POLICY BRIEF

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REVITALISING PAPUA NEW GUINEA'S HEALTH SYSTEM: THE NEED FOR CREATIVE APPROACHES

WHAT IS THE PROBLEM?

Health services need substantial strengthening. Deteriorating performance, persistently poor health outcomes and worsening trends on key indicators are well documented. Challenges facing the health system result not just from low expenditure; performance is also constrained by its structure and by cultural factors. In general, investment is determined by supply-side strategies – providing infrastructure and resources consistent with 'minimum standards'. The assumption is that this delivers the services required by users, and that users can and will access. Evidence indicates that this has led to gaps and misaligned incentives for both providers and users.

WHAT SHOULD BE DONE?

If expectations for improved health outcomes, heightened by the bounty of resource development, are to be achieved without substantial wasting of additional investment, policy-makers need to consider all potentially viable options. Lessons can be drawn from countries facing similar challenges where the policy mix was broadened to include both supply-side strategies and 'demand-responsive' mechanisms (voucher schemes, micro-health insurance, social businesses and social franchises). Trialling these mechanisms has the potential to reshape key elements of PNG's health system, redressing structural weaknesses and reducing inconsistencies with cultural realities.

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Lowy Institute Policy Briefs are designed to address a particular, current policy issue and to suggest solutions. They are deliberately prescriptive, specifically addressing two questions: What is the problem? What should be done?

Health system strengthening

Health services in Papua New Guinea (PNG) need substantial strengthening. Deteriorating availability and performance of many public and some private health facilities, persistently poor population health outcomes, and worsening trends on some key indicators are well documented. Access to health services in rural areas has become increasingly challenging; over the last ten years hundreds of rural health facilities have either closed or are not fully functioning.[1] In the same period maternal mortality rates have almost doubled, making maternal health one of the country's main health concerns. Maternal mortality in PNG in 2006 was 733 per 100,000 live births, making it the highest rate in the Pacific region and one of the worst in the world.[2]

The challenges facing the health system result not just from low expenditure; performance is also constrained by its structure and by cultural factors. In general, public and private investment is determined by supply-side strategies which are based on the assumption that providing infrastructure and resources, consistent with the national definition of minimum standards, will deliver the services required by users, and that users, whether targeted or untargeted, can and will access these services. The evidence indicates that this has led to gaps and misaligned incentives for both providers and users in PNG's health system.

If expectations for improved health outcomes, heightened by the bounty of resource development, are to be achieved without substantial wasting of the additional investment, policy-makers and program implementers need to consider all potentially viable options. Valuable lessons can be drawn from the experiences of other developing countries facing similar challenges, where the mix of policy instruments has been broadened to include both supply-side mechanisms and schemes that are more attuned to the realities of users' needs and requirements. These 'demand-responsive' mechanisms include voucher schemes and micro-health insurance, which directly influence expressed demand, and social businesses and social franchises, which are sensitive to demand. Trialling and refining these mechanisms in PNG has the potential to reshape key elements of the health system, redressing structural weaknesses and reducing inconsistencies with cultural realities. This research assesses the potential of these four demand-responsive instruments in the PNG context.

Demand-responsive instruments

Voucher scheme: entitles holders to free or subsidised care for targeted services from accredited providers (public and private), with vouchers distributed and use monitored by independent agencies. Voucher schemes can be funded by government and/or development organisations – or by private sector organisations.

Micro-health insurance: provides members with protection against financial consequences of medical treatment in exchange for a small annual premium.

Social business: delivers simple, proven health products through local outlets at affordable prices, potentially in partnership with commercial enterprise, or established using donor seed capital or microfinance.

Social franchise: involves a network of health facilities where providers (franchisees) deliver specified products and services and meet quality standards and pricing protocols. Franchises can be created by networking and branding existing public or private health centres or by establishing new facilities.

Recommendations

Designing the appropriate mix of instruments will require selective testing and the development of different combinations by the PNG government, in cooperation with development partners, the private sector and NGOs. Employing these as part of planned overall system strengthening is likely to:

- result in reduced waste of scarce resources within existing budgets through incentives to redirect resources in more productive ways;
- open the possibility for accessing additional funds based on stronger evidence of cost effectiveness;
- increase scope for better sharing of costs across public and private providers, as well as users, as services become more valued and as users better appreciate their power to influence supply patterns;
- lead to more satisfied, informed and timely user demand.

Recommendation 1: Selective trialling of demand-responsive mechanisms, alongside existing policies. Focus on packages of measures that can be implemented on a small scale, using existing community infrastructure and resources, with the potential for later scaling-up, with or without modifications, based on lessons learnt. This allows for selective trialling of mechanisms without permanently committing to their indefinite or comprehensive use.

Recommendation 2: This trialling should be designed to facilitate and support access to priority health services where need is greatest. Voucher schemes, possibly in association with social franchises, offer an important opportunity to improve access to maternal health and family planning services and HIV treatment services, including referrals and consistent follow-up, and to reinforce ongoing links between service providers and clients.

Recommendation 3: In selecting geographic areas for trialling, pay close attention to relevance and variability. Each community in PNG will have its own cultural, economic, technical and logistical challenges which need to be taken into account in identifying where success is more likely and in trialling different combinations of measures consistent with needs and requirements.

Recommendation 4: Explore the potential for replicating and expanding the social business model supported by Oil Search Limited for malaria treatment. As increased resource development brings higher expectations there is great potential here for other private organisations, particularly in the resource sector, to provide similar services. There is opportunity for organisations to learn from, build upon and adapt the social business model supported by Oil Search Limited. Focus on areas where malaria is a high-priority health issue and where there are strong church and community networks to provide local management oversight.

Recommendation 5: Public health system takes the central role. The National Department of Health (NDOH) should take the central role in encouraging and facilitating public private collaboration in trialling and implementing demand-responsive mechanisms, drawing on the complementary skills of national, provincial and district governments and private sector organisations, including resource companies, management companies, churches, and development organisations. Strong oversight and coordination by NDOH of the contributions of the multiple providers of health services is essential to effective integration so that gaps are filled without creating wasteful overlap or unevenness in service provision. Collaboration and consultation are keys to ensuring the viability of these partnerships.

Evidence of gaps and misaligned incentives

Supply sometimes in excess of expressed demand. Recent reports analysing a broad cross section of health facilities indicate varying degrees of 'excess capacity' with more staff on the payroll than required to perform the number and type of services recorded as delivered at the facility.[3] Whether real or ghost, or reflecting misused capacity, the result is waste of financial and/or skilled resources in a country where key health outcomes are worsening.

Some demand commonly unmet. For example, in the critical area of maternal health, where only 40 per cent of births are supervised or assisted by a trained health worker,[4] records indicate that 60 per cent of deliveries at Mt Hagen General Hospital involve women who have received no antenatal care. This suggests that women seek supervised deliveries even though they have not been covered by antenatal outreach services.

Poor implementation of supply-side targeting or fee exemptions. At public health facilities, fees and fee exemptions are unregulated and unaudited. Even if well implemented, fees are only a small part of perceived and actual access costs.

Poor coordination across service providers. Poor coordination leads to wasteful duplication and overlap of services in some areas and failure to utilise opportunities for cost sharing while health problems elsewhere are under-serviced.

Inadequate provision of health information. Efficient utilisation of health services requires that people are knowledgeable about symptoms that can be treated through allopathic medicine and are aware of and ready, willing and able to access treatment services. Health promotion material and activities alone do not provide a bridge to treatment. For example, STI prevalence remains high despite extensive health promotion over many years and the availability of highly efficacious (and cost-effective) treatment.[5]

Forms of health care delivery that do not effectively draw on cultural resources and conflict with cultural realities. For example, reciprocal exchange practices are integral to social relationships and at times influence how people access and engage with services. Health care options are understood and utilised in relation to other priorities in people's lives,

particularly given issues surrounding quality of care and trust in health services.[6]

Given this evidence of gaps and misaligned incentives in current health service delivery, demand-responsive mechanisms will be practical and useful additions to health policy.

Improving health-seeking behaviour

The proposed demand-responsive instruments seek to improve health-seeking behaviour in a number of ways:

- Providing information about services and guiding potential users to where services can be obtained. These mechanisms have the capacity to reach underserved and/or vulnerable groups or target specific segments of the population. For example, voucher schemes can encourage pregnant women to access antenatal care and supervised delivery. Social businesses can target debilitating community health problems such as malaria and diarrheal diseases with low-cost, simple, proven treatments. Social franchises can be used to reach tuberculosis patients whose conditions have been undetected or whose under-supervised treatment results in poor outcomes.

- Prompting improvements in health service delivery by simultaneously giving information and power to users, and direct financial incentives to health workers, linked to service provision and quality. For example, a voucher scheme in Cambodia targeting pregnant women in order to increase health facility deliveries both empowers users and encourages improved service quality.[7] The scheme operates in conjunction with a government-run Health Equity Fund, which covers user fees, transport and other costs of eligible patients, removing financial barriers to accessing services. Service quality is focussed on users' needs and requirements by a combination of performance-based contracting of facilities, increased staff support and improved medical supplies, in conjunction with a delivery-based incentive scheme, where midwives and other health workers received an incentive payment for each live birth attended in a referral hospital or health centre. In the PNG context, incentive schemes could involve Village Birth Attendants to reinforce the referral system and linkages with health facility workers.

- Leveraging existing health (and other) infrastructure and resources (public and private) to achieve greater utilisation and more cost-effective service delivery. For example, in Vietnam a social franchise created by networking public health facilities resulted in significant improvements in the quality of reproductive health care, reflecting a combination of improved clinic infrastructure, increased standardisation of quality services, staff instruction on proactive relationship management, and promotion of a culturally relevant brand plus a standardised schedule of affordable fees.[8] In PNG, creating a 'franchised' network of public health facilities could complement the role of vouchers in delivering consistent improvement in service quality. This could be trialed, for example, to improve the provision and utilisation of antenatal care.

- Encouraging innovative, cost-effective and sustainable public private partnerships in health service delivery by linking funding to service quality and services provided. The malaria treatment program, based on a social business

model, developed and implemented by Oil Search Limited in Southern Highlands Province demonstrates how a resource company can directly involve communities in addressing an endemic health issue in a manner that utilises existing community social networks and infrastructure, promotes health-seeking behaviour and has a chance of sustainability, in contrast to the generally adopted approach of investing in infrastructure and resources.

- Extending demand for health services through the use of packages of complementary measures. For example, voucher schemes and micro-health insurance used together can help protect households from catastrophic household expenditure associated with high-cost interventions, such as emergency obstetric care. Vouchers can also be used to address equity issues associated with access to micro-health insurance, social franchises or even social businesses. Similarly, micro-health insurance can facilitate access to health care through social franchises. Social franchises can deliver the service quality that underwrites the success of voucher schemes.

- Allowing for community- or district-specific interventions, designed to reflect contextual differences in user needs or requirements, or logistical constraints on the supply of services. For example, voucher schemes and social businesses could be important delivery mechanisms in areas where the health system is in a state of transition from current models of investment in public and church-run facilities to new models reliant on fundamentally different financing and support structures. This is most common in resource-rich areas where landowner groups are seeking greater influence over health service delivery. Vouchers can be used to maintain demand for targeted services by encouraging users to seek treatment or care, and encouraging health workers through direct financial incentives to provide high-quality services while waiting for physical infrastructure to be upgraded. Social businesses can provide ongoing community-level access to treatment even though the local health facility remains underresourced.

Common reservations

All demand-responsive mechanisms have limitations and can be criticised. However, it is important that criticisms do not lead to hasty rejection before consideration is given to how they might be redressed. With respect to these limitations, it is important to consider that the fallback position of not employing demand-responsive mechanisms is likely to be more detrimental than dealing with their restrictions.

Common reservations include:

- Concern that the current narrow range of health care options restricts the capacity of users to exercise choice, particularly in rural and remote areas where the provision of basic health services is limited to poorly resourced and maintained sub-district facilities.[9] This overlooks the role demand-responsive mechanisms can play in providing support and incentives to improve services at existing facilities. It ignores the availability of other community infrastructure that might be tapped cost-effectively once the better incentives associated with these mechanisms are in place. It also ignores the present choice, which is being exercised, to underutilise existing services

that are not perceived as meeting requirements and needs.

- Unwillingness or inability to pay for health services. There is mounting evidence that people are prepared to pay for treatment, particularly treatment perceived as 'high quality' and provided fees are affordable. Distance from facilities and out-of-pocket expenses related to accessing services are more significant barriers.[10] Demand-responsive mechanisms, notably vouchers and possibly micro-insurance, have the capacity to lower these barriers.

- Insufficient demonstration of health-seeking behaviour to warrant demand- responsive mechanisms. This can be addressed on a number of counts. First, expression of demand must be seen in light of diminished expectations as a result of the failure of the health system to deliver and the lack of a vocal constituency to advocate improved services.[11] Second, there is strong evidence in PNG of people's desire for medical services and their willingness to travel long distances to access treatment.[12] Third, health-seeking behaviour often reflects a pluralist approach to treatment options where traditional healing practices are used in combination with services provided at health facilities.[13] Demand-responsive mechanisms are compatible with medical pluralism while encouraging closer alignment of provider and user incentives to improve service delivery and meet health needs, recognising that health-seeking behaviour involves many social, cultural, and structural factors affecting people's engagement with health systems.[14]

Implementing demand-responsive mechanisms

Demand-responsive mechanisms are not without challenges in introduction and implementation. However, packaging instruments to harness synergies and sharing knowledge and experience between providers with complementary skills can reduce the scale of these challenges. In addition, operationalising these mechanisms can contribute to longer-term health system strengthening by extending the state's capacity for contracting, regulating and monitoring public and private sector health providers and, as a result of the built-in checks, lowering over time the risks of future sustained misalignment between services and service standards and user demands.

Start-up costs can be high, particularly in relation to determining a cost base, accrediting providers and establishing robust monitoring. PNG has the advantage of an established cost base for different types of health facilities and health services, avoiding the need for additional investment in this area.[15]

Measures that can be implemented on a small scale, using existing infrastructure and resources, with the potential for later scaling-up, can limit costs and risks. Examples include social businesses created in existing village trade stores; social franchises created by linking existing public health facilities; or a form of micro-health insurance initiated through community levies. Partnering can be valuable in establishing community trust; in avoiding the need for much of the up-front capital costs (and associated risks) in establishing new, standalone facilities; and, where relevant, in

tapping into established community credit mechanisms.

Administrative costs can also be high, particularly if regulators and providers lack necessary systems, capacity and skills. Voucher schemes and micro-health insurance require providers to be reimbursed on a regular basis. Continuous support to staff and monitoring of service delivery and quality is essential. Again, leveraging existing skills and overheads can limit administrative costs, as can the use of complementary packages of instruments.

Conclusions

Demand-responsive mechanisms will complement existing and emerging policy instruments, including public private partnerships, as part of a more effective overall system of health service delivery. They are not proposed as replacements for traditional supply-side instruments – nor as the basis of a revolution in health service delivery. Supply-side mechanisms will remain central to redressing the resource and institutional constraints on service delivery and in allowing size and scope economies to be tapped in the further development of health and associated infrastructure.

It is clear that cost-effective strengthening of the health system will require more than just scaling-up the existing model. There is a need for better tailoring of infrastructure and service scope, quality and delivery to real demand patterns and for greater coordination between providers in delivering services. In effect, improved tailoring would help to plug existing gaps in the health care system as well as what might otherwise be gaps in the evolving system, and to support faster and more reliable system strengthening in areas where demand and value is greatest. Indeed, trialling these creative mechanisms, in addition to carefully assessing the outcomes, could play a key role in revitalising PNG's health system.

This Policy Brief is an abridgment of a Lowy Institute Analysis with the title 'Health system strengthening in Papua New Guinea: exploring the role of demand-responsive mechanisms' authored by Ms Julienne McKay and Dr Katherine Lepani.

NOTES

[1] National Department of Health (NDOH), *Annual health sector review*, Port Moresby, 2008.

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ABOUT THE AUTHORS

Julienne McKay is an international public health adviser. She is a graduate in economics, with a career spanning research, policy development and analysis, investment analysis and senior management in government and the private sector. Since retiring in 2000, Julienne has attained a Masters degree in international public health and contributed to development programs in many different capacities in South East Asia, the Pacific and Central America.

Dr Katherine Lepani is a long-term resident of Papua New Guinea, where she has worked in the health sector on HIV, maternal and child health, and gender. She was a Senior Research Officer at the National Research Institute in the mid-1990s when she coordinated the development of PNG's first national multi-sectoral strategy for responding to HIV. She recently was involved in the development of PNG's new National HIV Prevention Strategy. She did postgraduate studies in Anthropology at The Australian National University and was awarded her PhD in February 2008. She holds a Bachelor of Arts (Anthropology) degree from the University of Hawai'i (1991), and a Master of Public Health (Tropical Health) degree from the University of Queensland (2001). She is a lecturer in the ANU College of Medicine, Biology and Environment where she teaches qualitative methodologies for health research in the Master of Culture, Health, and Medicine and the Master of Public Health programs.

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