

**Illuminating the local: can non-formal  
institutions be complementary to health  
system development in Papua New  
Guinea?**

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Andrew McNee is a visiting fellow at the Development Policy Centre at the ANU's Crawford School of Public Policy.

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## Abstract

This paper offers a fresh insight into the performance and reform opportunities of the formal health system of Papua New Guinea. A central tenant of this paper is that the historically imposed and continuing top-down nature of the formal health system in PNG is not capitalizing on potentially positive incentives and motivations inherent in the broad range of non-formal institutions that frame the PNG health system. The paper suggests that an enhanced understanding of these non-formal institutions may provide clues for how the formal system could be reconfigured to better align with the non-formal. The opportunity offered by this approach is to leverage the energy, motivation and legitimacy inherent in non-formal institutions to better buttress or infuse the formal health system.

The paper draws on an emerging body of development thinking that recognises that development depends on institutions that are stable, fair, legitimate and flexible enough to reflect political pressures; and that in turn, these kinds of institutions are the product of the interplay of formal and informal institutions. In particular, this theory argues it is when informal institutions are “complementary” to formal institutions that institutions are likely to be most effective. In these situations informal institutions support the formal institution through “filling in gaps” either by addressing contingencies not dealt with in the formal rules and/or by facilitating or creating incentives for individuals to pursue the goals of formal institutions.

The paper analyses the PNG health system through the lens of this non-formal institutional framework. This analysis, based on secondary data, suggests:

- Historically, the formal PNG health system was introduced as part of the broader process of colonial administration which, in combination with a number of contemporary ideological forces, allowed little or no space for indigenous negotiation, contestation, or engagement on the form of the PNG health system, or the nature of care within that system.

- This legacy of top-down planning and delivery in the formal health services of PNG continues, in a modified form, to the present.
- There is a rich, vibrant matrix of local, intersecting non-formal institutions of relevance to health in PNG – non-formal institutions that are characterised by strong and deep engagement and contestation around health and illness issues.
- The formal health system is not optimally leveraging the motivation, energy and legitimacy inherent in these non-formal institutions.

Some elements of the non-formal institutions in PNG that, *prima facie* would appear to be potentially complementary to health service development include:

- Local leadership keen to capitalise on the perceived “modernising” political benefits of western health services;
- Communities seeking to locate health workers, and health facilities more broadly, within local social relationships – relationships that coincide with understood social obligations;
- Space for local negotiation around appropriate level/form of user fees – with a considerable degree of intra-family subsidisation, group based risk sharing, and exemptions for the poor;
- A high degree of patient autonomy – with health seeking behaviour influenced by a social understanding of the cause and appropriate treatment of illness;
- A very strong tendency to locate ill-health in ruptured social relations - which require a range of collective actions to remedy;
- The potential for the associational value of provider associations to provide a source of constraint on health worker behaviour that is not evident from government;

- A vibrant (if diverse) range of traditional health systems that remain common and valued healing resorts for many Papua New Guineans, and which have shown a relative degree of openness to western healing;
- A rich tapestry of community and clan based organisations that are actively engaged in solving local collective action problems, including health improvement activities.

The paper argues there is no blueprint for how an awareness of non-formal institutions could be incorporated into possible institutional re-design/reform of the PNG health system. However it does conclude with a number of general pointers to guide possible action. These include:

1. The critical importance of looking beyond the façade of the formal organisational and institutional arrangements of the health sector to make visible the non-formal institutions that surround and shape the formal.
2. The need for deeper and more meaningful structures of engagement/ involvement of the PNG populace in the form, financing, delivery and performance of the PNG health system.
3. The need to understand better the scale, motivation and practices of local, village based private health resources.
4. The opportunity to build more dispersed mechanisms of sector regulation – including community monitoring of services, and competition between providers based on reputation and accreditation.
5. A more concentrated focus on how traditional and formal health services can co-exist and, over time, integrate to create new or “hybrid” institutions.
6. A possible larger role for provider associations as organisational actors in the planning, development, management and regulation of PNG health services than is currently the case.

# **Illuminating the local: can non-formal institutions be complementary to health system development in Papua New Guinea?**

## **1. Introduction**

This paper aims to provide an enhanced understanding of the non-formal institutional arrangements which may exist to support health system development in Papua New Guinea. A key assumption of this paper is that formal health systems (including PNG's) are framed and influenced (potentially positively and negatively) by the broader cultural, social and political environment within which the system is embedded (North 1995; Atkinson 2002; Saltman 1997). It is hoped that a greater understanding of the nature of these broader factors (called non-formal institutions in this paper) and how they currently or potentially interact with the formal health system will contribute towards assisting current strategies to make the formal health system in PNG more effective, and also possibly open up space for how the formal health system may evolve to be more strongly embedded in the specific environment(s) of Papua New Guinea.

The paper is framed by an emerging body of development thinking and practice centred on institutional theory. This theory focuses on the centrality of robust, legitimate institutions to effective development outcomes (North 1995; Rodrick et al 2004), and in particular the interplay of formal and informal forces in shaping the emergence and development of these institutions (Boesen 2006; Goodin 1996; Booth 2011; Kelsall 2011; de Soysa and Jutting 2006; Leftwich & Hogg 2008). The paper provides an overview of the theoretical basis of this literature, and then based on a review of the relevant empirical literature, constructs a framework of how this work links to international health system development.

The particular value of this theoretical literature to development thinking generally, and to health system development more specifically, is the insight it offers to understanding incentive and motivation. Institutions (as the "rules of the game") are important to development because they constrain or enable

behaviour (Helmke & Levitsky 2004; Shivakumar 2005). The theory argues institutions are likely to be most effective when they are permeated, fused or buttressed by “complementary” informal institutions (Goodin 1996; Helmke & Levitsky 2004; Booth 2011). Complementary informal institutions support formal institutions through “filling in gaps” either by addressing contingencies not dealt with in the formal rules and/or by facilitating or creating incentives for individuals to pursue the goals of the formal institution (Helmke & Levitsky 2004). Alternatively when institutions are designed or imposed as top-down, rational, external constraint based solutions to collective action problems, they run the very considerable risk of being misaligned with existing non-formal institutions - institutions which may well be managing on a norm or collective (non-formal) basis some or all of the problem the top-down institution is designed to address. In these cases, confusion, inefficiency and ineffectiveness are likely outcomes (Ostrom 2000; Shivakumar 2005). It is also possible in these situations, “intrinsic motivation” of local actors to engage with or solve problems may be “crowded out” (Ostrom 2000; Frey 1994).

Thus in short, the key theoretical insight underpinning this paper is that effective institutions require the enduring energy, motivation and legitimacy inherent in non-formal institutions, and as such, a key development question is if, and how formal institutions – including formal health systems – can optimally leverage and interact with the non-formal to improve their overall effectiveness.

The paper then applies this theoretical insight to the PNG health system. The PNG health system is chosen for this kind of analysis as *prima facie* its formation through the colonial period (cf Denoon 1989); ongoing poor performance (cf NDOH 2010; Foster et al 2009); and limited reform success (cf Thomason & Kase 2009; Day 2009) suggests an alternate, more institutionally grounded understanding may assist those trying to affect change. The hypothesis of this paper is that there are a broad range of non-formal institutions that frame the formal PNG health services which have not to date been systematically or productively considered in reform strategies. The paper conducts a major review of the secondary literature related to non-formal institutions in PNG, and on this basis concludes there are elements of non-formal institutions in PNG that

would appear to be potentially complementary to the development of the formal health system of PNG, and as such, if these were more strongly fused with the formal, may provide a, “bottom-up” source of incentive and motivation to deliver on the objectives of the formal health system.

The paper concludes with some broad suggestions for how PNG actors may further elaborate and progress insights that emerge from this paper. However at the outset it is also important to state that the findings and suggestions in this paper are not definitive. The paper’s insights and possibilities are based on secondary data. They suggest starting points for further discussion, analysis and research. Central to this process would be further thinking about the practical implications of this line of reasoning. Equally important would be primary research – which would both test the work of this paper, and which would also more than likely identify possible new interactions between the informal and the formal. However it is hoped that what this paper has provided is a relevant framework to guide this further deliberation – a framework which clearly recognises the central and critical importance of the formal health system of PNG being more strongly fused with the broad range of non-formal institutions of relevant to health in PNG. How, or if, this can be achieved is the focus of more work.

## **2. Institutional Theory**

### **2.1. Definition**

The key insight offered by an institutionalist perspective is that individual behaviours and actions are not the product of free-floating, unconstrained, self-interested agents, but rather are framed (but not determined) by a set of broader rules, norms or scripts which make some paths more or less likely (Goodin 1996; Easterly 2008; Leftwich & Sen 2011). These broader forces are institutions.

Goodin (1996) defines institutions as “stable, valued, recurring pattern of behaviour” – which is social or collective in nature. This is consistent with the oft-quoted definition from North (1995) that institutions are “rules of the game” of a society, or more formally, the humanly devised constraints that structure



human interaction. Phillips et al (2004, p. 637) define institutions as “conventions that are self-policing”.

“Institutions influence behaviour because departures from them are counteracted in a regulated fashion by repetitively activated, socially constructed controls. In other words, deviation from the accepted institutional order is costly in some way, and the more highly institutionalised a particular social pattern becomes, the more costly such deviations are. Institutions involve mechanisms that associate nonconformity with increased costs in several different ways: economically (it increases risk), cognitively (it requires more thought), and socially (it reduces legitimacy and the access to resources that accompany legitimacy.” (Phillips et al 2004, p. 637)

Mackintosh and Tibandebage (2002), following Douglas, define institutions from a more anthropological perspective which does not posit such a clear distinction between individuals and institutions, but rather sees institutions as things we “think within” or “think for us”. In this sense institutions are more akin to “norms [that] are understood not as rules or constraints but rather as “scripts” for sense-making and as building blocks of identity” (Tibandebage 2002, p. 3).

## **2.2. Institutions, Organisations and Agency**

Leftwich and Sen (2011) emphasise that whilst institutions structure social, economic and political relations and interactions, they are not deterministic of such interactions. These authors see organisations (and in particular individual agency and political contestation through organisations) as being critical to the formation, maintenance and changing of institutional arrangements. In this context organisations are considered “players” or “the formally or informally coordinated vehicles for the promotion or protection of a mix of individual and shared interests and ideas” (Leftwich & Sen 2011, p. 323).

“Organizations aggregate and articulate interests, whether they are business or professional associations, trades unions, political movements, farmers’ organizations, women’s coalitions or other formal or informal

groups. They are therefore the critical political links between citizens and the decision-making organs of the state. Hence while it is true that ‘institutions matter,’ individuals and organizations matter too, for it is they who forge, maintain, implement and change institutions.” (Leftwich & Sen 2011, p. 333)

Ostrom (2000) also points to the importance of individual agency vis-à-vis institutional development and change. Drawing on a range of experimental data and development case studies, she argues there are multiple types of actors in relation to collective action problems - with some approximating the rational, self-interested egoist, and others following “norms of behaviour – such as those of reciprocity, fairness and trustworthiness – that lead them to take actions that are directly contrary to those predicted by contemporary rational choice theory” (Ostrom 2000, p. 8). She argues that institutional design needs to be cognisant of the diffuse nature of individual agency as:

“The evidence shows that in some settings – particularly those where individuals lose a sense of control over their own fate – providing external inducements to contribute to collective benefits may actually produce counter-intentional consequences. External incentives may crowd out behaviours that are based on intrinsic preferences so that the lower levels of contribution are achieved with the incentives than would be achieved without them.” (Ostrom 2000, p. 5-6)

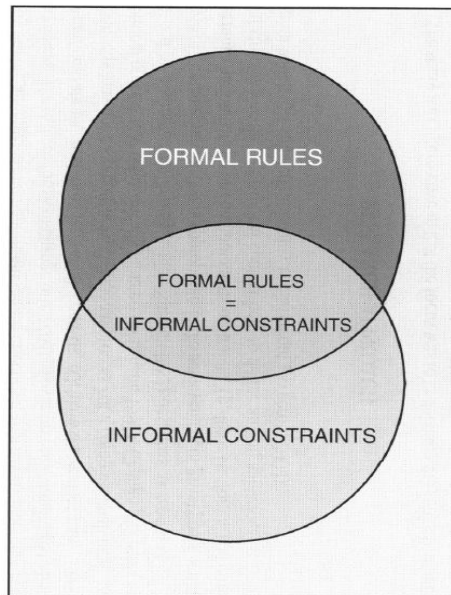
In this context, Ostrom concludes that the institutional design needs to allow structures and processes that enhance, rather than crowd out, intrinsic motivation.

### **2.3. Formal and Informal Institutions**

Institutions can be formal and informal – the former regarded as universal and transferable rules (eg constitutions, laws, charters, by-laws, regulations, property rights, contracts etc); and the latter including features of group life such as norms, traditions, social conventions, relationships, networks (Rodriguez-Pose 2010; Piotti et al 2006). Informal institutions can be defined as a

“behavioural regularity based on socially-shared rules, usually unwritten, that are created, communicated, and enforced outside of officially sanctioned channels (de Soysa & Jutting 2006; Helmke & Levitsky 2004).

**Figure 1: The interaction of the formal and informal institutions**



*Source: Piotti et al 2006*

Formal and informal (indigenous) institutions can interact in a number of different ways. Goodin (1996) argues it is precisely the deeply nested rules/norms drawn from the informal and which often are not codified or written – but understood and accepted – which can permeate formal institutions, and can give them their stability, predictability and value. Conversely, where there is little overlap between the formal and informal, and the formal rules cannot be enforced adequately, then informal constraints will dominate (Piotti et al 2006). Figure 1 provides a broad schematic view of the relationship between formal and informal (Piotti et al 2006).

Helmke and Levitsky (2004) extend this analysis to develop a useful typology which provides a more sophisticated understanding of how informal and formal institutions interact. In their framework, there are four possible interactions.

Complementary informal institutions arise when informal institutional outcomes and formal institutional rules substantially coincide. In these situations informal institutions support the formal institution through “filling in gaps”, either by addressing contingencies not dealt with in the formal rules and/or by facilitating or creating incentives for individuals to pursue the goals of the formal institutional framework. In effect, complementary informal institutions provide a foundation, or the glue, for formal institutions by creating the incentives to comply with the formal rules that otherwise may only exist on paper (Helmke & Levitsky 2004). Examples of this interaction include the effectiveness of Singapore’s post-colonial bureaucracy being attributed to the underlying norms of meritocracy and discipline (Helmke & Levitsky 2004), and the provision of public goods by rural Chinese village governments being enhanced by informal norms of social obligation generated by membership of local temple associations (Helmke & Levitsky 2004).

Accommodating informal institutions occur when there is discord between the intent of the informal and formal, but the formal prevails but not necessarily fully in the form intended. In other words, in these situations the informal institutions create incentives to behave in ways that alter the substantive effects of formal rules, but without directly violating them. de Soysa and Jutting (2006) provide an example of hiring practices within many universities whereby departments tend to hire each other’s students despite formal and apparently transparent recruitment processes. In this case, actors do not have the power to change the formal process, but effectively subvert it by following the letter if not the spirit of the procedure. It likely produces an outcome which is efficient in some regards – quicker appointment and good relations with colleagues – but may not be fair or necessarily provide the best candidates.

Substitutive informal institutions combine ineffective formal institutions and compatible informal arrangements. In these situations informal institutions are employed to seek outcomes that are consistent with formal rules and procedures because of the lack of effectiveness of formal institutions. An example of this situation are informal *rondas campesinas* (self-defence patrols) established in

Peru during the 1970s in response to the failure of police and courts to provide effective protection (Helmke & Levitsky 2004).

Competing informal institutions is a situation where formal rules and procedures are not enforced, and informal institutions create incentives that are incompatible with the desired intention of the formal institution. Helmke and Levitsky (2004) provide examples of this situation as “particularistic” arrangements such as clientelism, patrimonialism, clan politics and corruption. They also suggest that such situations are often found in post-colonial contexts where formal institutions were imposed on indigenous structures, and provide the example of the Ghanaian civil service being caught between the formal rules of the civil service and the loss of social standing in the community if they ignored kinship group norms to favour families and villages (Helmke & Levitsky 2004).

A clear and important implication of this analytical framework is that institutions are likely to be most effective where there is high degree of overlap between the formal institution and complementary informal institutions; and vica-versa formal institutions are likely to be less effective where competitive, substitutive or accommodating informal institutions dominate (Helmke & Levitsky 2004; Piotti et al 2006).

### **3. Institutionalism and Development**

It is well established that development depends on a society’s effectiveness in creating institutions that are productive, stable, fair and broadly accepted and flexible enough to change and reflect political perspectives (North 1995; Rodrick et al 2004). Central to this understanding is that institutions generate shared expectations around collective action problems, and without these shared understandings (or rules) solutions to collective action problems will be less than they otherwise would be (Shivakumar 2005).

“Development concerns the realization of our adaptive well-being through productive associations with others. Institutions matter for development because they represent a shared understanding within a community of the rules we need to cooperate successfully with each other

... Successful collective action is required for individuals to do such things as grow food, build roads, maintain safe neighbourhoods.... [and] more broadly to craft and maintain the rules governing market exchange and collective decision making. The failure of social cooperation is rooted in a variety of social dilemma's that, in the absence of countervailing institutions, lead to failures of collective actions" (Shivakumar 2005, pp. 1-2)

The centrality of institutions to development, combined with the insight that institutions have both formal and informal dimensions, has given growth to a body of development scholarship which aims to embrace the reality and opportunities of indigenous institutions in development practice. Operating under various banners – “bottom-up” (Easterly 2008); “starting from here” (Shivakumar 2005); or “working with the grain” (Booth 2011) – these theorists argue that much of what has occurred under the guise of firstly colonial administration, and later development assistance (often in the guise of “good governance”) to try to build or transplant strong, stable, legitimate institutions to developing countries, has been ill conceived and ineffective (Pritchett et al 2010; Grindle 2011; Ostrom 2000; Easterly 2008; Goodin 1996; Rodrik 2008; Evans 2004).

These authors argue that when institutions are designed or imposed as top-down, external constraint based solutions to collective action problems, they run the very considerable risk of not being congruent with existing institutions - institutions which may well be managing on a norm or collective basis some or all of the problem the top-down institution is designed to address. In these cases, confusion, inefficiency and ineffectiveness are likely outcomes (Ostrom 2000). Further there is the added risk that the top-down approach may in fact lead to a more rapid breakdown of the existing institutional arrangements, which if the new top-down institution is not yet in place, or fully accepted, could lead to an overall worsening of the situation. Easterly (2008) gives the example of land titling in Africa as an example of this phenomena. Ostrom (2000) also provides examples of this phenomena drawn from local resource management.

These would be examples of “competing” informal institutional arrangements as per the Helmke and Levitsky framework set out above.

Thus armed with the core twin understandings of the failure of traditional approaches to transplanting institutions from developed to developing countries and the conceptual power of a more sophisticated understanding of institutional development based on a constructive fusion of the formal and informal, a diverse range of thinkers are actively developing a body of theory and practice around an alternative approach to institutional development – an approach that is grounded in the specific political and cultural milieu of particular contexts. This approach can be summarised as follows:

“..institutions work better when they build on what exists, make use of indigenous institutional creativity or are otherwise rooted in their sociocultural context. They work badly when they rely heavily on the implantation, without major modification, of models that have worked well in other times and places.” (Booth, 2011a)

The key elements of this emerging approach are:

- Avoidance of “universal best practice” templates imported from elsewhere to guide institutional development (Pritchett et al 2010; Grindle 2011; Ostrom 2000; Easterly 2008; Goodin 1996; Rodrik 2008; Evans 2004);
- Building on existing institutional arrangements that are working in some way in terms of solving collective action problems, and which can evolve through “practical hybrids” to become “good enough”, grounded, legitimate, institutions capable of supporting broad based sustainable development (Ibid; Shivakumar 2005; Adler et al 2009; Kellsall 2011; Bloom et al 2008; Booth 2011a; Hoefstadte & Roche 2011; Dhesi 2000);
- Recognising that development – even that based on appropriate fit of non-formal institutions – is an inherently political process, and that not all (or in some cases any) political leaders in some countries have the

incentives/interests to support the provision of public goods or drive indigenous institutional development processes. Rather their main interest may lay in harvesting “rents” to meet the needs of voter/supporter groups (clientism or neo-patriomonalism) (Booth 2011; Leftwich & Hogg 2008; Duncan 2010);

- In this context, the critical need to identify and support “developmental leaders” who have the motivation, incentive, and know how to get things done (in a political context). Further, leadership may be in the form of “developmental partriomonalism” whereby leaders/elites centralise the management of economic rents that are partially at least used to support a development vision (Kelsall 2011a; Leftwich & Hogg 2008).
- A recognition of the need for a more sophisticated understanding of community engagement or “voice” strategies based on constraints and opportunities of non-formal institution arrangements such as political culture (clientelism), and local social and cultural context (Booth 2011; Duncan 2010; Golooba-Mutebi 2005).

Dinnen et al (2010) summarise much of this thinking in their argument for the importance of local institutions vis-a-vis conflict management in Melanesia:

“..the wide variety of local institutions ... need to be taken seriously, not as some form of “second best” or “good enough” governance. These are not throw-backs or regressions, but inventive and potentially formidable political responses to present realities and future aspirations. It is important to understand these network and alliances, the multiple sources of legitimacy they draw upon and how these have developed. Then, it may become possible to strategically nurture links amongst them, with a view to developing an alternative “governance of conflict” that creatively combines existing sources of strength and resilience at local, national and global levels, while minimising their respective weaknesses.” (Dinnen et al 2010, p. 29)



## **4. Institutionalism and Health System Development**

The above bodies of institutionalist and development theory and practice are also increasingly being reflected in international scholarship on health systems development.

### **4.1. Health Systems as Institutions**

At the most fundamental level, institutional thought and health systems development relate through the observation that health systems are in fact institutional products that are, or should, reflect each country's unique political, social and cultural characteristics. (Saltman, 1997; Litman & Robins 1971; Stevens & van der Zee 2008)

“... health systems are deeply embedded within the social and cultural fabric of each society, and thereby defy simple economic or financial characterization... comparisons must reflect national social context, rather than assuming that health system arrangements exist in splendid social and political isolation.” (Saltman, 1997, s9-10)

The validity of this can be seen in the heterogeneity of approaches to health financing and provision that exist in the advanced market economies of Europe and North America – institutional arrangements that range from largely state-financed and delivered (UK and Canada), to largely private-provided and financed (US), to social solidarity models based on employer or other social institutions such as sickness funds (Western Europe) (Saltman 1997; Stevens & van der Zee 2008). This variation in approaches precisely reflects the importance of underlying political and cultural factors (non-formal institutions) in shaping unique health system approaches, often over many years, in different countries.

### **4.2. Health Systems, Institutions and Development**

There is evidence that much of international support for developing country health systems has been blind to this institutional reality. Bloom and Standing (2008) argue that the dominant trend in health aid policy has been to export

models of how health systems should operate from particular developed to developing countries with little questioning of their appropriateness or adaptability. For example, Mills et al (2001) argue that the failure in many developing countries of health reforms inspired by New Public Management (contracting, privatisation, decentralisation, internal markets etc) can, in part, be attributed to lack of cultural fit of the individualist premise of New Public Management with the more collectivist or tightly knit social relations present in many developing countries.

Bloom et al (2008) also argue that another manifestation of this institutional blindness is a tendency to ignore the highly fractured or pluralist nature of many developing country health systems. They argue for many post-colonial countries in the second half of the 20<sup>th</sup> century, the dominant model of health system development was realising a commitment to universal access to health care via the rapid creation of a government health care service. In some cases this model was bequeathed in whole or part from the colonial administration, in other cases it was consciously built as part of an anti-colonial or revolutionary mobilisation (Ibid). However, the last 20 years has seen the decay of this ambition due to both a lack of financial and organisational capacity, and broader international orthodoxy on around the limits of the state (Ibid, Mills et al 2001). This has resulted in a situation in many countries where the formal (state financed/run) health system is weak and providing partial services, with the gaps being filled by the pre-existing traditional health system/ providers; the rapid growth of mostly unlicensed and unregulated private providers; and/or public providers providing unofficial private services (Bloom et al 2008). However, health reform has tended to ignore the blossoming (and unregulated) informal sector, and focus efforts on strengthening or reviving the formal.

“Health systems in most parts of the world continue to be organised in ways that were essentially set in the early part of the 20<sup>th</sup> century in a few countries. In many low-income and transition countries, there is an increasing disconnect between these organisational forms and realities on the ground, yet debates and reform agendas concerning health

systems largely proceed on a 'business as usual' basis." (Bloom & Standing 2008, p. 2070)

It could also be argued that the decline of the formal structures of health systems in many developing countries, viewed through an institutional lens, is precisely due to the lack of "fit" or "fusion" between the formal and informal institutions ie. in terms of the framework described above, informal institutions in these situations are not "complementary" but rather "competitive" or at best "accommodating" of formal institutional arrangements. It is also possible to conjecture that this lack of fit is due to the "top-down" or imposed nature of the formal health systems in developing countries that have evolved in the course of colonial and post-colonial periods. However equally importantly to note is the possibility that the forms of health financing and provision that are spontaneously emerging in, around and through the existing formal structures may contain seeds of a more accommodating "fit" between informal and formal health institutions, and hence provide the basis for more legitimate, robust, indigenous, institutional arrangements.

### **4.3. Institutional Change**

Underpinning this conjecture is the view that institutions can change. A key dimension of institutional analysis is the notion of path dependence. The essence of path dependency is the idea that a small early decision can influence the future development of the institution in question, because of the increasing returns to the original decision, and the cost associated with changing it (Bloom & Standing 2008). A number of studies have shown there is a strong element of path dependence or "stickiness" of institutional arrangements of the health systems of developed countries (Wilsford 1994). This is precisely because the institutions in these countries have evolved slowly over a period of time, and a strong fusion of formal and informal institutions exists, which has meaning and value anchored in more than the formal institution itself (Goodin 1996). However, in many developing countries where the formal architecture bequeathed by colonial powers, or constructed in the immediate aftermath, has decayed and unregulated private or quasi- private provision is developing, the

evidence would suggest that the existing formal institutional arrangements are not strongly embedded in the informal, and hence the current path of these health systems is not set (Bloom & Standing 2008). In these situations, Bloom and Standing (2008) argue:

“Health systems are social and political artefacts and can be organised differently. Health systems, like other systems of producing social goods, are ways of producing and organising access to expert knowledge and technologies that derive from it. There is nothing immutable about the way they are organised. Their failure, in many contexts, to serve the interests of the poor means we should also be exploring different ways of producing and delivering rather than intensifying efforts to recreate existing ones.” (Bloom & Standing 2008, p. 2070)

However in thinking about potential different ways to organise a health system, it is important to reiterate that this is not simply a matter of importing a system, or elements of a system that is “best practice” or has worked elsewhere. Nor is it a process of designing a rational, top-down system from scratch and imposing that. As argued above, both these approaches are flawed (Pritchett et al 2010; Easterly 2008; Rodrik 2008; Evans 2004). Rather the challenge and opportunity is to identify precisely what exists at an informal institutional level in particular country contexts that could be built upon in institutional design process to infuse, buttress or otherwise strengthen new or reformed formal institutional arrangements. Goodin (1996) describes this as the “goodness of fit” of an institution within the social order it is set. Kelsall (2011) describes it as “working with the grain”. Helmke and Levitsky (2004) describe it as the degree of “complementarity” of the informal with the formal institutional arrangements.

Regardless of the label, it is to the possibility that non-formal institutions can contribute to robust, legitimate health institutions that the remainder of this paper is devoted.

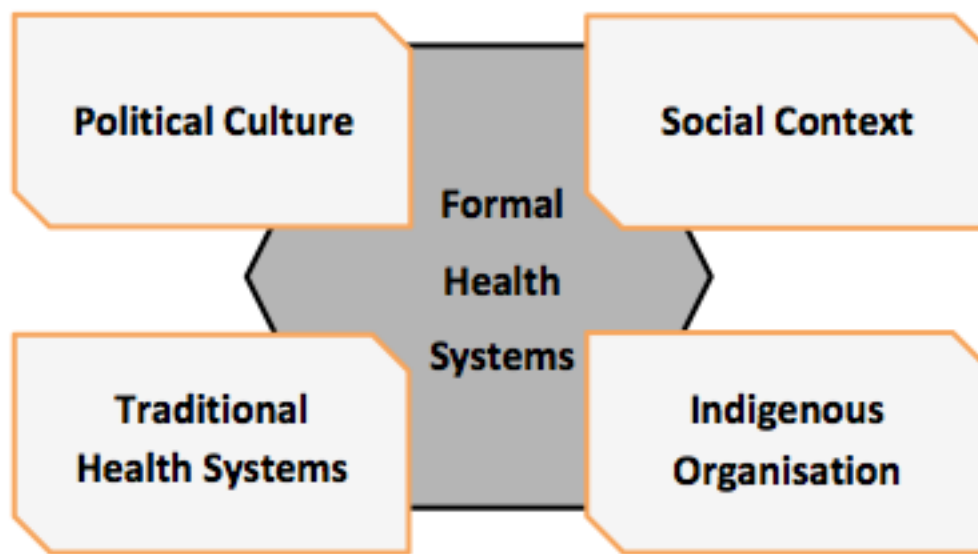
#### 4.4. Non Formal Institutions and Health

It is not the intention of this paper to focus on the negative consequences for formal health services where informal institutions compete with, and hence undermine, the intentions of the formal health services. Rather the intention is to discuss the smaller, but potentially more interesting and valuable, data set that focuses on the positive (actual or potential) interaction of the informal and formal institutions in health ie. cases where the informal institutions are currently, or potentially *complementary* to the formal health services of developing countries. This analysis provides the foundation for identifying possible potential positive synergies between formal and informal institutions, as a basis for considering more sustainable institutional reform strategies for developing country health systems.

Based on a review of the international literature, this paper groups current and potential complementary informal institutions for health into four key groupings – political culture, traditional health systems, social context (embedded providers and consumers), and complementary non-health organisations. Each of these are briefly summarised below, along with key references to support their inclusion.

Figure 2 provides a schematic representation, based on the general formal/informal schema depicted in Figure 1, of how the four groupings interact with formal health systems. As with the general schema in Figure 1, the degree of overlap (or fusion) between the formal and informal is a key indicator of the overall robustness and legitimacy of the formal institution.

**Figure 2: Schematic of the interaction of potentially complementary non-formal institutions and formal health systems.**



#### **4.4.1. Political Culture**

Leftwich (2007) defines political processes as:

“.. all the activities of cooperation, conflict and negotiation involved in the decisions about the use, production and distribution of resources, whether these activities are formal or informal, public or private, or a mixture of all.”

A number of authors have traced variation in health reform trajectory and service coverage and outcomes, within and between countries, to the nature of non-formal political institutions.

Atkinson (2002) argues that Northeast Brazil since the beginning of the 20<sup>th</sup> century has been characterized by oligarchic power based on ownership of large estates which has built up a system known as *Coronelismo*. This is a system that produces social organisation and political culture characterised by clientelism, paternalism, favouritism, and personal links where provision of public services (including health) is a favour rather than a public responsibility. Atkinson argues that in this situations health reforms, based on rational, linear, top-down logic “have made little impact” (Atkinson 2002).

In Bangladesh, Faguet and Ali (2009) attribute the variation in health sector performance and outcomes in two districts to differences in the respective districts history and geography. Specifically, in the better performing district these factors have interacted to produce a “dense web of relationships between citizens, their natural legal authorities, and service providers, that enmeshed these advances – and the reformers who drove advances forward – in local systems of authority and legitimacy” (Faguet & Ali 2009, p. 215).

“Saturia’s [the better performing district] institutional soil as prepared and made fertile by its proximity to the capital, its history of sustained NGO involvement, and a relatively open, tolerant religious tradition. In Rajnagar [the poorer performing district], by contrast, similar institutional underpinnings were missing. Citizens felt less empowered, and less connected to their authorities. The seeds of change fell on soil made barren by history and geography, and social development stalled.” (Faguet & Ali 2009, p. 215)

Rosser et al (2011) demonstrates that variation in the ability and willingness of Indonesian districts to introduce free basic health (and education) services is the “nature of district leadership – in particular, the nature of *bupatis* (district heads’) strategies for maintaining and advancing their political careers” (Rosser et al 2011, p. 3). In particular, they show that pro-poor outcomes are more likely where local leaders have relied on popular base among the poor for electoral success, rather than relying on patronage associated with “predatory business and criminal interests” (Rosser et al 2011, p. 3).

An important characteristic common to these case studies is that political non-formal institutions are important but not determinant of outcomes. Institutions can change, and sometimes quite quickly. In the case of Bangladesh, in Saturia (the better performing district) the authors quote sources which stress that “it was not like this ten years ago”. Rather, the effort of NGOs, reformers, and continuous exposure to the practices of the capital (Dhaka) facilitated a rapid transformation in broader social norms, and hence health care practice and outcomes (Rosser et al 2011). Similarly Atkinson notes in relation to Brazil there

is variation in the effect of *coronelismo* on health services based on different forms of political culture and social networks. For example in some urban areas, there is an established middle class with an active private medical cadre who have a vested interest in the operation of government, the health system, and private practice which, in combination, works to facilitate health sector reform. In other areas of high mobility and rapidly growing population, there are not the established personal networks between land owners and local government, and in the absence of these patronage arrangements, nor indeed of more general engagement in health services from a mobile and disconnected population, the health system was largely run by bureaucrats with little influence of local political culture (good or bad) (Rosser et al 2011).

However, the key point remains that political culture can, and is likely, to be an important influence to some degree on the nature of health system performance, and consequently on strategies for change.

#### **4.4.2. Social Context**

There is a body of empirical work which suggests that both health care providers (public, private and traditional) and consumers make health provision and utilization decisions through the lens of social networks, knowledges and interests which, in certain contexts, can contribute to quality and equitable health services.

##### *Providers*

Mackintosh and Tibandebage (2002) found in Tanzania that there were pockets of health care providers - in both public and private facilities - who went against the expected and dominant logic of profit maximisation, and exclusion of the poor and rather provided quality, accessible curative and preventive care. Similarly Leonard and Masatu (2010) also found in Tanzania that some providers (about 20%) provide high quality care even when they work in an organisation that does not reward this effort. An important characteristic of these cases was that although user fees were pervasive, they were managed in a way that was perceived to be legitimate.



“Strikingly, widespread small informal charges .. in rural dispensaries were *not* associated with a culture of abuse. These charges were characterised by interviewees not as “bribes” but as “contributions”, and in some cases village leaders had been involved in their initiation. Interviewees clearly believed that most of these funds went into supplies, not individual pockets.” (Mackintosh & Tibandebage 2002, p. 9)

The drivers of this more ethical care were traced to social expectations and involvement of community leadership in the setting of the obligations of care provision, and also to a longer-term market logic of building reputation in the community in order to win ongoing customer loyalty (and return business). The providers professional ethic was also important.

Whilst these kinds of ethical providers were the minority, its importance lay in the fact that it existed in the face of lack of formal constraints from the public formal system (in supervision or control) or private system (lack of formal regulation). This points to the persistence and strength of informal institutions (local leadership, social obligation, reputation) to act as counter veiling forces to the potential negative incentives of an unbridled market for health care provision (Mackintosh & Tibandebage 2002).

Cross and MacGregor (2010) place these kinds of actions in terms of a “bottom-up approach to biomedical ethics” that recognise that providers are “embedded within a moral economy of care that influences the content and the nature of their decisions, as well, as their communication with clients” (Cross & MacGregor 2010, p. 1597). They provide empirical examples of non-formal providers in Africa providing medication on credit to those who cannot afford to pay up front, and of pharmacies in Mumbai’s slums refusing to sell drugs to clients who were new or unknown because they presented a as a “suicide risk” (Cross & MacGregor 2010). They conclude:

“Studies of individual providers operating small scale, localised medical or health care businesses in highly competitive marketplaces repeatedly show them building and maintaining relationships with their clientele by offering goods and services that meet local expectations of care or value

for money.... The social forces acting on informal providers in what are highly competitive medical market places can create very real regulatory dynamics, even though this dynamic might not correspond to normative assertions of what a well or properly functioning market for health care should look like.” (Cross & MacGregor 2010, p. 1597)

There is also some evidence that health provider peer associations can also be a beneficial force towards higher quality care. Oladepo et al (2009) showed how the Nigerian Patent Medicine Vendor Association is currently, and could potentially in the future provide an increased role in improving malaria management through enhancing and protecting reputations (self-education, peer review, self-regulation). Leonard and Masatu (2010) in a study of health care practitioner professionalism in Tanzania found that the perceptions of peers were a significant contributor to provider’s providing professional care. Dussault (2008) argues that provider associations can be a positive force towards improved quality of health services, but the nature of provider association to restrict practice and advocate for the interest of their members can also work against equity and accessibility of services. However, Dussault (2008) argues in the context of the particular nature of health services which are discretionary and transaction intensive and hence not amenable to top-down administrative, policy or programmatic control (Dussalt 2008; Pritchett & Woolcock 2010) and in which are health workers are often in highly decentralised settings with little or no formal supervision or regulation, then it is worthwhile exploring strategies to engage provider associations to increase their role in member self-regulation, professional development and training.

### *Consumers*

On the demand side, a number of studies have questioned the common assumption about the ignorance or passiveness of poor households in making health care choices. Leonard’s (2007) work in rural Tanzania showed that over time households exhibited “social learning” in converging to better physicians. Central to this process is local knowledge networks in determining reputations. Leach et al (2008) argue that clear and strong distinctions between

modern/biomedical and traditional practices and public and private sectors made by health professionals, do not necessarily hold against actual health seeking behaviour. Rather, drawing on evidence from the Republic of Guinea, they argue that other emergent indigenous classifications of health/ill health - eg. different providers for women and men, known and unknown ailments, those requiring injection and those that do not - are more important in shaping behaviour/provider choice(s) (be that modern, traditional or combination) than a clear, cultural based preference based on an understanding of the type of provider.

Similarly Golooba-Mutebi (2005) drawing on ethnographic work in Uganda argues that, instead of complaining or agitating for improved public provision, users move to “private clinics and drug shops [who] were more responsive to the demands and preferences of patients than public units” (Golooba-Mutebi 2005, p. 175). Golooba-Mutebi (2005) goes on to argue:

“By gravitating towards responsive providers, however seemingly misguided and irrational the decisions might be, users can be said to have been driven by feelings of powerlessness to do anything about poor public provision, opportunities for participatory decision-making notwithstanding. On the other hand, preference for private provision had nothing to do with participation in planning or managing private services. Rather, it arose from users being certain that, unlike public sector health workers, private providers took their needs and preferences seriously.” (Golooba-Mutebi 2005, p. 175)

The common theme running through the above provider and consumer cases is that they are all examples of non-formal drivers of behaviour that is supportive of providing/accessing quality health services. Further these positive behaviours exist despite the lack of effective formal or top-down institutional arrangements. Leach et al (2008) conclude that often health reform discussions around participation and system development more broadly:

“.. fails to capture the emergent forms of sociality that are significant to people in their health seeking practices. Discussions of citizenship in

relation to health may need to be grounded more strongly in an appreciation of people's existing forms of knowledge, expertise and social relations, as it is this that will shape their claims and the ways they are able to stake them." (Leach et al, 2008, p. 2166)

#### **4.4.2. Traditional Health Systems**

Numerous studies have shown that despite the existence of even quality western medicine, traditional health beliefs, practices and treatment options remain popular and common choices (often in combination with western medicine) for consumers in both developed and developing countries.

Bodeker and Kronenberg (2002) estimate approximately 50 per cent of people in developed countries and up to 80 percent of people in developing countries use some form of traditional/complementary medicine. Whilst in many countries, official western/allopathic medicine and traditional/complementary medicine are separate (and in some cases open hostility exists between the two forms of care) in some countries there are conscious efforts to integrate/coordinate/complement the provision of care between the two systems (Bodeker & Kronenberg 2002; Macfarlane & Alpers 2010). The spectrum of degrees of interaction with traditional health systems ranges from incorporation (whereby traditional healers are co-opted to work within and under the dominant western medical paradigm); to collaboration (whereby the two systems remain separate but establish communication and referral patterns); to integration (whereby elements of both are fused to form a new hybrid system) (Bodeker & Kronenberg 2002; Macfarlane & Alpers 2010).

Cross and MacGregor (2010) argue that in many parts of Africa and Asia, allopathic and non-allopathic medicine exists side by side in the market place, and in many cases in practice there is a blurring of the boundaries between systems as diagnosis and therapies merge. O'Neill et al (2006) provide examples from five Latin American and Caribbean countries (Guatemala, Chile, Ecuador, Colombia, Suriname) of facilities that have either combined the provision of both forms of care, or have established formal linkages. Torri (2011) provides further detail of the joint management and care provision in a hospital between the

Mapuche people of Chile and the state of Chile. Parker (1988) argues there is a high degree of synergy between the traditional curing network of the Thakali people of Northwest Nepal, and in particular the *mu tu* ceremony of divination is an important source of complementary medical referral between indigenous and western healers. Dalal (2005), in making the case for the complementarity between the traditional and modern care in India, points to successful examples of local and national integration in Sri Lanka and Indonesia, where there is referral and complementarity in healing approaches between providers. In Australia, there is a network of over 120 Aboriginal Controlled Health Services, which provide primary care services that are high quality, holistic and culturally appropriate (Taylor et al 2001).

The key logic underpinning these various efforts to integrate or coordinate, or at least not compete, between the traditional and allopathic medicine is that traditional medicine continues in every country to be an important source of health advice and care for people (Bodeker & Kronenberg 2002). The persistence of traditional medicine even in advanced health care systems suggests that it is not simply the case that as allopathic proves its superiority it will inevitably replace or eradicate traditional medicine. In fact, the reverse seems to be the case, with traditional medicine continuing to play an important role in health seeking behaviour despite the level and apparent sophistication of western medicine. This attests to the enduring power of the informal institutions of traditional medicine vis-à-vis introduced formal health care, and the possibility of harnessing the perceived benefits to consumers of both (Bloom et al 2008). Macfarlane and Alpers (2010) in summarising the benefits of a closer relationship between the traditional and western health systems conclude:

“Health benefits may also accrue because of the social and cultural relevance of an integrated system. Peoples understanding of disease aetiologies are rooted in the their cultural heritage, which is generally resistance to change and new ideas. Thus, understanding the culture of the target population is critical to the success of any health program. Traditional healers operate within the same cultural paradigm as their fellow community members and usually share their customs, beliefs and

explanations of illness. Traditional healers are therefore ideally placed to explain illness and health management practices in culturally relevant terms.” (Macfarlane and Alpers 2010, p. 394)

Some authors also argue that a more equal recognition of the role of traditional health systems may also have broader political implications. O’Neill et al (2005) conclude of their 5 country Latin American/ Caribbean study:

“A key finding from this investigation is that intercultural health programs play very significant roles in providing a “space” within which to create the capacity of Indigenous communities to develop autonomous self-governing organizations and communities. These programs help to re-affirm the central importance of Indigenous spiritual and social values in communities, which in turn provides the confidence required to assert autonomy and independence in relations with the wider society and the State.”

#### **4.4.3. Indigenous Organisation**

There is strong evidence that ostensibly non-health, non-formal organisations have played a critical role in the development of health systems in the developed world. For example, Barninghausen and Sauerborn (2002) trace the development of the now universal social health insurance scheme in Germany from their origins as solidarity based support systems within medieval worker guilds. There is similar evidence of a potential emerging role of analogous non-formal institutions in developing country health systems.

Mariam (2003) investigated the current and potential role of *Eders* (burial associations) in Ethiopia vis-à-vis health insurance. *Eder* is a form of indigenous social organisation established to help victims deal with the financial burden of catastrophic events, particularly funeral costs. However, overtime, they have diversified into broader development activities and assist sick members in financial and non-financial ways (Mariam 2003). They are financed on an annual household contribution, with broad-based membership and contributory exemptions. In Mariam’s study approximately 20 per cent of members were

already using *Eder* funds for health expenditures, and 90 per cent indicated they would be willing to make a contribution to their *Eder* specifically for additional health insurance.

Similarly, Andersen (2011) found that a community health fund (CHF) in Tanzania was facilitated through a mix of formal and informal institutions, with “health service users and local leaders... performing institutional bricolage whereby they interpret the new CHF system drawing on existing informal institutional logics of horizontal and vertical reciprocity [which] confers legitimacy and attraction in the eyes of local actors”.

Kelsall (2011), in the African context, argues that extended families often provide mutual support for purposes of education and times of illness and bereavement. Leonard (2003) extends this observation to argue the extended family could be the basis for the development of a formalised health insurance approach in Africa. He argues that the low uptake of formal health insurance in Africa is due to adverse selection (based on information asymmetry), high transaction costs of fee collection in dispersed rural societies, and poor fit of product with extended family (health insurance based on nuclear family). Leonard argues that extended families have a number of advantages as an indigenous unit capable of building a sustainable and efficient health insurance system. It is a pre-existing group with involuntary membership and hence mitigates adverse selection (i.e the tendency for only the sick to join and pay premiums), and because it is pre-existing the marginal cost of adding health insurance is low. It can also be redistributive (between employed better of family members and rural, informal). Finally, social pressures should reduce any moral hazard (the tendency to over consume care due to the presence of insurance) (Leonard 2003).

Molyneux et al (2007) found that local-level community based organisations in Kenya - often set up by householders themselves - are playing an important role in supporting households to access health care. In particular a specific form of local financing organisation - “merry go rounds” (MGR)- are particularly effective in this regard.

“For reasons of trust, kinship and convenience, these organisations are typically comprised of relatives, friends and neighbours. They almost always include a MGR. MGR’s are popular for both assisting with savings and acting as part of a safety net to allow households access to day-to-day items, and to meet unexpected expenses (including treatment costs).” (Molyneux et al 2007, p. 388)

Booth (2011) provides similar examples of where local initiatives from notionally non-health institutions have played important roles in facilitating the provision of effective health services. He provides the example of local mayors in Niger collecting an earmarked tax from all users of primary health care facilities to fund the transport costs associated with emergency obstetric transfers. Pariyo et al (2011) provide an example from Uganda where formal and informal transport providers were mobilized and paid to transport pregnant women to and from ante- and post-natal care and birthing. Akinola (2008) provides examples from Nigeria where, in the face of government neglect, self-governing indigenous or traditional organisations, have emerged to provide a range of social services including health services. These traditional structures include community development associations, town development unions, age-grade societies, and trade groups (such as fishermen, market women’s associations).

Booth (2011) summarising a range of case study evidence from Africa concludes that donor or project inspired “associational” approaches tend not to work, and rather can cause unintended negative consequences of social division, elite capture, and distraction from key local problems to donor defined problems. Rather he argues local organisational approaches that appear to be more successful are those that are “locally initiated and orientated towards solving specific problems which are not being solved nationally, and are not dependent on government or donor funds” (Booth 2011, p. 19). Booth concludes:

“Unlike the usual project-inspired initiatives, they do not require beneficiaries to sign up to principles of organisations of which they have little experience or understanding. On the contrary, there is an enabling institutional environment for local problem-solving initiatives which



involve whole populations, make use of local resources and draw legitimacy and other strength from already existing and widely shared views on what is important and how to get things done – borrowing institutional elements from local cultural repertoires to avoid the high costs of inventing everything from scratch.” (Booth 2011, p. 19)

Cornwall and Gaventa (2001) extend this argument through a range of examples of self-provisioning of communities (particularly those that emerge from the informal and indigenous as opposed to those created by donor or outside groups), that both provide a level of service to particular communities, and through political organisation and contestation, affect broader sector policy and development.

“... collective action through self-provisioning may contribute to the creation of identities of previously excluded groups as political actors, which then leads to their broader engagement in the public sphere. Efforts to provide services, then, can become transformed into organised struggles of the otherwise excluded and provide a platform not only for articulating rights, but also for recasting responsibilities and obligations.” (Cornwall & Gaventa 2001)

The above are examples of how organisations (as the players in the institutional fields) can play an important role in both the provision of health activities, and be involved in pushing for, negotiating, implementing and monitoring effective and legitimate local institutions (Leftwich & Sen 2011, p. 333).

#### **4.5. Implications for formal health system development**

The previous section has argued that there exists a range of non-formal institutions that are, or are potentially, complementary to the development of formal health systems. The policy and programmatic implications of this insight are still in their infancy. However, a number of authors have begun to speculate how findings from this kind of analysis could be incorporated into health system reform and development approaches (Bloom & Standing 2008; Mackintosh & Tibandebage 2002). Some of the identified strategies include:

- The importance of understanding the political processes (both formal and informal) that shape/affect sector performance and change trajectory. This insight is central to the emerging body of theory and practice around political economy analysis in health sector policy development and change strategies (Goodard et al 2006; Oliver 2006; Moncrieffe & Luttrell 2005; Edelmann 2009; Fritz et al 2009; Buse 2008).
- Building on a more sophisticated understanding of the nature of individual and community interest and understanding of health services to devise locally meaningful ways for individuals and communities to engage and direct the planning, financing and/or management of health services. This would include, where appropriate, the mobilization of nominally non-health organisation that enjoy local legitimacy (such as saving societies, place based associations, kin/clan other local groups) to play a role in financing and delivering local health services (Rassekh & Segarern 2009; Leach et al 2008; Stone 1992).
- Rethinking sector regulation from being a top-down imposition to more of a collaborative, bottom- up process of industry and provider self-regulation comprising multiple actors – including non-government and general public, and provider associations (Mackintosh & Tibandebage 2002). This approach is premised on the observation that positive norms of seeking and providing quality services – from both providers and consumers – often already exist as a basis of a more dispersed, locally empowered regulatory regime (Mackintosh & Tibandebage 2002). It also acknowledges that the burgeoning access to ICT – internet and mobile phones – may also assist consumer engagement and monitoring (Lucas 2008).
- Encouraging reputation-based competition between pluralistic providers through publically available measures of quality such as accreditation, branding or franchising. Such a strategy aims to build on elements of local social context that provide incentives for providers and consumers to provide/seek quality, accessible care (Lucas 2008).

- Identifying opportunities to maximise the synergies between provider types – public/private; and formal/traditional. Mackintosh and Tibandebage (2002) suggest there may be benefits for prevention and financing via strategic alliances between public and private providers through, for example, formalising (and regulating) private provision in public facilities. Macfarlane and Alpers (2010) list a range of other potential benefits from closer links between traditional and western health systems. These include: improving the quality of traditional cures through testing and standardization; improving the overall quality of care and reducing cost by avoiding overlapping, conflicting or unnecessary treatment; and providing a more holistic care that encompasses the full range of health beliefs and practices of consumers.

The next section extends the above general health institutional analysis to a more specific understanding of the Papua New Guinea health system. In particular it applies the general framework of how non-formal institutions interact with the formal health services described above to the PNG health system

## **5. Institutionalism and the PNG Health System**

The rationale for conducting a non-formal institutional analysis of the PNG health system is strong. Firstly, the current PNG health system is clearly imported to PNG, and historical accounts of its development point to a strong nexus of external and local elite (doctor) views in its formation, rather than being a product of deeply embedded local, non-formal institutions and processes (Denoon 1989; Frankel & Lewis 1989). Secondly, the performance of the formal PNG health system is poor, and continues to be so despite considerable reform efforts over many years (Day forthcoming). This paper hypothesizes that these reform efforts have overemphasized changes to the formal institutional arrangements, with little or no focus on the underpinning or surrounding non-formal institutions.

Each of these factors are discussed below, prior to a more detailed discussion of how non-formal and formal institutions interact within the PNG health system.

### **5.1. The Formal PNG Health System**

The Papua New Guinea health system can be classified as a predominantly government/donor financed, mixed delivery (government and church) health care system.

Its delivery system is characterized by a classic pyramid structure. At the lowest level of the system are aid posts, staffed by a single, two-year-trained Community Health Workers (CWHs) who is responsible for the provision of basic curative care, and in theory, health education and promotion (although in practice curative care dominates). The next level of care is provided by health and sub-centres. These centres are intended to serve a population of 5,000 to 20,000 and provide outpatient and inpatient care covering the majority of common illness in the community. These can be headed by a Health Extension Officer (para-doctor) but in practice are more often headed and run by nursing officers. A key feature of health centre activity, and service delivery more broadly, is the undertaking of outreach clinics and patrols from the centre to areas within the centre's catchment population<sup>1</sup>. The next level in the system is district and provincial hospitals. In theory each of PNG's 89 districts has a district hospital (staffed by a doctor). However, in practice this is rare, primarily due to a lack of doctors willing to work in rural districts. Each province has a provincial hospital, which is the main referral facility for more complicated cases that cannot be dealt with at the lower levels (Dugue & Izard 2003).

PNG's churches operate approximately half of the rural health centres and sub-centres. The churches are also responsible for training many of PNG's health workers, including nurses (six schools) and community health workers (14 schools). In addition, the Pacific Adventist University has a school of health sciences, and the Divine Word University (DWU) runs a health administration program (Dugue & Izard 2003).

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<sup>1</sup> Clinics are outreach sites within a day's travel of the health centre, patrols are sites that require multiple day travel

The government is the main financier of health services. It directly funds its own facilities and provides grants to churches for them to staff and operate church facilities and training schools. The government also directly provides medical supplies to both government and church facilities. There is an unofficial system of user fees – with some evidence that these deter use (Thomason et al 1984).

There is a relatively small reported (but growing) private health sector in PNG. This consists of local private providers, some blurred public/private provision, and a significant contribution from large mining and plantation companies to direct health provision (Thomason & Hancock 2011; McFarlane & Alpers 2010; McKay & Lepani 2010).

The formal institutional arrangements for the sector are complicated, and fluid. The National Department of Health directly funds provincial hospitals but hospitals are managed under a separate legislation and are governed by independent boards (reporting to the Minister of Health). The National Department of Health also directly provides the grants to churches, through the Churches Medical Council, who pass the grants on to individual churches. The day-to-day management and supervision of churches is provided by the churches with only voluntary coordination and reporting with/to provincial or national government. In practice, this coordination is highly variable. Government rural health centres and aid posts are financed by and report to provincial government. The National Department of Health has no direct control/influence of provincial health services.

There is some scope for community input into the formal health systems via various management boards at the different levels of the health service. These include national, provincial and hospital boards, and some local health management committees. With the exception of the Hospital Boards, these committees are advisory in nature, and unevenly supported and activated.

A number of church and NGOs have developed Village Health Volunteer (VHV) programs in some parts of the country. These programs are a form of community health workers who are selected and trained to deliver basic health care and education into their villages (Byrne & Morgan 2011).

## 5.2. Historical Development of the PNG Health System

The formal PNG health system developed hand-in-hand with the broader spread of colonial administration in PNG during the 19<sup>th</sup> and 20<sup>th</sup> centuries. Denoon (1989) traces the development of the PNG health system through the influences of three external bodies of knowledge – bodies of knowledge which are as much “social as scientific” (Denoon 1989, p. 2).

First, from the turn of the 20<sup>th</sup> century through to the 1940’s, the key influence was “tropical medicine” which was a body of international theory that assumed that health status was largely determined by the physical environment, and that only a few diseases could be treated *per se*. From this point of view, “doctors were disposed to treat only those few conditions which would respond to treatment, and to concentrate their efforts on the “protection of enclaves of “temperate” settlers and their labourers ... general improvements in living standards seemed impossible” (Denoon 1989, p. 3).

Second, following the Second World War, the invention of a range of miracle drugs (e.g. penicillin) combined with a predominance of military medical personnel from WWII, inspired a period of “heroic” campaigns against specific diseases – malaria, TB, yaws etc. Denoon argues:

“Counter-insurgency campaigns during the 1950’s often endorsed the medical image of communism and nationalist revolt as unnatural infections to be contained and eradicated by heroic effort. To be sure, the excitement of campaigning against specific diseases did wonder for the morale of ex-servicemen doctors, and evoked heroism in their work.” (Denoon 1989, p. 77)

However despite the enthusiasm of which the campaign approach was embraced, Denoon argues that the approach had limited success. He argues the campaigns were overly centralised and a “profound dependence upon the central authority” was created, and “if the campaign broke down, nothing that a village community could do would sustain it” (Denoon 1989, p. 82).

“The miracle drugs yielded decreasing returns; an uninformed public became increasingly resistant to arbitrary direction; and the glorious set piece warfare of the first years of each campaign led on to the frustration and immobilism of guerrilla warfare. Trained and inspired for the formal campaigns, the department was temperamentally unsuited to battles which could have no triumphant conclusion.” (Denoon 1989, p. 83)

Against this backdrop, the 1950’s gave way to the third key influence on the development of the PNG health system – that of the new strategic vision of primary health care. This new vision was based on the view that health services should be available to all. However even in this broader view of health needs, Denoon argues:

“At first sight, therefore “primary health care” seems diametrically opposed to the earlier vision of “tropical medicine”: optimistic, participatory and egalitarian, where the earlier vision of “tropical medicine” had been defensive, authoritarian and divisive. Yet the two approaches share some features in common, most notably the fact that each is a strategic vision devised by medical workers and presented to the general population for endorsement rather than discussion. Primary health care is a *doctors’* vision of public health, and its adoption does not alter the fact that health policy remains a matter of doctors’ dilemmas.” (Denoon 1989, p. 3)

This points to a critical and recurring theme in Denoon’s historical analysis of the formation of the PNG health system - being the lack of meaningful engagement or input from the PNG populace into the nature and form of the system. Denoon (1989) argues:

“On the eve of Independence... officers of the department and representatives of the mission services integrated their institutions, and framed health policies for the endorsement of the new democratic government. From time to time doctors have genuinely attempted to involve lay people in the formulation of policy, and its implementation;

yet doctors have always had science on their side, and lay people have been reluctant to interfere.” (Denoon 1989, p. 2)

This view is shared by a broad range of other commentators spanning pre- and post-independence periods.

PNG’s first National Health Plan to cover the post-independence period (1974-78) lamented the imported nature of the health systems the newly independent nation had inherited:

“Because of our close links with Australia, we have tended to follow standards higher than we can afford to support. This is true of hospitals and other services. Some administrative procedures we follow are complex and not well understood. We have imported western medicine and rejected the methods of traditional medicine.”

Numerous articles in the PNG Medical Journal from the early 1970’s to date also commented on the largely externally, top-down nature of the PNG health system, and the lack of meaningful input into the system by the people of Papua New Guinea. Zigas and Van Delden (1974) argue:

“Though the Public Health Department of Papua New Guinea has spent large amounts of money on various health and endemic disease programmes, particularly malaria control, it has captured neither the affection nor esteem of the local population, nor maintained their interest.” (Zigas & Van Delden 1974, p. 80)

Gee (1983) summarised:

“Papua New Guinea does not yet have a functioning system of primary health care.... western medicine is perceived as something remote from traditional beliefs and community values. It is often seen as something provided by the Government and not as something which requires active support and participation.” (Gee 1983, p. 168)



Welsch (1988) argued:

“At the very heart of the problem is a clash between “scientifically sound” health knowledge and community perceptions of their own health problems and needs... At each level [of the health system], higher-ranking personnel act as if they have privilege health knowledge that lower-ranking staff must passively accept. Health information and policy decisions flow from a "sophisticated" center to an "unknowledgeable" periphery. Thus, WHO advisors offer guidance to the national Ministry of Health; the ministry sets guidelines and policy for the provinces; provincial health officers set policies and issue directives to subprovincial health officers in the outstations; these officers in turn issue directives to aid post orderlies working in the villages, who then tell villagers what they should do.”

In institutional terms, this history of the formation of the PNG health system clearly posits it as being introduced with little or no meaningful engagement with the population, or the range of pre-existing non-formal institutions relevant to health. The implications of this is discussed further below.

### **5.3. Performance of the Formal PNG Health System**

Today, PNG formal services are unevenly implemented and of poor quality; have considerable access gaps with widespread user fees at the point of service; and growing and unregulated private and blurred public/private provision (NDOH 2010; Foster et al 2009). Overall, there is a well-established body of evidence that the formal health system in PNG is not meeting the government’s or the population’s expectations. Further whilst the system did perform better in the past (Thomason & Kase 2009; Day 2009), there is good evidence that the systems has never been fully embedded as a quality, continuous, valued service with broad or high coverage.

- Immunisation coverage has never been adequate – DPT (3<sup>rd</sup> dose) coverage was 32 percent in 1980, rose to 68 percent in 1990/91 before declining to 64 percent in 2009. Measles immunisation started in 1983

and rose to a high of 70 percent in 1992, before declining to 58 percent in 2009 (Indexmundi 2011; NDOH 2010).

- Outpatient contacts reached a “high” of 2.5 per year in 1990, and have declined ever since to 1.6 in 2010. (A minimum of three contacts per year is estimated to be necessary to provide essential basic package of care. OECD countries have an average of seven outpatient contacts/ year (NDOH 2010; OECD 2002).
- There are approximately 2,400 aid posts throughout the country – but up to half of these can be closed at any point in time due to factors ranging from lack of supplies, absent health workers, or local violence (Dugue & Izard, 2003; Aitken 1991). Officially, over 300 aid posts closed between 1995 and 2000 with a disproportionately adverse impact on the poor living in remote rural areas. Between the period of 2001-2010 a further 781 aid posts closed, bringing the total open aid posts down to 71 percent as of 2010 (GoPNG 2010).
- In relation to maternal and child health, the proportion of pregnant women with at least one antenatal visit has declined to less than 60 per cent over the past five years (the ideal is for all pregnant women to have at least three antenatal visits). The percentage of births supervised in health facilities has remained stagnant at around 40 per cent (GoPNG 2010).
- Over time, the frequency of outreach clinics and patrols has declined due to lack of supplies, transport difficulties, and lack of allowances (Dugue & Izard, 2003; Aitken 1991).
- Village Health Volunteer (VHV) programs have not been fully established within the formal health system, nor are they being fully owned and supported by communities (Byrne & Morgan 2011; McNee 2011).

## 5.4. Reform Strategies

In response to these problems, there is a significant and ongoing body of reforms which aim to alter the formal organisational arrangements of the PNG health system (NDOH 2010; Thomason & Kase 2009; Day 2009). Overwhelmingly, these efforts have been based on an analysis which identifies the degree of organisational fragmentation associated with successive waves of broader decentralisation as the main problem to be addressed. For example, Day (2009) argues the *New Organic Law on Provincial and Local Level Governments 1995* led to increased decentralisation within government and disrupted the vertical integration between providers and managers, and between provincial health offices and the National Department of Health. This resulted in a loss of technical supervision and accountability because there is no single point for management and budget responsibility (NDOH 2010; Thomason & Kase 2009; Day 2009).

The main organisational response to this problem has been the passing by Parliament in 2007 of the *Provincial Health Authorities Act*. This amendment enables the streamlining of provincial health services to occur by transferring the management of public hospital services and rural health services to one Provincial Health Authority (GoPNG 2010). The intention of this change is to unify the local planning and provision of curative and public health services under one organisational form – in effect to return the health sector organisations to a state similar to that which previously existed (Day 2009). This process is now starting to be implemented, with pilots underway in three provinces.

The effectiveness of this approach will only be known in time. However it is true to observe that overwhelmingly these reform efforts have been on the formal health system conceived as a set of rational, bureaucratic organisations. The key focus has been on how these organisations (qua organisations) should be structured and relate to each other. There has been no systematic consideration of the role/impact of non-formal institutions on the nature or performance of these organisations – either as organisations per se, or as part of a broader set of formal institutional arrangements.

Regan (2005) argues that reform of the PNG state needs to be considered in a more fundamental light than only its organisational form.

“It can be argued that that what we are witnessing in Papua New Guinea is in fact part of a long historical process of development of a state appropriate to the circumstances of the country, replacing the largely inherited and little understood colonial state, which is gradually weakening and decaying, or at least in the process of transformation.” (Regan 2005, p. 10)

Denoon (2002) concurs:

“At the root of Papua New Guinea’s recurrent problems ... lurks the misfit between its national parliamentary and bureaucratic institutions and the values of the small-scale, land owning societies that continue to claim the allegiance of most of the people. It will take time and imagination and energy to modify those institutions to meet the needs of the people they are intended to serve.” (Denoon 2002, p. 121)

Regan goes on to argue that efforts, including those of national governments and donors via large scale technical assistance (and one could add reshuffling of the formal organisations of the state) to:

“... prop up what is decaying or transforming ... implies that at some earlier point it operated effectively, whereas the Melanesian states have never done so, and that proposals for state-strengthening run the risk of re-building what has not worked, possibly inviting further failure some time later.” (Regan 2005, p. 10)

The following section extends Regan’s argument to the PNG health system. It looks beyond the organisational forms of the health system (regardless of its configuration) to focus on the range of non-formal institutions which frame the formal health system in PNG. It asks if this illumination of the non-formal points to a possible different institutional configuration of the health system – a configuration that may ultimately be more “appropriate to the circumstances of the country”.

In doing this it is important to note that this focus does not mean that the range of current efforts to reform the formal institutional arrangements of the sector are unnecessary or invalid. Rather, it is to suggest that these efforts may not be sufficient to effect sustainable, meaningful change – and that more fundamental reform, grounded in a more in-depth understanding of how the formal and the non-formal can interact, may also be necessary.

The remainder of the paper is an initial contribution towards this idea.

## **5.5. The Informal Institutional Framing of the PNG Health System**

There is an extensive body of secondary literature on health and broader political and social development in PNG which suggests there are a raft of vibrant and influential informal forces which frame the formal PNG health system.

### **5.5.1. PNG Political Culture**

There is solid historical and contemporary evidence that the formal PNG health service is firmly located within a broader political context – a context that can work for or against quality health service delivery.

#### *Health as Government Responsibility*

As discussed above, how the PNG health system was introduced and developed was inexorably linked with a broader political process of the formation and extension of top-down public administration in PNG. Denoon's (1989) historical account of the introduction of the PNG health system into PNG outlined above makes the point well that the design and intent of the system was framed by broader ideologies and forces that allowed little or no space for indigenous views.

“Colonialism was the matrix in which modern medical services emerged in Papua New Guinea, and there is some value in relating those services to the interests which dominated the colonial state.... many medical institutions bear comparison with the structures of colonial authority. Doctors and hospitals resemble district commissioners and district

headquarters, each imposing hegemony over the surrounding population.” (Denoon 1989, p. 116)

The empirical evidence from anthropology and health service research also strongly supports the view that the health service was introduced hand-in-hand with the broader spread of colonial public administration and, as such, was as much about establishing and demonstrating the power of colonial government administration, as it was about establishing a robust, legitimate, health service.

Allen’s (1989) account of the introduction of health services in the Torricelli foothills of West Sepik province recounted how colonialism enforced public hygiene regulations and compulsory hospitalization, and whilst the populace saw the benefits of new treatments, they also resisted or avoided the outside authority. Baker (1989) recounted a similar pattern and modus operandi of the early introduction of health services in the Collingwood Bay area of Oro Province. He argues:

“Health initiatives were not limited to the provision of medical services. Patrol officers had as one of their main duties the enforcement of various regulations designed to improve village hygiene: the burial of bodies in cemeteries outside of settlements, filling in of swampy areas, destruction of diseased pigs and dogs, and regular clearing of refuse from village grounds. These regulations were enforced by the threat of internment in Tufi goal. Whatever the overall health benefits of these measures, they appear to have done more to demonstrate the authority of the patrol officers than to teach Maisin the rudiments of European theories of sanitation.” (Baker 1989, p. 71)

Herdt (1989), writing of the introduction of an aid post in the Sambia area of Eastern Highlands in the 1970’s, recounted how the Aid Post Orderly (APO) was assigned to the aid post and local government officials accompanied him to give a clear signal of his official status and to ensure cooperation of local council. Alto (1996) argues “the aid post system was introduced into the village by western-trained colonial officials who had little knowledge or interest in the traditional medical customs of the people”.

An important implication of the construction of the formal PNG health services as part of colonial administration is that the formal health services are not seen as being something that belonged to, or was part of the community. Rather they are perceived as something that is provided to/for communities, and hence is the responsibility of the Government.

Allen (1989) recounts the story of two retired APO's in West Sepik who refused to go on providing services privately as they were no longer being paid by the Government (despite being offered equipment and drugs), on the basis that they see it as the "government's responsibility to provide health care and not theirs". Allen concludes that "most APO's do not view their positions as providing a service to the community and have a restricted view of their role (Allen 1989, p. 62).

Frankel (1984) provides a similar but slightly more nuanced account of the role of the Government vis-à-vis health in the Huli area around Tari in the Southern Highlands Province. Frankel observes that the Huli are very passive in their seeking and response to treatment by the APO. He observes that they do not get angry when service is not provided. He argues:

"As a medical practitioner... it is largely left to him [the APO] to determine what is an adequate service. His clients use the service readily when it is available. They may grumble privately if they fail to secure treatment, but in public they accept such setbacks passively... The most obvious explanation is that his clients are unsure of the nature of an aid post orderly's obligation to them. He is a government worker, and they assume that in his medical work he is doing what the government intends him to do. If he is not, then he is accountable to his employers not to them." (Frankel 1984, p. 286)

McLaurin (1987, p. 30), based on extensive observation and experience of health service delivery in the Southern Highlands of PNG, concludes:

"...the hierarchical structure of doctor/HEO/nurse/APO patient inherited from the colonial and post-colonial medical administration is singularly

inappropriate in the delivery of rural health care. Whilst it is arguably appropriate in an urban setting, in the rural areas it fosters mystification of medical knowledge and a dependency on health professionals, which makes community involvement in their own health care a bad joke... the lowest members in the hierarchy in terms of knowledge and therefore power to affect their own health, are the patients and the community. ... They come to see health and prevention as “*samting bilong ol helt workers*” and nothing to do with them.”

Wyatt (1977), in an editorial of the PNG Medical Journal, argues:

“One of the main hold ups is that health services are still largely thought of something provided by the Government. People do not really feel that the aid post or health centre belongs to them and they may show this attitude by failure to keep an aid post in repair or even by break-ins and stealing. Many villages are unaware of the possibility of improved health for their families and certainly take no responsibility for such improvement.” (Wyatt 1977, p. 100)

Malcolm (1973) argues that health service provision in PNG was based on two key approaches. The first was the “authoritarian “kiap” type of “doing to” approach in which the community are merely passive recipients”. The second was “the “doing for” approach [of] paternalistic hand out of services” associated with the formal health service. Lacking was a “doing with” approach (Malcolm 1973, p. 165).

A number of authors suggest until this fundamental political dynamic of perceptions of control between the PNG populace and the formal health service is altered, the formal health service will continue to lack support and legitimacy. Malcolm (1971), for example, argued that effective involvement and empowerment of communities to manage health services was the best strategy to maintain and continue to grow health services in PNG after independence.

“The quality of health care in future Papua New Guinea will depend largely on the extent to which the community is involved in the



administrative and financial responsibility for the provision of such care. It is too much to expect that the present centralised type of health administration will survive the political demands of the future.” (Malcolm 1971, p. 123)

He made the case for local government councils and community committees to be given the responsibility for health facility management (Malcolm 1971). Alto (1996) advocates for a similar approach with front line health workers being accountable to the people by being “locally chosen and wherever possible paid, housed and supervised by a committee of villagers” (Alto 1996, p. 318). Frankel (1984, p. 288) concludes that “aid posts cannot function well unless the people it serves feel responsible for it in some way”.

### *Clientelism*

The PNG state has characteristics of clientelism. This is a situation where politicians main interests are in securing the visible targeted transfer of resources to voter groups, rather than the provision of public goods that benefit the wider community (Duncan & Hassall 2010; Allen & Hasnain 2010). Allen and Hasnain (2010, p. 13) argue:

“... a survey of the literature points to a number of factors that have combined to give rise to a postcolonial political culture in Papua New Guinea that is strongly characterized by localism and patronage. The interrelated issues of extreme social fragmentation, the lack of commitment to abstract notions of the state and nation, traditional leadership styles *wantokism*, aspects of the colonial legacy, the collapse of state services and the non-emergence of strong political parties have all contributed to the prevalence of patronage politics in Papua New Guinea.”

Duncan and Hassall (2010) test this claim empirically through the development of an indirect measure of clientelism (being the proportion of the Government budget going to the public goods of health and education, as opposed to targeted transfers that benefit particular groups). On this measure, PNG fell into the

bottom group of nations within the Pacific – which is suggestive of clientelist behaviour (Duncan & Hassall 2010). Batten (2010), although not explicitly considering clientelism, provides support for the Duncan and Hassall thesis through his historical analysis of PNG government expenditure which shows health and education has declined in real terms since independence, whilst over the same period “other” government expenditure (which includes direct grants to MPs) has increased dramatically in real terms.

The immediate implication for health of PNG clientelism, is that it is possible, in the context of a system with multiple problems at multiple levels, that politicians are not interested in a) investing political capital in complex, long term reforms with little hope of immediate pay off or visible link back to them as the sponsor; or b) making improvements if that reduces the opportunities for rents to distribute to clients (Duncan & Hassall 2010; Atkinson 2002).

A possible broader implication for health of a clientelist state can be seen in Day (2009) who argues that the range of PNG public sector reforms since independence – particularly those around decentralisation of service delivery (including health) – have been more about broader political settlements than efforts to improve health service delivery. He argues:

“Tracing the implementation of the two key organic laws in PNG since independence reveals that, in its simplest terms, the history of health sector governance is the story of the health sector responding as best it can to the prevailing legislative and administrative environments. The difficulties in health service delivery are inextricably linked to the broader political and governance context. Efforts to improve service delivery, whilst ostensibly the driving force of reform efforts, have ultimately taken a back seat to the primacy of politics.” (Day 2009)

Day, quoting Dillinger, concludes that PNG’s experience of decentralisation is not the result of some “carefully designed sequence of reforms aimed at improving the efficiency of public service delivery” but rather “a reluctant and disorderly series of concessions by central governments trying to maintain political stability” (Day 2009).

However, there is also evidence at a more local-level, that the intersection of politics and health does not necessarily have to be negative vis-à-vis health service provision in PNG . There are a number of examples from medical anthropology literature which point to the overtly political way in which formal health services were received by local communities and leaders. In particular there are examples of where local leaders embraced and supported the introduction of western medicine as vehicle to modernity and a sign of power which was then used a lever to local political advantage (Herdt, 1989; Baker 1989; Lipuma 1989). Lipuma (1989) in his account of the introduction of western medicine amongst the Maring people, argues:

“...young men are much more likely to use the aid post and the hospital, to approach biomedicine with more confidence. It is the young me who become aid post orderlies and who seek to capture the work opportunities offered by the hospital. More because the use of and participation in Western medicine is a source of political strength for the younger generation, they are motivated to push for its success.” (Lipuma 1989, p. 306)

In these cases the nature of local non-formal institutions of leadership has potentially worked to support the introduction, acceptance and spread of western medicine. Kini (2010) describes the mechanics of this leadership process through the example of a water supply project in Gulf province:

“Leadership is attained by competition on levels of influence and ability to bring resources into the community and to be able to demonstrate skills that are unique and useful to the community. Although all members of the community contributed to some extent labour and other resources to the construction of the water supply and sanitation facilities, not all 125 contributions were found to be weighed the same. Those members that contributed skilled labour and maintained initial and continued negotiations with the donor and the implementing agency have gained increased status within the leadership structures of their community because of their unique and skilled contributions. These include men and

women members of the community. This project was therefore becoming a force to once again change power structures.” (Kini 2010)

According to Duncan (2011), elements of traditional political leadership and values should be embraced to support service provision in the Pacific. For example, the “big men” practice of securing reciprocal obligation through the public distribution of “gifts” could be the basis for a more transparent and effective service financing approach.

“... a feature of Pacific political culture that might work towards improved governance is the competition between big men. A better governance system might be to institutionalise the big man networks at the district level, as the big men are still the legitimate political figures in that arena. Instead of relying upon public service administrators to deliver funds to a district, local distribution might be moved into the local political sphere.” (Duncan 2011, p. 158)

In this context, Garner (1988), in an Editorial of the *PNG Medical Journal* argues part of “the way forward” for rural health services in PNG is the strengthening of community leadership as “active and effective leaders at a local level are important in voicing complaints about service decline” (Garner 1988, p. 163). However, he cautions that it is unlikely that health alone will maintain enthusiasm for local development. Rather, he suggests approaches to health development need to be couched in broader developments such as cash-earning opportunities and education (Garner 1988).

### **5.5.2. Social Context of Health in PNG**

As with the broader literature, there is a body of empirical work in PNG which suggests that both health care providers (public, private and non-formal) and consumers make health provision and utilization decisions through the lens of social networks, knowledges and interests which can work for (or against) quality and equitable health service provision.

### *Provider relationships*

The literature is replete with examples – positive and negative – of the importance of the social positioning of providers vis-à-vis the provision of quality acceptable health services in PNG.

On the negative side, there is the oft observed pattern of brusqueness, rudeness, and on occasions abuse of patients by health workers (both government and church) which can, in part at least, be traced to a lack of social connection between providers and users. Whittaker et al (2009) report that the “alienating behaviour on the part of the nurses” was a factor constraining MCH use. Gilmour (2012) posits a range of social factors as being critical to the non-use of health services in a remote part of Eastern Highlands Province:

“... the root of women’s reasons for not going to a health centre to give birth and most of it came down to fear: fear of the health worker who is not from their village and doesn’t speak their language, fear of seeking help from a male health worker, fear that their family will be asked to pay for the service, fear that the medications they’re given will hurt them, fear that the health worker will yell at them and make them do things that feel painful or wrong.”

Reid’s (1984) observation of MCH clinics in Madang province indicated recipients of MCH services are “passive recipients of procedures, the point of which is probably poorly understood by most village women”. She reports the MCH team’s attitudes towards clients were, with a few exceptions, generally poor, and overall teams felt frustrated and negative towards clients. Reid argues that a key limitation of the clinics were that they focused on the individual as a patient, not as people who were members of social units, and “few attempts have been made to mobilize village women (or men) to take an active part in health care delivery” (Reid 1984, p. 300).

Carrier (1989), observing MCH patrols on Ponam Island in Manus Province, concluded that whilst people attended the clinics, the clinics “did not provide the kind of service which it was intended to provide”. He argues the sisters, not

being from the village, “suffered from few social constraints” hence “they were conscientious about time keeping, record keeping, weighing and measuring and so forth, but attended so much to these bureaucratic requirements that the children received very little clinical care” (Carrier 1989, p. 164).

Jenkins (1992) quotes a study from Tari in the Southern Highlands which showed the average length of 120 interactions between mothers and MCH nurses was 7.4 seconds.

On the more positive side of the ledger, there is also evidence of health workers having positive social relationships with the individuals and communities and, as a result, service quality and use can be high.

Macfarlane and Alpers (2010), based on a study in Bougainville, observed a largely equal degree of use and trust between modern and traditional/public and private health providers. As with Leach et al (2008), Macfarlane and Alpers found that people’s preference for a particular provider was not necessarily based solely on a cultural preference, but in fact was mediated through a range of factors including cost, location, and relationships. For most respondents, the choice of first treatment resort was based on confidence in a particular service provider or practitioner’s ability to deliver a fast and effective cure. For some respondents, their relationship to the practitioner was the determining factor. Practical considerations, such as proximity of the service to home, cost and availability of medicine, were important to a lesser number of respondents (Macfarlane & Alpers 2010).

There is also evidence that the training of local people as health workers, by their greater connection to the local population, increased the acceptability of western health services. Herdt (1989) argues it was only when the Sambia (Eastern Highlands Province) themselves trained as APO’s that the aid post became popular and effective. Lepowsky (1990) reported low initial use of aid posts on a small island in the Louisiade Archipelago due to the fact that the aid post orderlies were from different language groups and hence found it difficult to gain the confidence of the community. She argues that local people should be trained as local health workers (Lepowsky 1990). Maddocks and Maddocks (1972)

observed in the Motu village of Pari “medicine is seen as a personal service, and if the structures of health care do not facilitate this personal element they will be regarded as unsatisfactory”. However, there is also evidence that this kind of localisation of health worker staffing can create other local political problems with the local health worker not being able to treat certain relatives (Carrier 1989), or sometimes refusing to treat people from other clans (Lipuma 1989; Frankel 1984).

### *The Social Management of User Fees*

There is evidence that a range of informal factors influence how providers at the local level operationalise user-fees in PNG.

Thomason et al (1994) concluded that overall user fees as introduced and managed in PNG at that time had a negative effect on service utilisation and equity. However, the study also illuminates a range of informal practices that impinged on how user fees were introduced, understood, and implemented in PNG. The study found that whilst there were no standard exemption policies, the majority of centres surveyed did provide exemptions not just for the poor, but also for children, the elderly, STD/TB/leprosy patients, family planning, chronic disease, and the disabled (Thomson et al 1994). The application of these exemptions can be seen in the fact that all health centres collected less than the theoretical maximum amount possible. Further, the study found a number of “informal” arrangements were developed to “overcome the negative effect of fees”.

“... many patients without money waited until after the government cashiers finished work and then were attended to by the health staff. Health staff reported high outpatient attendances and admissions outside of normal working hours.” (Thomson et al 1994, p. 1111)

The study also identified a range of community financing mechanisms in existence in PNG which were assessed as being “relatively successful”. These schemes operated in a variety of ways including individual and village based premiums, with one linking to a local business enterprises (plantation) who

subsidised the scheme. Further they, like point of service user fee schemes, all had some kind of governance board overseeing the facility, and the scheme. In general the study attributes an important role to the boards in relation to scheme's success –with the more active the board, the more successful the scheme. In relation to the community financing scheme, the study reports that broad consultation with village leaders, and health and non-health organisations at all levels, was a significant contributor to its success (Ibid).

McKay and Lepani (2010) also provide a number of examples of informal, nascent health insurance schemes that have evolved spontaneously across PNG. These include schemes established by facility management committees, urban-based workers contributing to “fortnight clubs” to meet social obligations, and village or local area based schemes. The authors conclude “it is worth exploring how the underlying principles of such models, including the inter-household cash transfers based on reciprocal exchange and kinship obligations, might be applied more directly to improving utilisation of health services” (McKay & Lepani, p. 15).

At a more fundamental level, Alto (1996, p. 316) argues that, in the PNG context, a “free service is viewed of little value”. This may relate to the traditional importance of exchange in PNG society. Gardner and Wiener (1992) argue that exchange and the relationships it set up and defines is an extremely important part of the social fabric. They argue Shamans, mediums and priests may all play leadership roles and in this they are in exchange relationships with their followers. It is common across PNG that traditional healers charge some kind of fee – be it monetary or social payment in terms of food or other obligation or recognition (Roscoe 1989, Herdt 1989; Young 1989; Macfarlane & Alpers 2010). In some cases, there appears to be scope for the local negotiation of the level and type of fees (which can be high). Further, in at least one location of PNG, Goodenough Island in Milne Bay Province, Young (1989) suggests payment for traditional healers take the form of a retainer fee being provided at the commencement of the illness, with more offered when (if) the patient recovers. Leonard (2002) argues, in the context of Africa, this form of “contingent



contract” may be a useful financing approach for western medicine as it creates an incentive for the provider to make maximum effort on behalf of their patient.

The clear message that emerges from the above is that the issue of user fees in PNG cannot only be seen in the classic economic categories of efficiency and equity. Rather they need to be understood through a range of social and traditional prisms which have meaning beyond the formal transaction.

### *Socially-Embedded Private Provision*

Little is directly known about the operation of the local private health sector in PNG. However, there is a small but important body of literature in relation to other local, notionally private organisations (such as tradestores) which may have relevance to the health sector. This body of work suggests that the private sector at this level does not operate in the classically self-interested manner suggested by theory. Rather, there is evidence that these notionally private sector bodies are deeply embedded in local social and kin based structures. Curry (1999, 2004) studied village-based trade stores in East Sepik and Eastern Highlands Province and found:

“... the majority of such tradestores are group investments. Their operators often draw on extensive networks of kin to pool capital and labor, in the way these same kinship networks to support indigenous exchange transactions, such as bride prices, mortuary exchanges, and the staging of large ritual events. The activation of social and kinship networks to establish a trade store is an act imbued with meanings associated with group identity and status.” (Curry 1999, p. 411)

In this context, Curry argues relations between customers and trade-store operators are often “nonmarket in form, and market imperatives for generating profits are subordinated to the requirement of gift exchange.” (Curry 1999, p. 411)

The potential relevance to health in PNG of the nature of these local level “private “institutions is large. It is possible (but not known) that local private

health providers may follow a similar socially-embedded service provision model, in which case it may provide a health service delivery model that avoids many of the equity and efficiency downsides associated with unregulated private health provision in other situations. McKay and Lepani (2010) provide a limited example of this possibility via the work of a mining company in the Southern Highlands Province which has activated local tradestores and local medicine stores in the diagnosis and subsidised treatment of malaria.

It also possible (but again not know) if tradestores, given their centrality to social exchange are or could play a role in health insurance. There would also seem to be the possibility of tradestores entering into a partnership role with Government to make cash available (cheque cashing) to government and church facilities (the lack of cash at a district and facility level is a critical constraint to conducting outreach patrols/clinics).

#### *Provider Associations*

International evidence suggests that provider associations can influence provider behaviour (Oladepo 2009). Again little is known directly about the current role of provider associations in PNG beyond the anecdotal observation that they exist, and are working effectively on behalf of their members on the industrial front. Frankel (1984) gives a small insight into the potential meaning (and hence power) that could be contained in provider associations in relation to Aid Post Orderly's (APO's):

“We APO's have no father now, we have just been abandoned in the forest', a rueful expression of the Health Department's perceived indifference to their needs. But in recent years this has changed, for in the words of one APO, 'We have a father now,' the Aid Post Orderly Association (APOA).” (Frankel 1984, p. 283)

Frankel goes on to argue that the association was becoming involved in pay and conditions and “has largely taken over the momentum in aid post affairs from the Health Department, and aid post orderlies are pleased to have discovered the benefits of organising” (Frankel 1984). It is also illuminating that one of the first

acts of the recently introduced Traditional Medicine Policy (see below) was the formation of a traditional healer association in a number of provinces (Macfarlane & Alpers, p. 2010).

The potential importance of these kind of associations in the context of PNG health is that they may provide a robust and legitimate structure to which health workers feel they belong (akin to clan relationship) and as such may provide a source of constraint/enabling on their behaviour that is not evident from their association with national, provincial or local government. It is also possible the associations could become more active political players in broader contestation around the form, and management of the PNG health system.

### *Socially Based Patient Autonomy*

There is evidence that a very strong patient autonomy ethos exists in PNG. In its purest form (mostly formally expressed in developed county contexts), patient autonomy refers to the right of patients to make their own decisions about care – with health professionals providing education and guidance but not direction. In practice, it often comes down to patients wanting to be informed and empowered around their illness and treatment options, and feeling they are an active participant in (not a passive recipient of) health care decisions (Waris 2005; Azetsop & Rennie 2010).

In PNG patient autonomy, mediated through social context, is evident in at least two important ways.

The first manifestation of patient autonomy in PNG the widespread and dispersed therapeutic knowledge through the community of the nature of illness and it's the required treatment (Welsch 1983; Lepowsky; 1990; Roscoe 1989; Allen 1989; Herdt 1989). Welsch (1985) and Jenkins (1992) argue it is very common in PNG for villagers to diagnose themselves (based on traditional understanding) and seek medical care for the treatment they think they need. Welsch argues:

“Ningerum are receptive to western medicine, but practice of self-diagnosis means that majority of visits to aid posts are when the patients have already determined what the problem and how it should be treated. They do not seek advice from the aid post about health problems. The majority of PNG villagers have a similar model. This clashes with western understanding of role of health workers – assess, diagnose and treat.” (Welsch 1985, p. 208)

Davy (2007) reached a similar conclusion in her study of the well-being of PNG health workers. She concluded:

“One of the reasons suggested for their role ambiguity was that the worker and the people he served were not able to agree upon the services that should be provided. On the one hand the community expected the aid post to provide a dispensary service, distributing the drugs asked for, while on the other hand the CHW wanted to provide a full medical examination and then recommend treatment as they saw fit.” (Davy 2007, p. 238)

Welsch also argues the Ningerum do not expect health education from APOs. This appears to be linked to the fact that APOs do not make house calls (as traditional healers do), and villagers do not take APO knowledge as being important knowledge (Welsch 1985). Frankel (1984) paints a similar scenario with the Huli in Southern Highlands Province, who only associate activities of the Health Department with improved health to a limited extent:

“To them, and for the most part in reality, the Western health service is an illness service. The aid post is called the “illness house” (tigimdu). People are happy to go there to gain relief from a particular illness, but are likely to be more concerned with its social, moral and religious implications, and will ascribe relief as much to their resolution of these aspects of the illness as to the medicine they receive. General health and well-being are to be gained elsewhere, so that when people are well they do not feel the same commitment to the aid post as to the school and church.” (Frankel 1984, p. 288)

The second manifestation of patient autonomy in PNG lies in the ubiquitous belief across PNG that many types of illness are the result of ruptured social relations – and healing requires social action to fix the cause of the illness (Herdt 1989; Strathern 1989; McFarlane 2009; Carrier 1989).

Curry (1999) provides an example of a range of social actions (feasts and payment to sorcerers) taken by a trade store owner to ward off illness caused by sorcery. Roscoe (1989) observes illness caused by sorcery or ancestral spirits is difficult and time consuming to cure “involving trips to other hamlets or villages for announcements, more or less oblique accusations, and finally public discussion”. Young (1989), observing illness on Goodenough Island in Milne Bay province found that social relationships largely govern the diagnosis of sickness and influence the quest for a cure, and that curers are usually sorcerers. He concludes:

“For these reasons alone modern health facilities are perceived to be quite inadequate to community needs. When a person is hospitalised for a “big sickness”, the cause of the sickness and hence the responsibility for it remain behind in the village.” (Young 1989)

Street’s (2010) study of patients in Madang Hospital also focussed on the importance of social relations as a source of illness/cure.

“Patients described the hospital as a space of stasis where they were unable either to engage in the productive work of the village, such as gardening, or to engage in the world of white people, hospital medicine, and urban forms of sociality. They said it was hard to focus on hospital medicine because of uncertainty about the doctors’ intentions, and whether it would work if social conflicts remain in the village.” (Street 2010)

Maddocks and Maddocks (1972) argue:

“Older Motu people would consider a discussion of clinic attendances largely irrelevant to the question of “health”. They see health as

something closely linked with satisfactory personal relationships. Sickness is a consequence of anger, guilt or shame and is met and overcome through family consultation, confession and reconciliation.” (Maddocks & Maddocks 1972, p. 233)

The important implication of the above is that it is likely there exists a very strong and deep reservoir of interest and motivation from PNG individuals to engage in health improving actions – but actions that are understood in their own socially constructed terms. The challenge and the opportunity for the formal health system is how it can create the structures and processes by which this local energy is captured and channelled into the productive solving of general health service collective action problems.

Allen (1989) gives an indication of the possible form this thinking might take when he argues that “health administrators and trainers must explicitly acknowledge sorcery as a cause of illness”. He argues:

“... even though many hospitals in Papua New Guinea allow local curers into their wards, sorcery is not acknowledged as a primary cause of disease... To be more effective, health workers have to say “Yes, this disease is caused by sorcery, and this is a treatment which may defeat sorcery”. Whatever approach is used to this problem, a more effective medical service will have to acknowledge the right of the patient to control his or her own illness...” (Allen 1989, p. 65)

Sharp (1982) echoes a similar sentiment:

“If the modern health service is truly interested in bringing health care to all the people of even the remote areas, professional medical and health workers need to understand a lot more about the beliefs of the peoples they attend. Among the people of remote PNG sickness and death are demeaning and shameful: the shame is diminished by explaining these events in terms that reaffirm the mystery of life. Medical and Health workers who are trained to treat and prevent illness must apply their

skills without increasing the shame (helplessness) people feel, or eroding their sense of mystery.” (Sharp 1982, p. 114)

### 5.5.3. PNG Traditional Health Systems

Traditional health beliefs, practices and treatment options remain popular and common choices (often in combination with western medicine) for consumers in PNG, and there is empirical evidence that is a high degree of informal interaction between the traditional and formal health systems in PNG (Macfarlane 2009). Further, whilst there is a high degree of local heterogeneity in traditional health systems across PNG, Macfarlane (2009) argues there is sufficient uniformity in underlying beliefs and practices across the country to allow some level of generalisation.

At the broadest level, all communities across PNG have a vibrant and resilient set of traditional health beliefs and practices. A very strong finding across nearly all medical anthropology studies in PNG is that the advent of western medicine does not displace or replace traditional systems, rather there is a process of assimilation and accommodation of western medicine into traditional beliefs/practices. Villagers don't see the choice between western medicine and their own health system as an either/or situation, rather they appear to have readily accepted western medicine as part of their own system – often as a good/effective cure for natural illness (and the symptoms of supernatural illness if not the causes) (Lipuma, 1989; Frankel 1983; Lepowsky 1990). As Roscoe (1989) summarises:

“As elsewhere in PNG (for example Weslsch 1983), there is no conception that Western medicine forms an alternative system incompatible with its traditional counterpart. Villagers readily concede a superior European knowledge of certain types of illness, but they believe this knowledge to be an extension of traditional medicine.”

Baker (1989) argues that the Maisin people “have successfully encompassed the limited Western medical technology available to them within a framework of culturally grounded beliefs and practices. The effect of western medicine on the

Maisin's overall notion of health and illness has been quite limited". Similarly, Carrier (1989) argues for the Ponam the "choice between Western and indigenous medicine was not a choice between alternative systems, but a choice between alternative diagnoses within a single medical system". He argues that the Ponam don't see western medicine as different or in conflict – rather they understand western medicine in their own terms. "Ponams had a unified theory in which Western and indigenous treatments had equal legitimacy" (Carrier 1989, p. 174).

Frankel (1984) argues that the indifference to APO performance partly explained by the place of western medicine in the Huli medical system:

"[The Huli] take a pragmatic approach to most illness and take advantage of those treatments offered by the Department of Public Health which they judge to be more efficacious than their own methods... Western treatments are largely judged to be equivalent to their own treatments for conditions explained in terms of proximate causes. Western treatments are seen mainly as techniques which act directly upon the illness. But this mechanistic component is only part of the traditional medical system. Particularly in more serious conditions the illness is likely to be diagnosed in social, moral or religious terms ...their commitment is therefore guided by Christian interpretations, as well as to judicial modes of therapy, and the vigour with which they pursue these is in marked contrast to their seemingly diffident use of the Health Department's facilities." (Frankel 1984, p. 286)

Overall, Welsh (1985) summarises:

"In general, the introduction of western biomedicine in PNG has not led to Papua New Guineans abandoning customary therapeutic practices. Rather a situation has developed where different forms of therapy play complementary rather than competitive roles in health seeking behaviour." (Welsh 1985, p. 205)



There is also a substantial body of evidence that points to the high degree of informal linkages between indigenous and western health providers.

In a study of the opportunities and constraints on the formal integration of traditional and western health systems in the Nasoi of Bougainville, Macfarlane and Alpers (2010) found a high degree of interest from both the community and practitioners for some form of integration of formal and traditional systems.

“The extent of support for an integrated health care system expressed by members of the community and health care practitioners alike suggest there is considerable potential for some type of integrated health care system to be developed in the Nasioi area. Although currently not part of the formal health system, traditional medicine is widely used and well regarded.” (Macfarlane & Alpers 2010, p. 394)

McFarlane and Alpers (2010) also found there was already some informal referral and advice linkages established between healers among the Nasioi. They recount:

“One of the best known traditional practitioners has an official arrangement with the private medical provider practitioner in Arawa. The traditional practitioner is able to treat most conditions and is a specialist bonesetter. He collaborates with the western medical doctor and provides services from the doctors’ premise several days a week.” (MacFarlane & Alpers 2010, p. 391)

Young (1989) reported that sometimes health workers on Goodenough Island would call in specialist healers to supplement orthodox treatment. Chowning (1989) observed Kove healers in West New Britain do not seem to resent having other experts called in, and it is common for people to volunteer advice and services in cases involving, for example, loss of consciousness or difficulty in breathing. Allen (1989) observed that *glasmen* would often suggest patients seek treatment at an aid post or health centre – and they also frequently treat patients in health centre wards at night when the professional staff are absent, but with the cooperation of local staff.

Jenkins (1992), whilst being generally sceptical about the prospects for broad-based integration of the traditional and western systems (on the basis of the systems being “conceptually in conflict”), does recognise there are local examples of productive relationships between different kinds of healers. She acknowledges often traditional healer themselves would like to see the patients come to them first, so that they can remove the supernatural element in the illness, and then go to the modern doctor (Jenkins 1992). Jenkins (1989) also argues utilization of health services has been most effective “where supernatural or religious beliefs have buttressed the exposure to western medicine”. For example, supervised delivery in Madang province was made:

“... more palatable by allowing traditional practices to continue in the hospital setting. Women were allowed to undergo labor accompanied by their kinswomen, as was usual in the village. They could stand or walk or squat as they chose until very close to delivery. If problems arose or labor was especially prolonged, they were allowed to send for their husbands or someone else from the village who could elicit confessions of silently harboured anger or guilt.” (Jenkins 1989)

PNG has recently adopted a Traditional Medicine Policy (Macfarlane & Alpers 2010). However on the spectrum of degrees of interaction with traditional health systems which ranges from incorporation, collaboration, and integration (see above), Macfarlane and Alpers (2010) describe the PNG policy has falling between incorporation and collaboration – but falling short of full integration (i.e. creating a new “hybrid” service). Macfarlane and Alpers (2010) argue:

“The Nasioi it is not an “either/or” choice - respondents saw a role for and wanted both western and traditional health care services. At present the formal health system offers only western medical services. Although traditional health care is a popular and much-used treatment option, it is only available through the informal sector. Thus, the formal health sector is poorly aligned with the duality evident in people’s perceptions and practices, and is not providing the range of health care options people would like.”

Alto (1996) argues more forcefully that the structural separation between the traditional and western systems is unnecessary and unproductive.

“A social distance was imposed between health providers and the traditional healers, and unnecessary separation that remains to this day although the two systems are not innately in conflict. Little effort has been made to identify and integrate traditional healers, and they remain marginalised from PHC.” (Alto 1996, p. 316)

Pataki-Schweizer (1985) argues integration of traditional and western medicine in PNG has “pervasive complications” but these are not “irresolvable”. He suggests a gradual exploration of commonalities between the systems around a broad understanding of “curing”, better ethnographic data, and use of traditional practices. In particular he sees primary health care with its “authentic face-to-face interaction” offering the possibility of local integration and “fusion” of approaches. Without this effort to engage the traditional, he concludes primary health care will “not work.... [and] what results is a superimposed veneer or patina with less penetration, less effectiveness, and even less efficiency” (Pataki-Schweizer 1985, p. 215).

Given the range of non-formal cooperation that appears to already exist between the systems in PNG, and the continuation of the strong and vibrant traditional health systems across PNG (in which in the minds of many Papua New Guineans western medicine is a part), there would seem value in exploring how the two systems could more meaningfully integrate. This would involve going beyond the more limited approach of “cooperation”, and searching for ways to develop truly new services which fused both traditional and western approaches, and as such leveraged the support and legitimacy inherent in the more extensive and deeply embedded traditional system.

#### **5.5.4. Complementary Non-Health Indigenous Organisations in PNG**

There is evidence that ostensibly non-health, non-formal organisations have played a critical role in the development of health systems in the developed world. In PNG there is a broad range and type of non-formal, community based

organisations – often centred on clans or place - that have demonstrated their ability to play a productive role in the solving of collective action problems, including around health, and as such may, over time, provide the foundation on which new institutional forms for the sector could be built (Unage 2009; Hegarty 2009).

At a broad level, Hasnain et al (2011) have demonstrated empirically, in relation to the distribution of local infrastructure projects, that the extent to which communities are organised for collective action, as measured by reported membership of groups, particularly non-church groups, is the strongest and most consistent predictor of whether a ward receives a project.

More specifically in relation to health, in a study of women's groups in East Sepik and Chimbu, Imai and Eklund (2008) found that a very significant proportion of these groups had health generally as an objective, and of these 58 percent in Chimbu and one third in East Sepik had child growth as one of the objectives of the group. The study found these groups were effective in reducing childhood malnutrition, but those organisations that evolved indigenously without the input or direction from donors, were more effective in this role than those that had donor input. The authors conclude:

“Support for existing autonomous women's organizations is a particularly relevant intervention in PNG [as] governance with limited trust in formal institutions and modest outreach of services remain issues for large segments of the rural population.” (Imai & Eklund 2008, p. 209)

Fitzpatrick and Ako (2007) report how an urban-based language group (Kewapi) mobilised resources to support malaria bed net provision and distribution to their kin in villages in Southern Highlands province. The project capitalised on the interest, organisation, local knowledge, and relative greater access to resources of the urban group to provide a culturally acceptable and efficient entry to the village. The urban-based group were able to readily understand and interact with local leaders, and hence plan and deliver support effectively.

“The project design accommodated the logistics of using a partnership approach to work across diverse cultures. What emerged was that a genuine interest in, and affirmation of, the local culture is the crucial factor in a positive outcome.... Strengths of the project were in capitalising on the traditional discussion forum of the community, and relating to community concerns.... This approach also allowed power dynamics within the project to be acknowledged and addressed, within the constraints of time and commitment.” (Fitzpatrick & Ako 2007, p. 7)

Ashwell and Barclay (2009) found that a multifaceted education, community development and health promotion intervention in PNG initiated change to lifestyle practices and improved physical health and social and economic well-being. The factors that positively influenced the uptake of new health knowledge and practices in communities were a motivated person acting as a catalyst for change, empowered leadership through community governance structures, effective visual tools, and village health volunteers linking community and rural health workers (Ashwell & Barclay 2009). Conversely, they found less successful health interventions occurred where community leadership was weak. In particular:

“In communities where politics and jealousy had affected the leadership there was little sustainable evidence of lasting change influencing health and well-being. Also, in communities where national level staff, as distinct from local district personnel, had conducted training, community members failed to claim “ownership” of changes.” (Ashwell & Barclay 2009)

Reid (2010) outlines how a particular participatory technique – “community conversations” – is starting to be applied to assist PNG communities work through difficult issues – such as HIV and gender violence. She argues:

“The methodology of community conversations privileges working with groups and communities, builds on the goodness in people and communities, and strengthens social capital. For these reasons, participants at the workshops decided that it should be developed for the

PNG context. The community conversations approach resonates with people's view of the PNG way of doing things: community and clan discussion of problems, storytelling as a form of moral guidance, a strong sense of reciprocity and of concern for the well-being of the group." (Reid 2010, p 271)

Malcolm (1973) reported on how a number of "settlement societies" in Lae organised to plan, build, finance and manage community based health centres in their area. He argues this approach is an example of a "doing with" approach that embedded "co-operation, partnership and participation and the sharing and accepting of responsibility in the development of a service which is seen and accepted as a community mandate" (Malcolm 1973, p. 165).

Frankel (1984) also identifies the critical importance of the legitimacy of local organisational arrangements to health services. In the Huli area of Tari in Southern Highlands province, he compares the position of aid posts with other local intuitions such as schools and churches, and observes that the latter enjoy a much higher degree of community use, support and respect – as evidence through community contribution to construction and maintenance. He concludes that schools are more supported than aid posts due to the nature of their leadership – run by a headmaster who is educated - and decisions about the school are made by a Board of Management (formally constituted group of local people – councillor, village court magistrate, leaders of the parishes served by the school) that has legitimacy and hence ownership.

Frankel (1984) goes on to argue that a possible remedy to this situation is the devising of a local governance structure which embeds the aid post in local social relations, and as such a "mutual obligation of the orderly and the people he serves" is established (Frankel 1984, p. 289). He suggests a locally meaningful Community Health Board (akin to the local school board) be established for this purpose (Frankel 1984).

## 6. Suggestions for Moving Forward

The purpose of the above analysis of non-formal institutions is to make visible a range of factors that may be complementary to the formal health system of PNG. There is no blueprint for how an awareness of non-formal institutions can be incorporated into possible institutional re-design/reform. This is true in general terms, and for the PNG health system in particular. There are however a number of general pointers to guide action.

In prefacing these suggestions it is important to note that these suggestions for action are not definitive. The paper's insights and possibilities are based on secondary data. They suggest starting points for further discussion, analysis and research. Hence they are somewhat procedural in nature – in that they mainly identify actions that provide space for PNG actors to engage with, understand, and progress insights that emerge from this paper. A simple, formulaic action plan is not possible.

In this context, below are six, broad suggestions for how PNG actors may progress the understanding of the potentially complementary role of non-formal institutions contained in this paper.

### **6.1. First, and foremost, the analysis points to the critical importance of looking beyond the façade of the formal organisational and institutional arrangements of the health sector.**

It is clear from the above secondary data analysis that a vast array of factors exist outside the formal structures of the sector that impinge on how these formal structures operate. An awareness and understanding of these factors is critical – and a precursor to any action. This is the basic premise of political economy analysis in underpinning reform strategies (Goodard et al 2006; Oliver 2006; Moncrieffe & Luttrell 2005; Edelmann 2009; Fritz et al 2009; Buse 2008).

**6.2. Second, the analysis suggests that stronger and deeper structures of engagement/involvement of the PNG populace in the form, financing, delivery and performance of the PNG health system is important.**

The evidence is that there is a rich reservoir of capacity and interest in health at an individual and community level in Papua New Guinea. This interest has a strong form and particular orientations, which don't necessarily appear to align with the formal health service – a service that has developed and continues in a modality of “providing for”, rather than “working with” or “from within”.

The challenge and the opportunity for PNG is to create appropriate organisational forms and channels within the formal health system that have local resonance and power, and as such provide meaningful opportunities for PNG communities and groups to interact with and shape, the health system. Local place based associations, village leadership, clan structures would seem to provide the fertile ground on which such organisations could develop. An understanding and application within the health sector of the techniques of community development and empowerment are also important in this context (Unage 2009; Rassekh & Segarern 2009).

**6.3. Third, research is required to better understand the scale, motivation and practices of local, village based private health resources.**

A key focus of this analysis is the degree to which any local private providers of health are embedded in broader social context that shape the nature and form of service financing and provision.

**6.4. Fourth, is opportunity to explore options for more diverse and dispersed mechanisms of sector regulation.**

This would including community monitoring of services, and competition between pluralistic providers based on reputation for provision of socially responsive/valued services. This competition could be in the form of



franchising, supported by accreditation. Such a strategy would build on elements of PNG's local social context that provide incentives for providers and consumers to provide/seek quality, accessible care.

**6.5. Fifth, there would appear to be value in exploring how traditional and formal health services can move beyond cooperation towards integration and the creation of new or “hybrid” institutions.**

The evidence in PNG (as elsewhere) is that formal health services do not appear to be replacing traditional health system. In fact, there appears to be a high degree of openness from traditional healers to incorporate elements of western care. The key organisational challenge is how the formal health system can leverage the commitment and enduring legitimacy the traditional system enjoys. This suggests the need for a much deeper and more equal exploration of new organisational forms that encompass elements of both services.

**6.6. Finally, there may be a larger role for provider associations as organisational actors in the development, planning, management and regulation of PNG health services than is currently the case.**

There is some evidence that the associational value of particular cadres of health workers in PNG is strong. In the context of weak top-down regulation, the value of this kind of association – appropriated located and resourced - is that it may provide an alternate source (to government) of peer review, regulation and performance encouragement for health workers. Further, at a strategic level, such associations may evolve into more overt political actors involved in contestation around the form and direction of the system.

## **7. Conclusion**

The value of the analysis for PNG lies in its ability to offer a fresh insight to the oft analysed performance of the formal health system in PNG. In particular, this kind of analysis sheds some light on the incentives and motivation underpinning the behaviour of the managers, providers and users of the system. This paper has contended that these motives and incentives are driven, in part at least, by

the prevailing non-formal institutions surrounding the formal system. A central tenant of this paper is that the top-down nature of the current formal health system in PNG does not facilitate a range of potentially positive behavioural norms inherent in these non-formal institutions for health in PNG. The possibility offered by an enhanced understanding of these non-formal institutions is that this understanding may offer clues for how the formal could be re-configured to be more congruent and complementary with the non-formal – and in doing so leverage the enduring energy, motivation and legitimacy inherent in non-formal institutions to support formal health service provision in PNG.

There is no blueprint for how this can be achieved. The analysis in this paper can only be seen as a small step towards providing the insights and actions necessary to achieve a better alignment between the formal and informal. It is hoped this paper has been able to make a small contribution to the start of this process. It has marshalled a diverse range of conceptual and empirical insights to illuminate, at least partially, what exists at the local-level to potentially be a part of the development of the formal health system in PNG. This is important, for as Denoon (1989) argues:

“Of all the countries on earth, Papua New Guinea has the most vigorous tradition of parochial debate and local responsibility. If public health education could be harnessed to that parochial tradition, the effect would be powerfully therapeutic.... Without the creative impact of an organised public opinion, even the impressive services which the country now enjoys, must decline into a series of ritualised functions, whose original purpose recedes in the memory, which satisfies only the therapists, and which might even become (as in earlier days) the object of suspicion and superstition.” (Denoon 1989, p. 122)

The key challenge (and opportunity) is how the formal can harness the local to realise this therapeutic benefit.

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