another in the same region; and

c. Otago-Southland and Nelson/Marlborough: a single company was contracted to provide all testing in community and public hospital practice, driving out both the previous DHB laboratories and the competing commercial laboratory. The Commerce Commission declined to approve a merger between the private providers.

Commentators claim that the changes open new possibilities for cost-shifting and service reduction, and may work against innovation:[100]

> *In all cases, the new contract is for a lower price than the contracts that it replaces, since the driver for change is cost reduction. …*
>
> *What lessons are there from this situation? Firstly, it must be determined that in future no such wholesale change to a clinical service will be undertaken without a national policy framework, ensuring that issues of national significance are not lost in the drive to achieve local cost reductions. Secondly, it is imperative that clinical risks are carefully weighed and a sustainable benchmark of service estimated when financially-driven service changes are considered. Thirdly, relatively soon it will become apparent that defects in the terms of the contracts allow or encourage behaviour that is not in the interests of patients or of the health system as a whole. These defects in approach should be exposed, so they may be avoided in the next round of contracting.*

High Court decision

As a result of the Auckland regional contract being awarded to a completely new provider, the incumbent, Diagnostic MedLab Limited , took issue with the tender process and sought a

[100] R Boswell and A Tie, "All change for the New Zealand laboratories" (NZ Medical Journal, Vol 119, 13 October 2006). Dr Ross Boswell is the Chairman of the New Zealand Medical Association.

judicial review in the High Court. This case provides a useful insight into a number of relevant considerations for the pharmacy sector.

In *Diagnostic MedLab Limited v Auckland DHB, Waitemata DHB, Counties-Manukau DHB*[101], the High Court was required to review three heads of claim:

a. a conflict of interest on the part of a member of the ADHB (who had a significant interest in the successful tendering business);

b. failure to consult with DML during the tendering process (legitimate expectation); and

c. failure to consult adequately with the PHOs during the tendering process.

The most relevant claim for the pharmacy services sector is (c) above. Under this claim, Asher J confirmed that laboratory services were "an integral part" of the care provided to patients by GPs.[102] As such, GPs were directly affected by the relevant DHBs' purchasing decisions. Accordingly, the Judge considered whether the DHBs had a duty to consult with PHOs over possible changes to the provision of community laboratory services and, if so, whether the DHBs had discharged their duty to do so.

His Honour confirmed that the PHD Act imposes a duty on DHBs to foster community participation in significant changes to the provision of services, and this included providing for consultation on strategic planning.[103] Furthermore, the NZHS states at cl 43 that DHBs should consult with those who use services that "could be changed as a result of a decision". The DHBs were bound to adhere to the terms of the NZHS as the funding agreement between the Crown and DHBs contained a provision requiring this. Consequently, His Honour held that the PHD Act and associated documentation created "a legal duty on the party of DHBs to consult with those sections of the community who may be affected by a contemplated significant change to health services."[104]

In relation to the role of laboratory services within the PHO/general practice services framework, Asher J made the following findings:[105]

> *I am satisfied from the extensive affidavit evidence filed on behalf of Harbour PHO that* ***laboratory services are an integral part of the first contact care provided to patients by general practitioners****. The services are used for diagnostic purposes and the ongoing monitoring of patients. General practitioners are the main referrers and users of the services. They are directly affected by the ARDHBs' purchasing decisions concerning community diagnostic testing. Such testing underpins thousands of diagnoses carried out every day, and provides ongoing information about patients who require frequent monitoring for their particular conditions or drug programmes.*

His Honour went on to find that the overall effect of the contemplated changes to the methods of funding laboratory services, and the conducting of tenders, was significant.[106]

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[101] *Diagnostic MedLab Limited v Auckland DHB, Waitemata DHB, Counties-Manukau DHB* (High Court, Auckland, CIV 2006-404-4724, 20 March 2007) per Asher J.
[102] *Diagnostic MedLab Limited*, above, paras 251 and 265.
[103] *Diagnostic MedLab Limited*, above, paras 253-254. Reference to PHD Act, ss 3(1)(c) and 22(1)(h).
[104] *Diagnostic MedLab Limited*, above, paras 259 and 264.
[105] *Diagnostic MedLab Limited*, above, para 265.
[106] *Diagnostic MedLab Limited*, above, para 268.

The question arose, therefore, whether the required adequate consultation had taken place with relevant stakeholders.

The test as to whether adequate consultation has occurred is found in *Wellington International Airport Limited v Air New Zealand Limited*.[107] In this case, the Court of Appeal set out the following criteria:

i. consultation includes listening to what others have to say and considering their responses;

ii. the consultative process must be genuine and not a sham;

iii. sufficient time for consultation must be allowed;

iv. the party obliged to consult must provide enough information to enable the person consulted to be adequately informed so as to be able to make intelligent and useful responses; and

v. the party obliged to consult must keep an open mind and be ready to change and even start afresh, although it is entitled to have a work plan already in mind.

Against these criteria, Asher J held that there had not been adequate consultation undertaken by the DHBs with relevant stakeholders such as the PHOs.[108] As a result, the tender decision was held to be ultra vires.[109]

This decision has resulted in a major 'wake-up' call for the DHBs with respect to how they carry out their funding role. The key message is that any significant change to the structure of services, and how they are funded, must only occur after comprehensive consultation with all stakeholders.[110] Ultimately, as Asher J confirmed, "at issue here is good decision-making in the interests of the public".[111]

Analogies with the laboratory testing sector

Although very similar in nature, the pharmacy services and laboratory testing services sectors have some key differences. Pharmacy services have the following 'special' characteristics:[112]

a. pharmacists are often the first contact point for patients with health issues;

b. pharmacists have direct contact with patients who are referred by a GP (compared to pathologists who have direct contact with GPs rather than patients, and whose patients interact mainly with phlebotomists and administrative staff);

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[107] *Wellington International Airport Limited v Air New Zealand Limited* [1993] 1 NZLR 671, 675 (CA).
[108] *Diagnostic MedLab Limited*, above, paras 289-290 and 300.
[109] *Diagnostic MedLab Limited*, above, para 300.
[110] It is noted that the Ministry of Health has developed the "Service Planning and New Health Intervention Assessment - Framework for collaborative decision-making" guidelines (January 2006), www.moh.govt.nz. These guidelines provide clear guidance to DHBs regarding the process to be followed (including consultation) when proposals are made for changes in the health system. "The Framework will (also) ensure that individual DHBs are not inappropriately compromised by the decisions of other DHBs."
[111] *Diagnostic MedLab Limited*, above, para 374.
[112] This section will be further clarified once MDL's current survey of pharmacies and pharmacy services has been completed.

c. there is a "care relationship" between a pharmacist and patient, with elements of advice and counselling required;

d. pharmacists, like GPs, are faced with ambiguity in relation to illnesses presented to them and, therefore, there are higher elements of risk and certain professional skills required (compared to pathologists who are required to analyse and interpret the data presented to them).

Due to the care element in particular, the pharmacy services sector would appear to be in a more favourable position than that of the laboratory testing sector with respect to proposed changes to the funding framework. The consultation principles and indications from the *Diagnostic MedLab* decision send a clear signal to the DHBs that they must undertake comprehensive consultation with all stakeholders in the design of any significant change to the system.

Competition law framework

An essential part of the governing legal framework for pharmacy services is the competition law regime set out in the Commerce Act 1986 ("**COMA**"). The purpose of the COMA is to promote competition in markets for the long-term benefit of consumers within New Zealand.[113]

The COMA is particularly relevant to the pharmacy services sector given that pharmacies enjoy a statutory monopoly in relation to the dispensing and management of certain medicines, as well as the ownership structure of pharmacies. In addition, a monopsony exists whereby each regional DHB is the only purchaser of the majority of pharmacy services. This provides a unique competitive environment.

In the present case, it is difficult at this early stage to canvass the competition law issues arising from a possible change in DHB purchasing methods to a tendering model for pharmacy services because the parameters are too abstract and uncertain. For example, it depends on whether all DHBs, or some DHBs, or even one DHB moved to tendering. Similarly, it depends on whether all pharmacy services (including the new proposed services), or just some of the available pharmacy services, were tendered. And, in each region, the pharmacy services market is different depending on the community served and the number of pharmacies and pharmacists operating in that market. Accordingly, as these parameters become more certain, a more comprehensive analysis can be undertaken.

In the meantime, it is worthwhile reviewing potential issues in the context of previous discussion by the Commerce Commission relating to pharmacy services, related markets and the relevant COMA provisions.

Monopsony

Although PHARMAC has a statutory exemption from the COMA's application[114], the DHBs and other Crown entities in the health sector do not have such cover.[115]

Section 5(1) of the COMA states that the Act shall bind the Crown in so far as the Crown "engages in trade". "Trade" is defined in section 2(1) as:

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[113] Commerce Act 1986, s 1A.
[114] PHD Act, s 53.
[115] Although we note that it was originally contemplated that the DHBs would have the same exemption as Pharmac under the Commerce Act in relation to pharmaceutical arrangements (per the Minister of Health's memorandum to Cabinet, "Statutory Form of the New Zealand Blood Service and Pharmac", 2000).

> ***trade*** *means any trade, business, industry, profession, occupation, activity of commerce, or undertaking relating to the supply or acquisition of goods or services…*

On first analysis, DHBs are captured under this definition given that their funding of health services is an "undertaking" relating to the supply of services.[116] This means that the DHBs must be careful to ensure that any agreements they negotiate do not trigger the restrictive trade practices prohibited in the COMA.

As a monopsony, DHBs enjoy the privilege of being the only purchaser in a market with many sellers. This practice is not restricted under the COMA and relevant health sector legislation. However, it raises significant supply side implications in the relevant market/s. These implications are related to the overarching competition *policy*, rather than legal, framework. Notwithstanding this, the policy implications lead to legal concerns in the long-term where the result of policy is the diminution of a competitive market. For example, if one DHB chooses to go out to tender for pharmacy services in a community, and as a result, one services provider is chosen, the remaining services providers may be eliminated from that market. Then, in future, when that contract comes up for renewal, if market participants are reduced, competitive tendering will be constrained. Accordingly, creating competition tension now by moving to a tendering model may, in the end result, damage the relevant market/s in the long term.

Similarly, related issues such as the labour force in the relevant market/s (i.e. pharmacy services providers) will be affected by a change to a tendering model for procurement. This is already being seen in the laboratory testing services sector. In particular, this is a relevant consideration for monopsonist purchasers - and especially so when the purchaser is a Crown entity. These associated issues are necessarily linked to the quality of service provided. Unless the health profession's skills and resources are developed and invested in, the quality of the service provided will significantly decline. Accordingly, there is an essential linkage between these elements and the DHBs' chosen procurement model. This linkage must be carefully factored into any procurement model development or decision.

In a 2006 conference speech, Commerce Commission Chair, Paul Rebstock, made the following comments with respect to DHBs and their purchasing power in relation to medical laboratory/pathology services (following the Commission's decision to decline the application of Sonic Healthcare Limited and New Zealand Diagnostic Group Limited to form several joint venture companies in various DHB regions):[117]

> *The key deciding factors in this decision were the unlikelihood of fringe competitors being able to compete with the merged entity in future bidding rounds, and the shift from two vigorous competitors, to one merged venture.*
>
> *The Commission considered that the change from two competitors to a single venture would remove the DHBs' countervailing power as the single purchaser. Instead of the DHB being able to play off the two parties against each other to get the best deal with health consumers, the joint venture could present a "take it or leave it" proposition, and the DHB would have no alternative to turn to.*

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[116] Although we note that it has previously been held that the Minister of Health was not engaging in trade when he imposed conditions relating to providing adequate GP services - "his actions may affect trade, but he is not thereby acting 'in trade'" (Commerce Commission re NZ Medical Association, Decision 220/88, 13 September 1988). This case did not refer to the statutory interpretation provided for "trade" in section 2 of the COMA.

[117] Paul Rebstock, Speech to the 5th Annual Mergers and Acquisitions Summit 2006 (6 March 2006).

> *The Commission is concerned that, to date, the DHBs have not consistently exercised the full extent of their power as the only buyer. We consider that the DHBs can preserve their countervailing power through the design of their bidding processes. The Commission hopes that DHBs will be more willing to exercise their countervailing power in future contract rounds in order to ensure competitive prices and quality for consumers in the long term, and provide incentives for innovation.*
>
> *Given the significance of health markets to consumer welfare, the Commission will continue to closely analyse developments in this area, whether it is proposed mergers and acquisitions, or alleged anticompetitive behaviour. Health managers may not see themselves as business people, but they need to ensure that their consumers get the benefits of competition, as provided for by the Commerce Act.*

This insight is timely and useful for the present review of pharmacy services and the scope for DHBs to move to a tendering model. Given the unique market factors present in the pharmacy services sector, it appears that the Commission considers that the DHBs' monopsony position is a necessary, and acceptable, balancing element against the monopoly framework for the majority of funded pharmacy services.

An associated consideration, however, which has not yet been publicly explored by the Commission or DHBs (or tested in the Courts), is the statutory objectives prescribed by the PHD Act which operate to constrain the DHBs in the way that they carry out their functions. Given the recent issues arising around the new tendering model for laboratory services, as well as recent DHBNZ initiatives with respect to collaborative decision-making (encouraged by the Minister in his Letter of Expectations to DHBs), this too is an important factor in the overall assessment.

Transport sector analogy

An analogous government sector providing insight as to what may happen further down the track, following a choice to move to competitive tendering, is the transport management sector. Transit New Zealand is the Crown entity responsible for the management of State highways, and Land Transport New Zealand ("**LTNZ**") is the Crown entity responsible for allocating and providing the funding. LTNZ (and its predecessor, Transfund NZ) has developed a comprehensive procurement policy. This policy outlines the sector's approach to supply side implications due to Transit being a monopsonist purchaser.

Competitive tendering was introduced to the sector during the 1990s, with the aim of reducing costs, increasing efficiency, promoting innovation and creating private sector markets. As part of this model, Competitive Pricing Procedures ("**CPPs**") were introduced via legislation in 1991. Other procurement objectives include: enabling competition between suppliers that is fair; encouraging competing markets; and encouraging efficient markets.

CPPs were successful in facilitating the early-1990s transition from a public to a private sector supply market. However, this supply market has changed dramatically, with the result that: two major companies now share over 50% of the contracted value in the market; and the number of tenders received for each contract is rapidly decreasing. This segmentation in the composition of the supply market has led LTNZ to undertake a review of the need for a new approach to its procurement procedures (this review is currently being undertaken):[118]

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[118] Bernard Cuttance (Principal Advisor, Land Transport NZ), speech to "Transit NZ & NZIHT 8th Annual Conference" (October 2006).

> *Procurement procedures need to evolve and be innovative to ensure that market changes can be countered with procedures that can achieve 'best value for money' [a statutory requirement in the transport sector] spent over the life of the project, while also ensuring competition for supply. New procedures also need to: allocate risk effectively; be receptive to innovation; provide for ongoing flexibility; and be appropriate to client and project characteristics.*
>
> *Competitive tendering, enhancing competitive markets and periodic re-tendering of long-term contracts are still important requirements of the procurement process…*
>
> *Maximising the contribution of all parties will need new approaches. For example, use of payment structures which incentive innovation and reduce cost; establishing clear measurable targets for price, quality and time and benchmarking.*

The transport sector has, therefore, recognised the need to incorporate supply side implications into the overall procurement process in order to protect competitive markets. Despite this, the sector's use of competitive tendering has still resulted in a declining supplier base, with two significant major players holding the majority of the market share. Accordingly, this sector provides a useful case study for future analysis with respect to any proposals to move the pharmacy services market along the same lines.

Price-fixing

The Pharmacy Guild ("**Guild**") has already been the subject of Commerce Commission ("**Commission**") scrutiny in the past. Firstly, in 1998, the Commission issued a formal warning as a result of negotiations with the Regional Health Authorities and Transitional Health Authority (previous statutory entities similar to DHBs).

Secondly, in 2001, the Guild applied for authorisation to enter into or give effect to contracts, arrangements or understandings with respect to the new standard services agreement that had been collectively negotiated with the DHBs. The Commission issued a draft determination in April 2002 indicating that it would decline the application.

The Commission was concerned about the Guild's application due to section 30 of the COMA which prohibits any provision of a contract, arrangement or understanding between competitors that has the purpose, effect or likely effect of fixing, controlling or maintaining the price of goods or services. Such an arrangement is deemed to substantially lessen competition in terms of section 27 of the COMA.

To establish whether section 30 would be triggered, the Commission looked at:[119]

a. whether the arrangements were between actual or potential competitors; and

b. whether the arrangements had the purpose, effect or likely effect or fixing, controlling or maintaining prices.

With respect to (a), the Commission found that Guild members competed in a general sense for the same actual or potential customers within each local market.[120] As competitors,

[119] Commerce Commission, Draft Determination: Pharmacy Guild of New Zealand (26 April 2002), paras 166-167.
[120] Commerce Commission, Draft Determination: Pharmacy Guild of New Zealand (26 April 2002), para 171.

therefore, any discussions amongst members regarding the negotiations with DHBs would consequently trigger section 30.

And, in relation to (b), the Commission found that arrangements between the Guild and its members in relation to negotiations with DHBs were likely to *influence* or *interfere with* price, therefore falling within section 30.[121] However, in reaching this decision, the Commission noted that the "monopsony purchasers" (i.e. DHBs) controlled the funding available and, therefore, the outcome of negotiations (in terms of pricing) might be more likely to be "closer to the end of the spectrum where these purchasers hold the preponderance of market power."[122]

The DHBs were considered to hold a "high countervailing power" when purchasing subsidised pharmacy services.[123] In relation to its counterfactual inquiry into the use of section 88 notices for the funding of subsidised pharmacy services, the Commission considered section 36 of the COMA.[124] This provision prohibits a party that has a substantial degree of power in a market from taking advantage of that market power for the purpose of restricting the entry of any person into any market; or preventing or deterring any person from competing in any market; or eliminating any person from any market. The Commission confirmed that, as monopsony purchasers, the DHBs have a substantial degree of power in the purchase of subsidised pharmacy services. The Commission queried, however, whether the DHBs would be using this market power for a proscribed purpose if they utilised the section 88 notices for the funding of pharmacy services. This query was not answered.

Under its public benefits and detriments inquiry, the Commission accepted the following benefit: further reduction in the cost of contract administration in the future (via the use of the template services agreement). It considered that all other benefits proposed by the Guild would have no economic gains in efficiency or could also be achieved under the counterfactual scenario. Identified detriments were the lessened scope for innovation by individual service providers.

After balancing the accepted benefits and detriments, the Commission concluded that it was not satisfied that the public benefits outweighed the detriments and, accordingly, was not satisfied that the proposed arrangements should be permitted. The Draft Determination, therefore, indicated that the Commission would decline to grant an authorisation for the arrangements proposed by the Guild.

As a result of the counterfactual scenario presented by the Commission, the Guild subsequently withdrew the application for authorisation in May 2002.

Following the authorisation application, however, the Commission went on to investigate the Guild's practices. It consequently issued a warning in September 2004 in relation to the regular publication of the Guild's Premium Guide and associated price fixing issues under the COMA:[125]

> *The Pharmacy Guild and all associations should ensure that when making any recommendations to members, that those members are advised and are aware that they are subject to the Commerce Act. Arrangements between competitors to fix prices or arrangements that substantially lessen*

[121] Commerce Commission, Draft Determination: Pharmacy Guild of New Zealand (26 April 2002), paras 186-187.
[122] Commerce Commission, Draft Determination: Pharmacy Guild of New Zealand (26 April 2002), paras 184-185.
[123] Commerce Commission, Draft Determination: Pharmacy Guild of New Zealand (26 April 2002), para 211.
[124] Commerce Commission, Draft Determination: Pharmacy Guild of New Zealand (26 April 2002), paras 228-229.
[125] Commerce Commission, "Commission warning to Pharmacy Guild: Premiums Guide at risk of contravening Commerce Act" (Release No 135, 23 September 2004).

competition is a breach of the Act and will attract enforcement action by the Commerce Commission.

Substantially lessening competition

Section 27 of the COMA prohibits the entering of any contract, arrangement or understanding substantially lessening competition, as follows:

> *(1) No person shall enter into a contract or arrangement, or arrive at an understanding, containing a provision that has the purpose, or has or is likely to have the effect, of substantially lessening competition in a market.*
>
> *(2) No person shall give effect to a provision of a contract, arrangement, or understanding that has the purpose, or has or is likely to have the effect, of substantially lessening competition in a market.*
>
> *(3) Subsection (2) of this section applies in respect of a contract or arrangement entered into, or an understanding arrived at, whether before or after the commencement of this Act.*
>
> *(4) No provision of a contract, whether made before or after the commencement of this Act, that has the purpose, or has or is likely to have the effect, of substantially lessening competition in a market is enforceable.*

This key provision is the most likely to be triggered by a change in funding arrangements to a tendering model for pharmacy services. This is because an arrangement within a specific region for one provider to provide pharmacy services (depending on which services) could have the likely effect of substantially lessening competition in that regional market due to other pharmacies withdrawing from the market.

The unusual competitive environment of pharmacy services providers (with a monopoly on most services) and monopsonist purchasers has to-date been untested in the Courts. However, it is our view that there are sufficient concerns existing in this sector to potentially trigger section 27 if the DHBs were to change their procurement model to tendering.

Market power

The remaining relevant restrictive trade practice prohibited by section 36 of the COMA is that of taking advantage of market power:

> *(2) A person that has a substantial degree of power in a market must not take advantage of that power for the purpose of—*
>
> *(a) restricting the entry of a person into that or any other market; or*
>
> *(b) preventing or deterring a person from engaging in competitive conduct in that or any other market; or*
>
> *(c) eliminating a person from that or any other market.*

This is a more narrow provision that requires a person to have *the purpose* of preventing competition or eliminating another person from the market. It has the potential to be triggered, however, with a change to a tendering model for the funding of pharmacy services.

Conclusion

The legal framework for pharmacy services in New Zealand is comprised from various sources within statute, government policy and contractual agreements. The resulting framework consists of monopsonist Crown entities (DHBs) providing funding to pharmacies which provide pharmacy services, some of which are prescribed by statute and a standard sector contractual agreement, and some of which are prescribed in a new policy document and are subject to discretionary funding.

Ultimately, the DHBs may distribute government funding for health services as they see fit, so long as they act within their statutory functions and objectives which constrain them in respect of ensuring access and quality of health services. There are, however, a number of relevant factors which must be considered at the same time:

a. government policy (in the form of national health strategies, and procurement guidelines);

b. the distinction between pharmacy services falling within the statutory monopoly for pharmacists (and pharmacies) only and other pharmacy services (such as the recently proposed 'specialist' services) which could potentially be provided by a wider group of health practitioners;

c. issues which have arisen recently in the analogous laboratory testing services sector (which has recently shifted to a tendering model for funding); and

d. competition law implications under the Commerce Act, given the unique competitive environment with significant monopoly pharmacy services and monopsonist purchasers.

All of these factors operate to constrain the DHBs in their actions and, in particular, will be relevant considerations with respect to the present inquiry into possible tendering processes for pharmacy services by the DHBs.