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**From Providers to PHOs:
an institutional analysis of nonprofit primary health care
governance in New Zealand**

Bronwyn Howell* and Carolyn Cordery**
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* General Manager, New Zealand Institute for the Study of Competition and Regulation Inc

** Senior Lecturer, School of Accounting and Commercial Law, Victoria University of Wellington

Address for Correspondence:

New Zealand Institute for the Study of Competition and Regulation Inc.

Victoria University of Wellington,

PO Box 600, Wellington, New Zealand.

Email bronwyn.howell@vuw.ac.nz

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Abstract

Policy reforms to primary health care delivery in New Zealand required government-funded firms overseeing care delivery to be constituted as nonprofit entities with governance shared between consumer and producers. This paper examines the consumer and producer interests in the allocation of ownership and control of New Zealand firms delivering primary health care utilising theories of competition in the markets for ownership and control of firms. Consistent with pre-reform patterns of ownership and control, provider interests appear to have exerted effective control over the formation and governance of the new entities in all but a few cases where community (consumer) control was already established. Their ability to do so is implied from the absence of a defined ownership stake via which the balance of governance control could shift as consequence of changes to incentives facing the different stakeholding groups. It appears that the pre-existing patterns will prevail and further intervention will be required if policymakers are to achieve their underlying aims.

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Introduction

The cost of health care is escalating and, while, since the end of World War II, governments have assumed increased responsibility for funding their citizen's health care (van Kemenade, 1997), the ability of nation states to fund increasing demands for health care is declining. In New Zealand, the government's health care spending has risen at a rate of 5.1% per annum on a compound basis from 1996, with the overall health expenditure increasing from 7.3% of GDP in 1996 to 8.5% of GDP in 2004 (Ministry of Health, 2007), due in large part to increasing focus on primary health care from 2001. However, the questions of who should receive the increased funds, and the optimal institutional structures to manage them, are vexed.

Health care delivery markets¹ worldwide are characterised by the presence of many firms constituted in forms other than the classic shareholder-owned firm, so as to reduce the inherent moral hazard that would restrict access to health care, and information asymmetry that would increase health care costs. Yet, absent legislative or contractual prohibitions, these firms typically co-exist and compete with classic shareholder-owned firms (Brown, 2010). This suggests that whilst alternatively-constituted firms may offer advantages in certain circumstances, it is not axiomatic that such structures and their attendant advantages are generalisable across an entire market or industry sector.

Nonetheless, some government funders have signalled strict preferences for nonprofit firms to provide health care as a means of ensuring value for money from increased spending. For example, in the New Zealand Primary Health Care Strategy (NZPHCS), government funding is restricted to newly-created geographically-defined Primary Health Organisations (PHOs) which are required to demonstrate a nonprofit objective (Minister of Health, 2001).² The justification for nonprofit firms "to guard against public funds being diverted from health gain and health services to shareholder dividends" (Minister of Health, 2001:14) derives from the 'trust' that theoretically can be placed in these firms because they have no owners whose incentives might lead them to act contrarily to the interests of the funder or patient.

In practice, however, all firms operate as a nexus of relationships between a variety of ownership and control interests (Coase, 1937; Williamson, 1985) which generates ultimately

¹ The authors acknowledge that the wider health care sector embodies the nexus of markets for health care delivery and markets for the provision of risk management (insurance – either privately or socially provided – see Howell, 2005). However, for the purposes of this paper, we have chosen to address only those aspects relating to the exchange of products and services in the health care delivery markets – that is, care transactions between patients and service providers.

² In turn PHOs have entered into contracts for service provision with a vast range of service providers, including community and charitable trusts, indigenous (Maori) incorporations and trades unions, and independent practitioners associations (IPAs), as well as traditional privately-owned for-profit firms (usually General Practitioner clinics – GPs) (Howell, 2005a).

the firm's residual asset value and future income streams (Milgrom & Roberts, 1992). A nonprofit objective, operationalised in the 'nondistribution constraint' preventing defined owners appropriating excessive profits at the expense of other stakeholders (James & Rose-Ackerman, 1986), speaks only to the matter of distributing income streams (profits)³. The nondistribution constraint is silent on the matter of who controls decisionmaking in respect of the assets used to generate those income streams, or how any income acquired will be applied in the absence of shareholders to whom it would otherwise be distributed as either dividends or increased equity. The constraint cannot, for example, preclude the distribution of surpluses via higher salaries paid to employees who, absent the restrictions, would have appropriated the same surpluses as owners (Robinson, Jakubowski & Figueras, 2005; Howell, 2006). The allocation of decisionmaking control rights is thus likely to be at least equally, if not more important to the efficient operation of the firm and the achievement of the government's distributional objectives than simply the presence or absence of defined shareholding interests (Jensen & Meckling, 1976; Fama & Jensen 1983a, 1983b).

This paper utilises an industrial organisation framework derived from Hansmann's (1996) theories of competition in the markets for ownership and control of firms, to evaluate the allocation of ownership and control (governance) of firms delivering primary health care. In addition to addressing the economic case for these firms having owners or not, it addresses the circumstances in which control (either in the form of shareholdings, or the exercise of governance control in a nonowned firm) is optimally exercised by service provider or consumer interests. By way of case studies, the primary health care sectors in New Zealand both prior to and after the implementation of the NZPHCS are analyzed to explain the consequences of the allocation of PHO control rights between consumer and service provider interests, and how these allocations have influenced the formation and governance of the newly-created nonprofit PHOs.

We contend that, despite the New Zealand government's intentions to establish nonprofit PHOs with governance shared between provider and community (consumer) interests, the high costs of ownership under this model have resulted in a market for control of new nonprofit PHOs that has largely followed the patterns of health care provider ownership and control established prior to the NZPHCS implementation when the ownership form of firms receiving government funding were not limited. The Hansmann (1996) framework is borne out as provider interests appear to have effectively controlled the formation of PHOs and by extension primary health care service delivery in all but a few cases where community control pre-existed. We further suggest that this pattern is likely to continue until exogenous

³ That is, the 'ownership' component of Berle & Means' (1932) classic separation of 'ownership' and 'control'.

economic and/or environmental disruptions indicate that optimal control of service delivery should shift from provider to consumer interests.

The paper proceeds as follows; section one develops the theoretical framework, with section two applying the framework to the general case of primary health care ownership and governance. In sections three and four the New Zealand primary health care market is examined respectively prior to and following the implementation of the NZPHCS. Section five concludes with discussion and recommendations for further research.

1. An Industrial Organisation View of Nonprofit Health Care Delivery Firms

Ever since Kenneth Arrow (1963) articulated the advantages of a nonprofit objective in reducing inefficiencies arising in the markets for medical care, there has been great interest in the contribution of firms adopting forms other than the standard shareholder-owned model. The form most analysed is the classic ‘nonprofit’ with no owners and where the non-distribution constraint is held to militate against the risks associated with defined owners appropriating excessive profits at the expense of other stakeholders (James & Rose-Ackerman, 1986; Silverbo, 2004). However, attention has also been given to firms which, although having defined owners, might be constrained by either an explicit objective eschewing the pursuit of profits as the primary motivation (Glaeser & Shleifer, 2001) or reliance upon the owners’ personal altruistic motivations to counter the pursuit of profits in excess of reasonable costs of service provision (Besley & Ghatak, 2005; Lakdawallah & Philipson, 2006)⁴.

1.1 Rationale

Two rationales are commonly offered for the observed prevalence of nonprofit firms⁵ in the health sector. The first is to ensure the provision of ‘third sector’ or ‘public good’ services, which would not otherwise be offered by (or would be under-supplied by) for-profit or government entities (e.g. Weisbrod, 1975; 1988). Arguably, this justification accounts for the nonprofit provision of goods for which there is a ‘missing market’ – for example ensuring that in monopolistically competitive markets⁶ product variants are offered that cater to the differentiated demands of special interest groups (such as ethnic communities, religious groups or other such associated patient collectives). The second rationale is the presence of

⁴ Nonprofit firms may have defined shareholders or be ‘unowned’ – that is, where there are no defined owners with a claim on residual assets or income streams, and where all control rights regarding the application of the assets and income streams are vested in a governing body bound principally by adherence to fiduciary duties (Fama & Jensen, 1986; 1986a).

⁵ For a fuller discussion of the modelling of nonprofit institutional structures and behaviours, see Hughes & Luksetich (2010).

⁶ The market for medical care – and in particular, primary health care services – is widely presumed to exhibit monopolistically competitive characteristics as a consequence of both the repeated interaction that occurs between a patient and a primary health care practitioner and the high search costs incurred by patients in finding a practitioner whose differentiated service provision characteristics offer the best match for that specific patient (Dranove & Satterthwaite, 2000).

information asymmetries between service purchasers (either patients or third-party donors and insurers) and health care providers (Arrow, 1963; Newhouse, 1973; Rose-Ackerman, 1996). Whilst the asymmetry leads in the first instance to underprovision (arguably a ‘missing market’ as per rationale one), it also predisposes beneficiaries to risks of exploitation by more knowledgeable parties (usually service providers) that are not always easily ameliorated by contractual or regulatory constraints (Williamson, 1985; Hansmann, 1980). By signalling that the firm has no explicit profit-maximising objective, or that in the event that profits are made, the surpluses cannot be appropriated by specific individuals but will instead be distributed via the firm’s operations (e.g. as services to beneficiaries), the firm has assured stakeholders that they can ‘trust’ that they will not be exploited financially as a result of the firm’s information advantages.

In the Structure-Conduct-Performance view of industrial organisation (Mason, 1939, 1949; Bain, 1959), it is essentially a matter of strategic choice whether a firm will be constituted in a shareholder-owned, for-profit form or as a nonprofit. This view asserts an optimal structure both for the firms and the sector, that once established will lead to desired behaviours and consequently the most efficient sector outcomes. Government policy and legislative force can be utilised to ensure that socially optimal structures are imposed exogenously so that the desired outcomes will ensue. By contrast, however, the Price Theory view (Coase, 1937; Stigler, 1968; Williamson, 1975) holds that the economic incentives facing individuals and firms explain market phenomena such as the organisational structure of a firm and the interactions occurring in a market. In this view, a firm’s institutional structure (design and governance arrangements), the nature of its objective function(s), and the identity of its shareholders (including having none – that is, a classic ‘non-owned’ firm) are determined endogenously. If an opportunity exists for a party to be better off as a consequence of a change in the prevailing arrangements, then the ensuing interactions in the markets for both ownership (where possible) and control will gravitate towards securing that outcome.

1.2 Markets for (Non)Ownership and Control

Using Price Theory precepts, Hansmann (1996) contends that absent restrictions, markets for the ownership and control of firms will result in a firm being owned by the group of stakeholders whose ownership results in the least combined costs of ownership and market contracting. The costs of ‘ownership’ include the costs of co-ordinating (e.g. communicating with shareholders, making decisions) and motivating (e.g. ensuring management runs the firm efficiently; using incentives; avoiding losses from imperfect agency relationships). Market contracting costs include transaction costs, costs of market power imbalances (including those arising from information asymmetries), contractual incompleteness, bounded rationality and

contractual hold-up costs (Williamson, 1985). Hansmann classifies stakeholders as either suppliers to the firm (including suppliers of raw materials, labour and finance – both equity (shareholders) and debt) or its customers. He uses his theories to explain why, for example, dairy farmers (suppliers) have tended to own downstream processing activities (dairy factories), whereas consumers have tended to own insurance companies (particularly via the ‘mutual’ ownership instrument), and the firms supplying consumer goods in small-scale markets. Hansmann’s theories also serve to explain why optimal ownership changes in response to changes in the environment in which the firm operates. For example, better regulation and information availability gradually enabled third party (capital) suppliers to compete in the markets for ownership of insurance companies, leading to widespread demutualisation in the 1980s.

Hansmann further suggests that ‘non-owned’ firms (i.e. with no defined shareholders) will emerge endogenously when the costs of maintaining defined ownership stakes outweigh the benefits. In these circumstances, the costs are least when the controls and disciplines typically applied by shareholder-owners (whether of supplier or customer disposition) on the directors and managers of the firm are substituted with a set of fiduciary obligations. These fiduciary requirements will specify, in lieu of shareholders, in whose interests the assets of the firm will be applied and how the revenues derived will be utilised. Accordingly, if the firm would otherwise have been owned by suppliers (e.g. doctors, nurses), the fiduciary duties could be expected to reflect supplier beneficial interests. Alternatively, if the ownership interests would otherwise have been vested in consumers (e.g. patients) then the fiduciary duties could be expected to reflect consumer beneficial interests.

1.3 The NZPHCS Environment

By invoking the ‘trust’ arguments in support of the *ex ante* specification that PHOs must be nonprofit entities, the NZPHCS design appears to be underpinned by the ‘Structure-Conduct-Performance’ view of institutional design. However, the policy was implemented in an environment where primary health care firms across the entire spectrum from shareholder-owned for profit to unowned nonprofit already interacted (Crampton, 1999; Coster & Gribben, 1999).

The Price Theory view would suggest that the plurality of ownership forms pre-existing the NZPHCS was a function of heterogeneity on all of patient and service provision preferences and economic circumstances in specific sub-markets. Firm ownership and fiduciary interests would reflect not just the trading off of the relevant costs and benefits, but also the identity of the stakeholding group(s) (i.e. suppliers or consumers) whose control of the firm rendered the least costly institutional arrangements.

By mandating that PHOs have both a nonprofit objective and decisionmaking processes incorporating both supplier and consumer interests, the NZPHCS appears to be prescribing a single set of artificial ownership and governance obligations on PHOs that by the Price Theory view would be unlikely to emerge endogenously. If these arrangements are not consistent with the minimisation of the joint costs of ownership and market contracting, then it would be expected that the governance arrangements of PHOs will evolve in such a manner as to minimise ownership and market contracting costs within the new policy constraints. If there are compelling cost-based reasons why one stakeholder group should be the beneficial owners of a PHO, then regardless of the nonprofit objective or the imposition of a nondistribution constraint, it would be expected that the arrangements actually employed will ultimately reflect those interests. Although the firm may masquerade externally as an NZPHCS-compliant PHO (albeit at some additional cost of ownership and governance), its underlying activities will likely reflect the otherwise-lower cost ownership interests.

2. Primary Health Care: Who Will Own and Govern?

This section uses an analysis of the costs of ownership and market contracting to examine the case for either consumers or service providers to own the firms delivering primary health care. It also examines the circumstances where it might be economically most efficient for ownership interests to be foregone.

2.1 Why enter into Patient (Consumer) Ownership?

2.1.1 *Costs of Market Contracting*

The predominant market contracting reason for consumers to own the firms providing primary health care pertains to the moral hazard that ownership by other interests present. Service providers can utilise their superior information (or other factors conferring market power, such as limited competition) for personal pecuniary gain – for example by overcharging patients for services or recommending unnecessary procedures (the moral hazard of ‘supplier-induced demand’ – Pauly, 1968). To the extent that these risks cannot be adequately controlled by other mechanisms (e.g. regulation, registration requirements, etc.), patient ownership, where service providers are hired as employees by consumer-owners, potentially overcomes the overcharging problem. Patient-owners can set the prices they will charge to themselves as consumers to reflect the actual costs of the services provided. The incentive to overcharge is mitigated, as any proceeds raised in fees in excess of costs will simply be paid to the patient-owners as dividends. By granting the patients the power of employer in a contractual relationship with service providers, patient ownership also potentially addresses the risks of ‘supplier-induced demand’. Providing sufficient information is available to detect its occurrence, patient-owners can discipline employee-

practitioners who engage in such behaviour⁷. Furthermore, patient-employers can design employee remuneration contracts in order to reduce the likelihood of such behaviour occurring (e.g. utilising performance incentives that share the risk of opportunism with employee-providers – Robinson, 2001).

2.1.2 *Costs of Ownership*

With regard to the costs of ownership, patients may be the optimal (indeed, default) owners of a primary health care firm when the risks of ownership are too high for the alternative owners (i.e. service providers) to be willing to commit the capital (both physical and human) required to the firm (i.e. there is a ‘missing market’ for practitioner ownership). Such risks may arise because demand for health care in a given locality is either too small or too uncertain to induce practitioners to invest in firm ownership (given that they likely face less risky ownership options offering more certain or higher returns on their human and physical capital in other localities).

In order to ensure that any primary health care is provided in that locality, consumers (or their agents) must undertake the risks of firm ownership. Under these arrangements, practitioners are usually hired on a salaried basis (thereby reducing supplier uncertainty), but to offset higher risks, either fees charged to patients must be higher than in other practices, or operating shortfalls must be procured from other sources – for example, other sources of consumer capital, such as philanthropic donations, fundraising or subsidies from other consumer-owned and governed activities (e.g. taxation). Whilst ownership might be assumed in these circumstances by individuals who are not strictly themselves patients of the firm, it is important to note that any third-party engagement arises because those parties are giving effect to what would otherwise be consumer ownership of the firm, if only the consumers themselves could afford to assume the risks. Thus, the balance of governance interests in this case should lie with patients – because they are ultimately bearing the financial risks associated with the firm – rather than practitioners – who, having assumed the ownership risk-free status of salaried employees, have effectively signalled their aversion to bearing the financial risks of ownership.

2.1.3 *Which Patient-Owners?*

When individual patients have defined shareholdings, with a specified claim on all of residual assets, income streams and control, such an arrangement constitutes a classic shareholder-owned firm. It now matters *which* patients will own the firm – a subset or all patients jointly. Assuming only a subset of patients own the firm, then a risk exists that the

⁷ It is acknowledged that it may be difficult to detect such behaviour.

patient-owners will overcharge the other patients. If all patients jointly and equally own the firm, then the risk of exploitation disappears as the benefits can be shared equally. However, it also matters how that ownership stake is formalised. If each consumer owns a defined share of the assets and income streams (profits distributed as dividends) independent of trading activity with the firm (as in a standard for-profit firm), then owners consuming fewer services will have an incentive to charge those consuming more services higher fees in order to enjoy a higher dividend.

The equity required by primary health care firms is likely to be very small (premises can be leased and the typical practice equipment is, unlike specialist clinics and hospitals, not high-cost) when the patients' interest in the firm is as consumers, the most appropriate metric via which to define their ownership interests is from their custom rather than an equity stake. That is, the firm may have its least cost of ownership when established as a classic consumer-controlled co-operative. In a co-operative, all patients share equally in the governance of the firm, but any surpluses are distributed back to patients in proportion to their custom. The incentive to manipulate fees for personal gain is obviated – if fees above the cost of production are charged, the resulting profits are simply returned to precisely the same individuals who paid them in the first place (Hardesty & Salgia, 2004; Evans & Meade, 2006). Those who contribute most to the surpluses receive the greatest benefit (or if the benefit is distributed in the form of discounted fees, those consuming most services enjoy the greatest savings) whereas if surpluses were shared equally, healthier patients might be construed as profiting from the misfortunes of the sick.

Consumer-controlled co-operatives often emerge endogenously when customers face high costs of market contracting with a powerful supplier (e.g. groceries and farm supplies in rural locations). Such arrangements are especially likely to appeal in health care provision (relative to equal shareholding) as they also satisfy many social equity concerns. The merits of the co-operative form are evident from their endogenous emergence in the health care sector. Early examples include the Friendly Societies of the 18th and 19th century, elementary insurance funds such as Blue Cross, and Kaiser Permanente's elementary managed care plan (Birchall, 1997, 1998) (albeit that these organisations were engaged in both the funding of care and its delivery). Modern examples include trades and student union-owned clinics serving members who pay the costs of health care by a combination of regular membership dues and fees paid when services are actually consumed.

The literature on co-operatives notes that they are most likely to offer lower costs of ownership when the consumer-owners are relatively homogeneous in their demands for the product or are already closely linked for other purposes (Hendrikse, 2004). Demand homogeneity means lower likelihood of costly disputes over how the co-operative should be governed and managed. If the consumer-owners are already linked via other interests, then

the costs of governing the new firm are likely to benefit from economies of scale and scope with other activities. This provides a powerful explanation for the endogenous emergence of such co-operatives amongst worker unions and other extant organisations, such as rural and indigenous communities (such as *Marae*⁸ and *Iwi*⁹ Authorities in New Zealand), who are likely also engaged in co-operative ownership and management of a range of community facilities.

The greater the heterogeneity of the patient base, and/or in the absence of any existing entities under which to operate a patient-controlled co-operative, the more likely it is that the costs of co-ordinating governance and other decision-making will be high, thereby reducing the relative advantages of patient ownership over supplier-owned forms. In these instances, if patient ownership and control are still desirable, it may be most cost-effective for the individual patients to forgo a direct control interest in the firm and allow it to be constituted as one of Hansmann's non-owned firms (for example, as a Charitable Trust) (albeit that the lower co-ordination costs are achieved at the expense of higher costs of countering managerial opportunism – Milgrom & Roberts, 1992).

The non-owned firm is the form most likely to be observed where the costs and risks of ownership are so high that neither provider-owned firms nor consumer-controlled co-operatives emerge. It is noted that there are also strategic advantages in the non-owned form in the case where there is a 'missing market' for other ownership forms as it enables the trustees to access philanthropic (charitable) donations and tax concessions in order to meet the (necessarily) higher costs of service provision in such circumstances (Rose-Ackerman, 1986). However, the fiduciary duties of the governors of such firms would be expected to be aligned directly with those of patients as, but for the high costs of ownership, patients would have been the logical owners of the firm. It is noted that in these circumstances, it is usually patients and patient-agents who assume the responsibility for (and personal costs of) raising funds to meet shortfalls.

2.1.4 Summary: Patient Ownership

In summary, therefore, if the combined costs of ownership and market contracting lead to the conclusion that patients are the most efficient owners of primary health care firms, then this will most likely be manifested as either a patient-controlled co-operative where all patients share equally in the governance of the firm. Alternatively these will form as a classic non-owned nonprofit firm where the balance of governance responsibilities, reflected in the fiduciary duties binding those exerting control of the firm, favours patients interests.

⁸ The *Marae*, is Māori for the communal meeting area and also has great spiritual significance.

⁹ Māori for tribe

2.2 Why enter into Service Provider (Supplier) Ownership?

If service providers own a primary health care firm, it would be in their capacity as either the suppliers of physical capital in the first instance or health professionals as suppliers of human capital in the second instance.

2.2.1 Service Providers Own and Supply Costly-to-Contract Human Capital

Firms tend to be owned by the suppliers of physical capital (financiers or professional investors such as insurance and superannuation funds) when the physical capital requirements are very much larger than can be supplied by either customers or suppliers of other production inputs (e.g. labour, input commodities). Examples include electricity generators and telecommunications firms. By contrast, in primary health care, as noted, the demands for physical capital are very small - premises are typically not highly customised so are generally leased, and the 'tools of trade' (e.g. autoclaves, stethoscopes, scales, computers) are comparatively low-cost and non-specific compared to those required for hospital care delivery (e.g. radiotherapy treatment machines, MRI scanners, complex operating theatre equipment). Hence investor ownership of primary health care firms based upon physical capital needs is uncommon¹⁰.

Rather, if suppliers are to own the firm, it is most likely to be in their capacity as suppliers of human capital essential to the firm's activities. Practitioners must invest large amounts in developing their stock of human capital (education, training and experience). This investment is a prerequisite for entering into the business, and is sunk (i.e. cannot be recovered once made). In addition, the requisite human capital is both highly specific to the business of delivering primary health care (i.e. cannot easily be deployed into the provision of other services or at least not for a comparable return on the investment made), and therefore subject to hold-up. Hold-up occurs when, under a contractual arrangement (e.g. hiring an employee), the supplying party has some market power and may use threat of breach (e.g. withholding services) to extract from owners rents above a fair price for its acquisition). Furthermore, the one-to-one practitioner-to-patient nature of care delivery and the consumption of the good as part of its provision makes third-party (employer) monitoring of the level of effort exerted/quality delivered either very difficult or extremely costly for a third-party owner (Newhouse, 1973).

Together, the hold-up risks and monitoring costs render practitioner human capital essentially non-contractible (or at least very costly to contract for), so by Hansmann's

¹⁰ Arguably costs may be increasing as more complex diagnostic and treatment services are provided in community locations. However, it is not clear that even in these circumstances it is GP clinics that invest in such equipment – rather it tends to be specialist firms providing services to GPs and their clients who invest in these activities.

theories, the joint costs of ownership and market contracting will likely be least when the owner of the requisite human capital (the practitioner – doctor, midwife, nurse-practitioner etc) owns the firm. This appears to be confirmed by market evidence. Privately-owned primary health care firms are almost exclusively practitioner-owned, typically by a sole practitioner (Dranove & Satterthwaite, 2000; Scott, 2000).

2.2.2 Partnership: Militating Risks of Market Contracting, Increasing Ownership Costs

As the need for physical capital is small, there is no obvious equity-related reason why primary health care firms would comprise more than one practitioner. Indeed, quite often a ‘group practice’ is simply a convenient arrangement whereby sole practitioners jointly share common practice overheads such as premises, administration, and other services, but still trade under their own legally separate business identities (e.g. individual patient lists, separate tax registration)¹¹. Indeed, legal partnership may increase risks arising from factors such as malpractice suits (Danzon, 1997). Equity-sharing (jointly-owned) primary health care practices could thus be expected to arise only when the consequences of market contracting increase financial risks to sole practitioners, necessitating merging of individual businesses as a means of pooling the risks facing each individual practitioner. Such mergers will occur when the costs associated with managing the risks individually exceed the losses arising from imperfect contracts between the various owners as partners.

Financial risks to practice income are greater when the practitioners are remunerated under capitation contracts than under fee-for-service contracts¹² (Dranove, Simon & White, 2002). Income streams are more variable under capitation than fee-for-service as demand and the hence intensity of effort required to service that varies in both timing and care intensity but income does not (Robinson, 2001). Practice mergers enable losses incurred by practitioners whose patients demand more care or more intensive care than they are remunerated for to be offset by the surpluses earned by practitioners whose patients demand less, or less intensive, care than the firm is remunerated for.

However, as each practitioner’s activities are imperfectly monitored by others in the practice, the practitioner in an equity-sharing practice may exert less effort in that organisation than when working on his own account (due to moral hazard – Newhouse, 1973; Pauly, 1970; Zeckhauser, 1979). All else held equal, equity-sharing partnerships therefore tend to be less productively efficient than sole practices, so the gains from better risk-bearing

¹¹ It is noted that other professionals with similar physical and human capital and sunk cost profiles and hard-to-monitor-and-verify single client service delivery also use this same trading model – for example independent barristers operating in ‘chambers’.

¹² Under capitation, firms are paid a fixed amount on an annualised basis to supply primary health care services to the patients under their care. This does not stop them from also charging patients a ‘top-up’ fee. Whereas under a fee-for-service arrangement, patient visits to a health professional are subsidised by the purchaser making a fixed payment to the provider for each visit.

arrangements in the merged firm must outweigh the lost productivity for the change in ownership form to be economically justified.

2.2.3 Is Supplier-Controlled 'Non-Ownership' Ever Optimal?

As primary health care firms having defined supplier ownership stakes appears to be the norm, it begs the question when it might be conceivable that the costs of supplier ownership are so great as to warrant foregoing it in favour of a nonprofit firm with fiduciary duties constructed so as to reflect the interests of the otherwise optimal supplier-owners. Whilst it is not uncommon for practitioners delivering hospital care to merge and form nonprofit firms in order to induce philanthropic donations of costly physical capital¹³, the same does not appear to apply to primary health care, principally because the physical capital needs are so small. Furthermore, the argument that having many owners makes it prohibitively costly to maintain individual ownership interests likewise does not seem to apply to primary health care, given the economic characteristics trend strongly in favour of sole practitioner ownership. Whilst capitation funding might increase practice risk, leading to increased merger activity, even at full capitation (i.e. all market trading risks borne by the practitioners) in the United States context at least, it appears feasible for practices of around 25 primary health care practitioners to adequately manage the variations in patient demand (Hagen, 1999). It does not seem plausible that the costs of co-ordinating and motivating such a small number of practitioners would substantially outweigh the large counterfactual benefits of maintaining an ownership stake¹⁴.

The one exception borne out in the evidence appears to be the historic delivery of community-based care by religious charities and missions, where the care deliverers were themselves members of the religious or charitable order. To all intents and purposes, the philanthropic donations made to their supporting bodies were to finance the care deliverers in the first instance (such posts were often termed 'livings', reinforcing the conclusion that funding the deliverer's existence was the highest priority). The fiduciary duties of these organisations were focused strongly upon the interests of the care deliverers (indeed, 'missionaries' were often appointed as board members as well as managers of the firm, and many worked in isolation from colleagues with near total control over their time and resources made available). Moreover, unlike the consumer-beneficiaries of nonprofit firms

¹³ It is noted that philanthropic donations to practitioner-controlled nonprofit hospitals are almost always solicited and provided with the intention of benefiting practitioners in the first instance (e.g. the ability to perform a high-technology procedure (and in the case of a fee-paying system, charge fees accordingly) with patient benefits typically accruing as a secondary consideration. If there was a primary benefit to patients, either they or their insurers would be willing to pay fees reflecting the opportunity cost of the providers purchasing the equipment and providing services under commercial terms satisfactory to the providers of debt finance. Not surprisingly, such donations are typically made to teaching and research hospitals (Sloan, 2000).

¹⁴ This would appear to be the case only if the effort exerted under joint ownership is very substantially smaller than the effort exerted under the ownership counterfactual, and that non-ownership of itself will overcome almost all of the reduction in effort exerted – an unlikely scenario in practice.

and consumer co-operatives described above, the patients of the supplier-controlled firms had no genuine role as consumers in care delivery transactions – rather they were seen as subservient beneficiaries of charity care controlled and dispensed by the suppliers of that care in a manner that primarily satisfied the deliverers’ objectives (e.g. religious conversion). Few examples of this form of care delivery entity survive in the modern world due to a move away from philanthropic paternalism (Salamon, 1995) (although it has been argued that some charitable care delivered in third-world countries may still be motivated more by the need to satisfy the deliverer’s sensitivities than the recipients’ needs and preferences).

2.2.4 Provider Ownership Summary

In summary, therefore, it would appear that holding all other factors constant, if suppliers are to own primary health care firms, it will most likely be as sole practitioners. Whilst contractual remuneration forms and increasing capital requirements as more complex services are devolved from hospital and specialist care to community-based providers may encourage mergers to occur, it is most likely that the economic considerations encompassing the combined costs of ownership and market contracting mean that the firms will likely remain small and predominantly practitioner-owned.

2.3 ‘Mixed’ Ownership and Governance

As discussed in section four, the NZPHCS proscribes a governance model whereby control of PHOs is shared between practitioners and patients. Therefore, it begs the question of whether it would ever be economically optimal for consumer and practitioner interests to own the firm jointly, and to replace all defined ownership interests with fiduciary duties.

Joint ownership typically tends to emerge as a solution to either substantial future uncertainty leading to risks that are not possible to anticipate and assign contractually (e.g. joint ventures for exploration and research and development), or mutual holdup of essential resources that, again, is not amenable to resolution by contract (this occurs in, for example, coal mines, railways and coal-fired electricity plants). Whilst it is acknowledged that there may be risk of hold-up of human capital by suppliers (market contracting costs), which could be ameliorated by customer integration into ownership, it is not clear what resource could be mutually held up, except for the case of monopsony purchase by (for example) government funders. Although such a situation might be resolved by mutual ownership, it is not clear why this outcome would be necessarily superior to contractual resolution. As the human capital which is the subject of supplier hold-up poses contractual difficulties in any case, it may not matter whether it is within the firm or outside of it, as at some stage, the issue of remuneration for services provided must be addressed. Indeed, internalising the negotiations may lead to even greater tensions due to the increased heterogeneity of interests posed by having both

consumer and supplier interests involved. The outcome is likely to be increased costs of ownership, without necessarily reducing the costs of contracting human capital which still must be addressed. Indeed, internalising the tensions within the firm may reduce the firm's ability to use competitive market mechanisms to differentiate suppliers of human capital, exposing the firm to even greater risks of holdup and board capture occurring.

For these reasons, it would be highly unusual to see such a 'mixed' ownership arrangement emerging endogenously. Whilst the joint ownership of facilities is often observed (e.g. joint governance of hospital facilities or health clinics), the contracts for service provision tend to remain external to the operation of the facilities – either under employment or other arms-length contracts.

A potential caveat arises, however, when the entity engages in the subcontracted purchase of services for patients rather than, or in addition to, delivering them directly. If the only role for the firm is one of purchase, with no supply involved, then the firm is not a service provider but more properly a purchaser. Shared control of a purchasing entity between the patients for whom the services are purchased and the very providers from whom they will be purchased (who already possess information advantages over customers) would appear to invoke such a severe conflict of interest that the arrangement appears untenable. Consumer interests would likely seek to obtain full control of the purchasing entity and engage in arms-length purchase agreements with the relevant providers. If, however, the role was predominantly one of provision, it begs the question of what additional value mixed control might offer. If there was no tangible benefit from engaging consumer interests, then provider interests would prevail - as indicated in the preceding subsections where primary health care delivery firms are almost always owned by provider interests.

This logic tends towards the conclusion that 'mixed' governance will be observed only in the presence of restrictions in the markets for ownership and control that prevent one set of interests or the other gaining legitimate superiority (for example, provisions such as those in the NZPHCS that limit the payment of government funding to firms with 'mixed' control. Furthermore, it cannot be discounted that the economically more efficient outcomes would not be achieved by the optimal ownership interests exerting effective control internally whilst masquerading externally as having 'mixed control'.

3. Pre-NZPHCS Primary Health Care Ownership and Governance

The paper now considers the case study of New Zealand and the observed patterns of ownership of primary health care delivery firms in New Zealand prior to and following the implementation of the NZPHCS. The NZPHCS was introduced to a mature primary health care sector comprising a variety of providers across the entire spectrum of owned, for-profit,

non-owned and nonprofit forms. It would be expected that extant ownership interests and market transactions would have a significant effect upon the ways in which PHO ownership forms and governance arrangements have ‘emerged’. In particular, they would likely have a significant effect in determining both how PHOs formed, and whose interests – patients or providers - the balance of control of their governance functions of those PHOs would favour.

3.1 Pre-NZPHCS: Supplier Co-operation

Prior to the implementation of the NZPHCS in 2002 consistent with the theories of the combined costs of ownership and market contracting, General Practitioners (GPs) (the principal providers of primary health care in New Zealand) were mostly self-employed sole practitioners operating for-profit businesses. Fee-for-service government funding meant there were few financial risk-based reasons to merge practices. Rigorous registration processes and disciplinary procedures overseen by the Government and Medical Association acted as a check on the quality of service providers entering and practising in the profession¹⁵. Robust competition law, competition between practitioners for patients, and some government oversight of fees in respect to the co-payments made by those individuals qualifying for treatment subsidies, acted as a check on the ability of practitioners to charge prices substantially in excess of cost¹⁶.

Whilst most GPs operated independent businesses, for the purposes of delivering health care, they were linked collectively via their membership of the New Zealand Medical Association (NZMA). Furthermore, some collaborated via geographically distributed Independent Practitioner Associations (IPAs). The IPAs in particular, had emerged in response to market-based reforms in the early 1990s for the purchasing and supply of all health care services, including primary health care.

3.1.1 IPAs as Practitioner-Controlled Co-Operatives

IPAs formed initially as geographically-based collectives of GPs working in supplier-owned private practices, therefore GPs employed by government or non-GP owned entities such as consumer-owned co-operatives and nonprofit entities were not eligible for IPA membership. Each IPA is a legally distinct entity. The legal forms of their incorporation vary with some having defined shareholdings, but all are characterised by having nonprofit

¹⁵ Similar processes also existed for other health professionals (e.g. nurses via the New Zealand Nurses’ Organisation and midwives via the New Zealand College of Midwives).

¹⁶Primary health care delivery, with repeat custom and sunk human capital costs, exhibits a pattern of monopolistic competition where individual preferences and high search costs mean that prices tend towards average rather than marginal cost, and are typically higher the more practitioners there are competing in a given geographic location, all else equal (Carlton & Perloff, 2005).

objectives and control exercised ultimately by their controller-members. As their predominant purpose was initially to provide services to their members, in essence they began as consumer-owned co-operatives.

IPAs were initially formed for the purpose of supplying to GPs those services which were costly to co-ordinate and self-provide at the level of an independent practice or small group practice. This included education, training, locum management and other services benefiting from scale economies. GP members held the balance of power in governance arrangements in nonprofit IPAs. Membership was voluntary, and by no means did all practice-owning GPs join IPAs when they were initially formed in the 1980s. Following health care reforms in the 1990s, many IPAs levered off their existing relationships with GPs in private practice to become vocal advocates for the interests of their members, and membership increased commensurate with an increase of the benefits to members from IPA activities. By the implementation of the NZPHCS in 2002, 67% of GPs had joined IPAs (Controller and Auditor-General, 2002).

Government policy changes in 1995 enabled government funds to be spent on a much wider range of services than the historic subsidies paid to GPs for classic primary health care consultations. As entities linking service providers, IPAs were ideally placed to devise new care delivery models and tender for the funding to operate these new services. Classic economies of scope and scale meant that the ownership and contracting costs for IPAs to provide these services were lower than the counterfactual of establishing new entities for delivering equivalent services. However, as the GP-members continued to deliver traditional services in their surgeries, the new services tendered for by IPAs tended to be complementary to the classic GP consultation. These included control of laboratory and pharmaceutical budgets accessed by their members; new programmes targeting sufferers of specific diseases (e.g. asthma, diabetes), immunisation programmes and school health services.

New IPA-controlled services were typically provided by staff hired as employees specifically to operate the new programmes, rather than by IPA members as part of their membership of the co-operative. Although some members did become IPA employees for specific programmes, they were generally contracted and remunerated separately for these activities, which they delivered in addition to their GP practice activities. Profits generated from IPA-delivered services were applied to improve the services provided to GP members (e.g. increased education and training, development of computer systems for GP practices and linking practices to each other and the IPA electronically). Whilst the original advocacy and practice support activities continued to be provided to GP members as consumers, in respect of the new services IPAs morphed from being simple consumer-owned co-operatives serving GPs, to complex organisations embracing historic membership services and supplier-

controlled co-operative arms contracting to sell services (via government contracts) to end consumers (patients).

The fiduciary duties specified for the governance of IPA-provided activities quite appropriately reflected the interests of the GP members as the nominal owners and controllers of the organisation, in respect of both the GP-as-consumer and GP/IPA-as-supplier activities. The IPA nonprofit objective had no demonstrable effect upon the identity of the controlling interest. The interests of the final consumers of the services delivered by IPAs would not have been expected normally have entered into the governance arrangements of the firm, as they could quite reasonably have been addressed in the contract for sale and purchase of the services without any recourse to any additional governance obligations on the firm (Jensen, 1991). The corollary is the governance arrangements of the GP-owned firms supplying services to patients. Patients have no legitimate expectation of a governance role in those firms, so likewise were not expected to have a governance role in a firm which was in effect the collective manifestation of many such GPs 'merged' notionally into a larger co-operative. If there were some additional costs of market contracting that indicated consumers would be more efficient owners of the firm, then resolution would have been achieved by consumers purchasing the IPA-firm, installing governors and fiduciary duties that reflect their interests and hiring the GPs as employees (or setting up a consumer-controlled firm to compete with the IPA-owned firm). However, this did not occur.

That provider-controlled General Practices and IPAs dominated the supply of primary health care prior to the implementation of the NZPHCS (and no legal or regulatory prohibitions other than the preferences of government purchasers prevented competition from firms of alternative ownership) suggests that, all else held equal, there was no compelling economic justification for any other stakeholding interests to seek to acquire them.

3.2 Consumer-Governed Models

Despite the dominance of provider-controlled firms, consumer ownership of primary health care services also arose endogenously in New Zealand. Prior to the 1995 reforms that opened up new health care delivery options, consumer controlled firms emerged endogenously only in a limited number of circumstances. These firms mainly served comparatively homogeneous consumers of health care services whose service preferences differed from those of the customers of supplier-controlled services. The consumer-controlled firms were most usually already organised co-operatively for the provision of other services. Examples include primary health care services owned by worker or student unions, where patients have similar life- and health-state conditions, and iwi health clinics where patients may favour care delivered according to specific cultural criteria that is not normally provided in the wider community of health care providers.

Whilst initially formed under a government funding arrangement that remunerated only GP services and staffed by salaried GPs, following the 1995 reforms, the consumer-controlled firms began to expand both in number and in the range of services provided. Iwi-based services, leveraging off the economies of scale and scope present from the range of social and welfare activities already undertaken by these communities experienced the greatest growth. Similar ventures arose around Pacific Island communities (often church-based) and youth activity centres (Crampton, Davis & Lay-Yee, 2005). The firms were either explicitly owned by the entities co-ordinating the consumer interests (albeit that some were themselves non-owned entities) or were strictly non-owned. In either case, the governance arrangements and fiduciary duties reflected the interests of their consumers as the economically logical owner-beneficiaries.

An important subset of consumer-controlled firms has emerged as a consequence of the ‘missing market’ for ownership of primary health care firms. This is commonly seen in rural areas of New Zealand, where low population density and isolation discourage primary health care providers from wanting to practise in that community. Typically, the organisation emerges when the existing practitioner (often of long standing) wishes to sell and cannot find a buyer for the business (e.g. upon retirement). Rather than lose medical services altogether, community representatives assume responsibility for the co-ordination and provision of services. Whilst on the one hand, this may lead to ‘innovation’, because often necessity opens up opportunities to create new ways of providing services (e.g. nurse clinics rather than GP clinics; use of new technologies to provide advice to patients in the absence of a physical practitioner; transport co-ordination to take patients to practitioners in other locations), on the other hand it is usually a second-best to having dedicated general practitioner services. It is also a high-cost option, and the firm’s future may also be uncertain due to the vagaries of charity revenue and historic reliance upon short-term funding contracts that militate against practitioners making a long-term commitment to the community.¹⁷

4. Strategic Positioning under the NZPHCS

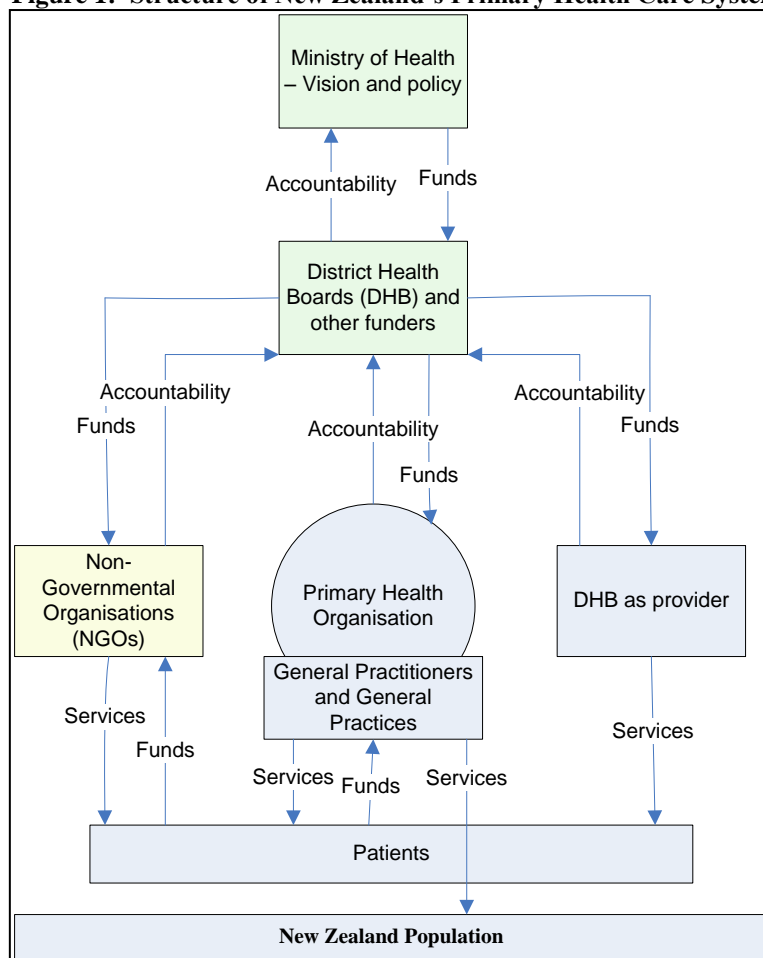
The NZPHCS was introduced in 2002. A key feature was a substantial increase in the amount of government funding applied to the sector. In order to access increased government funding, primary health care practitioners were required to affiliate with new nonprofit PHOs. Government funding was channelled to the PHOs through District Health Boards (DHBs); the latter were prohibited from contracting with for-profit organisations (for

¹⁷ These clinics could be staffed by employees, by GPs in a profit-sharing arrangement with their community or be leased as a rent-making function for the community.

primary health care) so that public monies "would not be diverted into dividends" (Minister of Health, 2001, p.14).

By 2007, 80 PHOs had been established. PHOs were charged with either providing, or contracting for the supply of, primary health care services for enrolled populations. Each acts as an intermediary between the government funder (one of the 21 DHBs) on the one hand, and General Practitioners (GPs) and other primary health care providers on the other. As a result of factors such as their historical origins, the rapidity of the establishment of PHOs during the first 18 months of the NZPHCS, subtle differences in the demands the 21 funding DHBs placed on PHOs in their districts, and variations in the demographics and health needs of the patients enrolled in PHOs, a range of PHO legal forms emerged and are ‘tolerated’ by the DHB funders.

Figure 1: Structure of New Zealand’s Primary Health Care System



The system’s structure is shown in Figure 1. The Ministry of Health was responsible for vision and policy and funds the 21 DHBs. These DHBs run hospital services from a provider arm and contract with nongovernment organizations (including PHOs) for other

health care services. PHO funding is based on the number of members (patients) enrolled either directly with the PHO or with the GPs who are contracted to the PHO. Although GPs may themselves maintain independent for-profit practices with their own ‘patient lists’, they must contract exclusively with only one PHO. The institutional structure thus predisposes PHOs to operate in effect as a provider entity supplying services or ensuring the supply of services to its registered patients.

As the NZPHCS was introduced into an environment where three distinct types of nonprofit entities – two consumer-controlled and one provider-controlled - had emerged endogenously, it is perhaps unsurprising that many different legal forms for PHOs have emerged. It might be expected that the extant nonprofit entities would have a significant advantage in being able to quickly satisfy the non-ownership requirements in order to receive government primary health care monies. However, the NZPHCS required PHOs to demonstrate both service provider and constituent community representation on their governing bodies. As there was no evidence of ‘mixed governance’ entities pre NZPHCS, meeting this obligation required PHOs emerging from provider-governed origins to include consumers in their governing bodies, and consumer-governed PHOs to include providers.

From the theories of ownership costs, mandating a ‘mixed governance’ model most likely imposes substantial additional costs of ownership as a consequence of having to coordinate the interests of an extremely heterogeneous set of stakeholders. For example, as consumer-governors needed to be apprised of provider issues, and vice versa, it would take much longer to make decisions than under the counterfactual of respectively provider-controlled and consumer-controlled firms¹⁸. Furthermore, the dual governance model invokes the risk of capture of the firm’s governance agenda by one set of interests at the expense of the other. In that case, rather than the PHO being governed in the mutual interests of both its stakeholding groups, the PHO would likely operate as either a de facto supplier-controlled or consumer-controlled entity depending upon which interests were captured or engaged in the capturing.

In practice, the competitive interactions emerging under the NZPHCS made speed of PHO formation the main imperative (Howell, 2005). As community-controlled groups were almost always non-owned nonprofits, often with some (minority) provider representation already in place on their boards, migration to PHO status occurred quickly. Indeed, it would appear that the PHO governance arrangements had been modelled upon examples of community-governed organisations. In order to avoid losing patients to newly-formed PHOs receiving higher levels of funding (a cost of market contracting), existing providers (namely independent GPs) faced very strong incentives to join or form their own PHO as soon as

¹⁸ Howell (2005) reports one PHO representative (service provider) noting that it took eighteen months for the consumer representatives on the board of his organisation to ‘get up to speed’ on the issues facing providers in the sector.

possible. IPAs offered the logical vehicle via which to achieve this. Consequently, most IPAs responded by forming 'subsidiary' operations (often a charitable trust) where they continued to exercise supplier control by appointing board members (typically their members and staff such as nurses working for GP clinics) and determining the processes via which other representatives were appointed. Appendix 1 shows that of the 77 PHOs in existence in 2004 covering 95% of the population, 30 had their origins in community-led organisations and 47 emerged from practitioner-led initiatives. The PHOs with community origins delivered services to 8.3% of the registered population. Provider-origin PHOs covered the remaining 91.7%.

Whilst in each case the governance arrangements 'on paper' met the NZPHCS requirements for governance by mutual interests, in practice it would be surprising if the balance of governance interests of the PHOs were not in practice biased towards the interests of their originating stakeholders. The case study in Howell (2005) of a large urban PHO indicates that this is essentially what occurred in one region, where to all intents and purposes the PHO was operating as a wholly-owned subsidiary of the IPA. The IPA controlled the process by which community representatives were appointed. Moreover, a management company owned by this IPA was contracted to provide management services to five PHOs in adjoining geographic locations. In the 2003-4 financial year, the PHO had a board of eleven trustees. Six were general practitioners and directors of the IPA. Two more were non-GPs whose appointment to the PHO was controlled by the IPA¹⁹. The chair of the PHO was the chair of the IPA. Clearly, the balance of governance control of this PHO lay squarely with the IPA. It is quite likely that the boards of other PHOs of IPA origin were similarly constituted. Cordery (2008) also recounts a similar situation in another region where the PHO was operated as a wholly-owned subsidiary of the IPA. The one PHO staff member was employed by the IPA, GPs contracted with the IPA which operated the PHO contract through the charitable PHO trust. Fiduciary duties were undertaken by those appointed by the IPA-member GPs.

5. Conclusion

The case studies would appear to confirm that, despite the intentions articulated in the NZPHCS that governance of PHOs be shared between provider and consumer interests, effective control of the new entities has followed the service provider ownership interests prevailing prior to the implementation of the policy. Provider interests appear to have dominated in the formation of PHOs covering over 90% of the population. This would be expected given the extent to which provider interests controlled firms prior to the

¹⁹ The two directors concerned were to be practice nurses employed by IPA members.

implementation of the strategy. Consumer interests appear to have prevailed only in a minority of PHOs emerging from entities which, for a variety of endogenous economic reasons, were already consumer-controlled prior to the NZPHCS. Whilst the policy might require evidence of mixed governance, it is quite likely that the underlying economic realities of the costs of ownership and market contracting biased the actual governance of these entities towards their original controlling interests. As the absence of a defined ownership stake now precludes the ‘takeover’ of control using ownership interests, unless there are significant changes in the external environment, the balance of locus of control interests are unlikely to alter substantially.

We note however, that the case study analysis undertaken for this paper has provided only a snapshot of the new entities based upon secondary data and relates to the formation of PHOs and not current practices. Consequently, further research is indicated in two dimensions. The first is to investigate whether the balance of control by either consumer or provider interests indicated by the secondary data at the time of PHO formation is reflected in the nature of decisionmaking processes actually undertaken by the governing bodies. The second is to investigate whether the effect of recent PHO amalgamation, partly in response to policy directives as a consequence of the burgeoning costs of PHO operation, has altered the balance of effective control of PHOs between provider and consumer interests.

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Appendix 1. PHO Origins 2003-4.

Consumer Origins	Enrolled Population
Hauora Hokianga Integrated PHO	6,633
Kaipara Care Incorporated	12,008
Tihewa Mauriora Charitable Trust	8,729
Wangaroa Primary Health Organisation	318
AuckPAC Health Trust Board	30,044
Langimalie Health Clinic Tongan	6,039
Tipaka Moana PHO Trust	6,523
Coast to Coast PHO (North Rodney)	11,910
Mangere Community Health Trust	11,827
Peoples Healthcare Trust	5,935
TaPasefika Health Trust	18,768
Te Kupenga O Hoturoa Charitable Trust	19,364
Hauraki PHO	7,199
Maori Primary Health Organisation Coalition	7,328
North Waikato PHO	8,878
Nga Mataapuna Oranga	8,685
Te Ao Hou Primary health Organisation	7,176
Ngati Porou Hauora Incorporated	12,579
Te Kupenga A Kahu Trust	6,870
Wairoa District Charitable Health Trust	8,630
Te Tihi Hauora o Taranaki	6,140
Taumata Hauora Trust	5,492
Otaki Primary Health Organisation Trust	5,975
Tararua PHO Limited	15,882
Porirua Health Plus Limited	12,857
South East & City Primary Health Organisation	9,543
Piki te Ora ki Te Awakairangi	12,248
Ropata Community PHO	16,186
Tamati Whangai PHO	4,563
Hurunui Kaikoura Primary Health Organisation	12,278
Total	306,607
Producer Origins	
Manaia Health PHO	74,244
Te Tai Tokerau PHO Ltd	41,468
Auckland PHO Ltd	15,636
Procure Network Auckland Ltd	305,674
Tamaki HealthCare Charitable Trust	31,023
HealthWest	149,365
North Harbour PHO Trust	149,797

Procure Network North Limited	88,540
East Health Trust	69,851
Waiora Healthcare Trust	10,652
Procure Network Manukau Limited	260,039
Total Healthcare Otara	74,827
Pinnacle	286,401
Kawerau Interim Primary Health Organisation	7,208
Eastern Bay of Plenty PHO Ltd	31,463
Western Bay of Plenty Primary Health Organisation	125,836
Turanganui PHO Limited	33,500
Lake Taupo PHO Ltd	33,821
Rotorua General Practice Group Ltd	66,401
Hawkes Bay PHO Ltd	131,336
Pinnacle Incorporated	47,371
Taranaki PHO Ltd	45,770
Whanganui Regional PHO	47,760
Horowhenua PHO Ltd	23,843
Capital PHO	127,559
Kapiti PHO	33,219
Karori PHO Trust	12,668
Tumai mo te Iwi Inc	45,056
MidValley Access PHO	20,319
Valley Primary Health Organisation	76,953
Wairarapa Community PHO Trust	37,159
Marlborough PHO Ltd (Nelson Bays Primary Health)	38,379
Nelson-Tasman PHO Ltd	86,577
West Coast PHO	25,396
Canterbury Community PHO	5,082
Partnership Health Canterbury	332,828
Rural Canterbury PHO	74,910
South Canterbury PHO Limited (Aoraki PHO Ltd)	53,802
Mornington Primary Health Organisation	14,595
Central Otago PHO Ltd (Rural Otago PHO)	37,837
Dunedin City PHO Ltd	79,065
Eastern and Northern Southland PHO	16,920
Waihopai PHO Limited (Invercargill - Te Ara A Kewa PHO)	59,336
Otago Southern Regional Primary Health Organisation	17,561
Taieri and Strath Taieri Primary Health Organisation	13,859
Rural Southland PHO Limited (Takitimu PHO)	13,922
Wakatipu PHO	11,644
Total	3,386,472

Source: Ministry of Health http://www.moh.govt.nz/moh.nsf/wpg_index/-Primary+Health+Care+Established+PHOS and Ministry of Health (2005).