



# BELOW THE GLASS FLOOR

Analytical Review of Expenditure by Provincial Administrations on  
Rural Health from Health Function Grants & Provincial Internal Revenue

JULY 2013



WORLD BANK





## **BELOW THE GLASS FLOOR**

Analytical Review of Expenditure by Provincial Administrations on Rural  
Health from Health Function Grants & Provincial Internal Revenue

**JULY 2013**

## **Rights and Permissions**

The material in this publication is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. The International Bank for Reconstruction and Development/The World Bank encourages dissemination of its work and will normally grant permission to reproduce portions of the work promptly.

For permission to photocopy or reprint any part of this work, please send a request with complete information to the Copyright Clearance Center Inc., 222 Rosewood Drive, Danvers, MA 01923, USA; telephone: 978-750-8400; fax: 978-750-4470; Internet: [www.copyright.com](http://www.copyright.com).

All other queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, The World Bank, 1818 H Street, NW, Washington, DC 20433, USA; fax 202-522-2422; email: [pubrights@worldbank.org](mailto:pubrights@worldbank.org).

## Table of Contents

<b>Acknowledgment .....</b>	<b>5</b>
<b>Abbreviations .....</b>	<b>6</b>
<b>Executive Summary .....</b>	<b>7</b>
<b>Background .....</b>	<b>13</b>
<b>Chapter 1: Introduction .....</b>	<b>14</b>
<b>Chapter 2: Spending on Frontline Service Delivery Activities in Rural Health .....</b>	<b>17</b>
The Importance of Timely Funding from Waigani .....	17
The Overall Picture of Provincial Spending on Health .....	20
<b>Chapter 3: Spending on the Operation of Rural Health Facilities (MPA 1) .....</b>	<b>23</b>
<b>Chapter 4: Spending on Integrated Rural Health Outreach Patrols (MPA 2) .....</b>	<b>28</b>
<b>Chapter 5: Spending on the Distribution of Drugs and Medical Supplies (MPA 3) .....</b>	<b>31</b>
<b>Chapter 6: Other Spending Priorities .....</b>	<b>34</b>
Spending on Patient Transfers from Rural Facilities .....	34
Spending on the Provision of Clean Water Supply .....	36
Spending on Supervision Activities .....	39
<b>Chapter 7: Summary and Next Steps .....</b>	<b>40</b>
Key Findings .....	40
Proposed Fieldwork .....	43
<b>Appendix 1: Country Summary – Papua New Guinea (and Comparators) .....</b>	<b>44</b>
<b>Appendix 2: The Rural Health Context .....</b>	<b>45</b>
<b>Appendix 3: Funding Streams for Rural Health .....</b>	<b>49</b>
<b>Appendix 4: Activity Spending versus Cost Estimate .....</b>	<b>59</b>
<b>Appendix 5: Analytical Methodology .....</b>	<b>60</b>
<b>Appendix 6: An Explanation of the NEFC Analytical Methodology for the Provincial Expenditure Review (PER) .....</b>	<b>61</b>
<b>Appendix 7: Proposed Fieldwork Questions .....</b>	<b>63</b>
<b>Glossary .....</b>	<b>66</b>
<b>References .....</b>	<b>67</b>

## Boxes

Box 3.A.1: Indonesian Case Study .....	57
--	----

## Figures

Figure 1: Spending on Frontline Services (2006-10) .....	8
Figure 2.1: Cash Release by February in 2008-10 (by Region) .....	18
Figure 2.2: Warrant/Cash Released via Health Function Grant by July (2010) .....	19
Figure 2.3: All Provincial Spending on Health (2006-10) .....	20
Figure 2.4: Recurrent-only Provincial Spending on Health (2006-10) (by Source) .....	21
Figure 2.5: Provincial Health Spending From Own-source Revenue (2006-10) .....	21
Figure 2.6: Morobe's Reduced Spending From Own-source Revenue (2006-10) .....	22
Figure 3.1: Provincial Spending on the Operation of Rural Health Facilities (by Region) .....	25
Figure 3.2: Provincial Spending on the Operation of Rural Health Facilities (by Fiscal Capacity) .....	26
Figure 4.1: Provincial Spending on Integrated Rural Health Outreach Patrols (by Region) .....	29
Figure 5.1: Provincial Spending on the Distribution of Drugs and Medical Supplies (by Region) .....	33
Figure 6.1: Provincial Spending on Patient Transfer (by Region) .....	35
Figure 6.2: Provincial Spending on the Provision of Clean Water Supply (by Region) .....	38
Figure 6.3: Provincial Spending on Supervision Activities (2010) .....	39
Figure 2.A.1: The Sub-national Service Delivery Supply Chain .....	46
Figure 3.A.1: Health Fund Flows .....	53
Figure 3.A.2: Estimated Provincial Fiscal Capacity (2012) .....	55
Figure 3.A.3: A Funding-of-Activities Approach in Rural Health .....	57

## Tables

Table 1: Activity Spending versus Cost Estimate (2010) .....	10
Table 2: Rural Health Provincial Profiles .....	11
Table 3: A Proposed Warrant Release Schedule .....	20
Table 7.1: Summary of Activity Spending versus Cost Estimate (2010) .....	41
Table 2.A.1: Standard Set of Provincial Health Activities and Cost Centers .....	47
Table 3.A.1: Funding to Rural Health for Recurrent Operations (millions of Kina) .....	50
Table 3.A.2: The Nature of the Funding Sources for Rural Health's Recurrent Operations .....	52

Table 3.A.3: Actual Fiscal Capacity to Fulfill Estimated Cost of Services (2010) .....	54
Table 3.A.4: Estimated Fiscal Capacity (2012).....	55

## Acknowledgment

This study was undertaken jointly by the World Bank (WB), the Australian Agency for International Development (AusAID), and the National Economic and Fiscal Commission (NEFC). The World Bank coordinated and led the review under the Program of Analytical and Advisory Activities in the health sector in PNG.

Alan Cairns led the design of the conceptual framework, undertook the analytics and wrote the report under the task leadership of Aparnaa Somanathan (World Bank). The work was carried out under the supervision of Laura E. Bailey (Country Manager, Papua New Guinea) and Toomas Palu (Sector Manager, Health, Nutrition and Population for East Asia and Pacific).

Sincere appreciation is extended to Hohora Suve, the current Chairman & CEO of the NEFC, and to Nao Badu, the recent Chairman & CEO of the NEFC, for their generous support that involved; the sharing of information, thoughtful feedback and cooperation at all stages of the review.

AusAID provided close oversight in all stages of the study, from conceptual design to strong involvement in the internal peer review process.

The author acknowledges the technical support provided by Aedan Wyatt, AusAID, on many aspects of the analysis. Also acknowledged is the technical support on water and sanitation sector issues provided by Isabel Blackett and Trevor Nott from the World Bank Water and Sanitation Program.

Contributions from the following World Bank staff and consultants brought important perspectives and content to the study, for which the author is grateful: Aparnaa Somanathan, Kathy Whimp, Jo Kemp and Isabel Blackett.

The author also gratefully acknowledges the contributions of others consulted or interviewed: Geoff Clark and Avi Hubert at AusAID, Navy Mulou, Senior Economist, National Department of Health, in PNG and David Whitehead, Financial Management Specialist, Timor-Leste, Papua New Guinea, Pacific Islands.

The World Bank's internal review process benefitted from the technical contributions of peer reviewers: Tim Bulman (Country Economist, Solomon Islands and Papua New Guinea, East Asia & Pacific) and Kathy Whimp (Health and Decentralization Specialist, Nairobi). The decision meeting was skillfully facilitated by Laura E. Bailey with comments and contributions gratefully received from; Toomas Palu, Isabel Blackett, Susan Ivatts (Senior Health Specialist, Human Development Pacific Islands and Timor-Leste), Geoff Clark, Aedan Wyatt and Avi Hubert.

The author is grateful to Sarah Harrison and Michelle Lee (Program Assistants), who graciously facilitated the conduct of this study.

## Abbreviations

ARB	Autonomous Region of Bougainville
AusAID	Australian Agency for International Development
CoA	Chart of Accounts
CoS	Cost of Services Study
CPI	Consumer Price Index
DFF	Direct Facility Funding
DHQ	District Headquarters (the district administrative offices)
DPLGA	Department of Provincial and Local Government Affairs
DSG	District Support Grant
DSIP	District Service Improvement Program
FAD	Function Assignment Determination
GoPNG	Government of Papua New Guinea
GST	Goods and Services Tax
HFG	Health Function Grant
HSIP	Health Sector Improvement Program
IASRG	Independent Annual Sector Review Group
LLG	Local Level Government
MPA	Minimum Priority Activity
NCD	National Capital District
NDoH	National Department of Health
NDPM	National Department of Planning and Monitoring
NEFC	National Economic and Fiscal Commission
OIC	Officer-in-charge
PBM	Provincial Budget Model
PGAS	PNG Government Accounting System
PHA	Provincial Health Authority
PHQ	Provincial Headquarters (the provincial administrative offices)
PIP	Public Investment Program
PNG	Papua New Guinea
PSIP	Provincial Support Improvement Program
RIGFA	Reform of Intergovernmental Financing Arrangements
SSG	Special Support Grant
SWAP	Sector wide Approach



## Executive Summary

**Much is heard and read of *glass ceilings*, that notion that there is a real, yet invisible, barrier for some groups in moving upward in a particular field.** In a financial sense, an analogy can be drawn to a *glass floor*, a seeming reluctance to move deeper, to develop an evidence-based understanding of what is actually happening on the ground at the service delivery level. Sometimes this reluctance is due to the perception of time and effort involved in undertaking such analysis, or it may be shadowed behind a need to 'stay strategic'. Ultimately, little is more important than finding relevant ways to explore what is actually happening on the ground. High level planning is not an end-game in itself but merely the precursor to the real action that happens at the frontline. How can the strategic effort be sharpened without developing a clearer picture of service delivery reality? This report helps to adjust the focus and draws closer to the frontline and the service delivery activities (SDAs) in rural health that government is seeking to provide.

***Below the Glass Floor* seeks to paint a picture of what is happening at the frontline of rural health service delivery when viewed through a fiscal lens.** Funding for basic rural health services has, in a relative sense, increased markedly since 2009 when the government began committing significantly more money to provinces. The government's priority areas for sub-national rural health spending are well established as the three Minimum Priority Activities (MPAs) of operational funding for rural facilities, rural outreach patrols, and the distribution of drugs and medical supplies. In addition to these MPAs, this analysis of frontline spending also considers spending on patient transfer, the provision of rural water supply to villages, and supervisory visits.

### Key Policy Issues

**This review highlights policy issues that directly impact frontline service delivery in each of the three MPAs and other relevant areas described above.**

**Two-thirds of provinces spent little or nothing on the distribution of drugs and medical supplies to rural facilities in 2010.** In 2011-12 the NDoH, assisted by AusAID, commenced a program of procuring and distributing 40 percent and now 100 percent kits to rural facilities. This essentially recentralizes a large part of the rural drugs and medical supply function. The distribution aspect of this function is noted as a provincial function in the function assignment determination (FAD). With this recent change it needs to be made clear where the responsibility for the function now rests and whether it is now a national function or a dual function and, if the latter, whether there is sufficient clarity on roles and responsibilities.

**There is evidence of some spending on rural water supply to villages across most provinces.<sup>1</sup>** If this function is a responsibility of provincial governments it should be noted in the FAD administered by the Department of Provincial and Local Government Affairs (DPLGA). In practice, is this a responsibility for the rural health team to coordinate, administer and implement?

**There appears to be little funding specifically allocated and spent on emergency patient transfer.** As a matter of policy, should an amount be allocated for patient transfer, or is this the responsibility of the patient's family?

---

<sup>1</sup> In 2010, 12 provinces spent on average 20 percent of what is estimated necessary by NEFC. Two provinces spent a lot more (over 100 percent), whilst four spent nothing.

## Framing The Thinking

The observations and findings of this report and the fieldwork that will follow can be grouped in a variety of ways. To help frame the thinking in an orderly manner the main findings of the analysis have been grouped into three areas: allocation, accessibility and quality. The fieldwork that follows will provide further insight in these areas.

**Figure 1: Spending on Frontline Services (2006-10)<sup>2</sup>**



*Allocation of expenditure—is more being spent on frontline services?*

In this context allocation encompasses both the budget and spending processes. The review asks whether more and sufficient money is now being spent on priority service delivery activities. Since 2009 much more money is being allocated to frontline activities, particularly by provinces in the mixed and grant dependent groups.

There is a real need to sharpen and standardize budget and expenditure coding to promote transparency and clarity, provide an evidence base and enable ready monitoring.<sup>3</sup> This review observed that higher funded provinces (those with access to funds from the Goods and Services Tax [GST] and natural resources) allocate much less to frontline rural health. This suggests that RIGFA is working—those provinces that receive larger health function grants do spend it on frontline activities but it highlights the need for higher funded provinces to reorder their budget priorities. Interestingly, the review observed a regional pattern, with most Islands and Momase provinces spending less on facilities (with the notable exceptions of ENB and Sandaun).

<sup>2</sup> Provinces are grouped by funding source profiles. Those that have larger amounts of internal revenue are named 'independent' meaning that they are more independent of government grants. Those that rely on both internal revenue and grants are named 'mixed', while those that largely rely on grants are named 'dependent'.

<sup>3</sup> A standard Chart of Accounts (CoA) that is cognizant of MPAs has been designed and approved and is available for use by provincial administrations. Using this CoA would promote the necessary visibility.

**For those provinces that do not appear to fund rural health services adequately, there is a need to understand whether they fund rural health in their province in another way (that is, from another source).** For example, how does the Morobe provincial administration provide funding for rural health operations in its large province. There is a need to understand the prevalence of the practice of charging user fees. *The District Case Study* (DPLGA 2009) suggests it is widespread and an essential (perhaps *the* essential) means for facilities to fund their daily operations. Finally, there is a need to be mindful of the government's emerging policy initiatives on 'free primary health care' and any impacts this may have on these questions.

*Accessibility of funding—is service delivery money getting to the right place in a timely way?*

**Accessibility of funding asks the question whether service delivery money is actually getting to the right place (and to the staff) from where it needs to be spent and in a timely way.**

**The release of funding by Treasury to provinces/provincial health needs to be timely, consistent and predictable.** The evidence suggests funding is inconsistent and often disbursed too slow or too late by Treasury to be spent effectively on service delivery at the sub-national level. All funding is currently released directly to provincial administrations but is this the most efficient arrangement?<sup>4</sup> Does funding for facility operations and outreach patrols need to be disbursed directly to facilities and would this be a more efficient arrangement?

**It is unclear what arrangements are in place (if any) to ensure all facilities receive an adequate and equitable amount to fund their operations and outreach patrols.** There needs to be a means of ensuring that government and church-run facilities each receive suitable amounts. This will involve clarifying the following service delivery responsibilities: (i) services that provincial administrations provide for all facilities; (ii) services that government-run facilities provide; and (iii) services that church-run facilities provide.<sup>5</sup> Once these service delivery responsibilities are understood their costs can be estimated and funding mechanisms can be fine-tuned and made transparent. Monitoring and reporting arrangements can then be improved and/or implemented.

**Subject to any policy decisions as highlighted earlier around responsibility, is there a need for specific funding to be allocated and accessible for patient transfer?** If so, where does that funding need to be located to be accessible for use—PHQ, districts, LLGs or facilities? There is little visible spending on provincial and district supervision activities.

*Quality and effectiveness—is the service delivery money being spent well?*

**This review sets the scene for the fieldwork to assess whether the service delivery money is being spent well (that is, the quality and effectiveness).** Much more funding appears to be allocated and spent on facility operations. The question now becomes whether this funding is being spent effectively on facility operations and, if not, what are the impediments. We also know that many facilities require maintenance to improve the condition of the facility itself. Is this best implemented by the individual facility's themselves or is it more effective to do it in a more coordinated manner via district or provincial administrations?

---

<sup>4</sup> In practice, funding is released to provincial treasuries for use by provincial administrations.

<sup>5</sup> Some initial work has been done in this area by NDoH (Molou and Muller) that will be of assistance.

**Subject to any policy decisions as highlighted earlier around functional responsibility, there is an ongoing need to establish and maintain access to clean water in villages and to determine how this is best implemented.** There is a need to clarify and communicate what responsibilities provinces retain for distributing drugs and medical supplies to rural facilities and then to consider the costs and funding arrangements that best match those responsibilities.

**Table 1: Activity Spending versus Cost Estimate (2010)**

Province	Facility Operations & Patrols MPA 1 & 2 (combined)				Facility Operations MPA 1	Outreach Patrols MPA 2	Distribution MPA 3	Patient Transfer	Water Supply	
	MPA 1&2 Spending v CoS	District v PHQ	Transfers % Of Exp.	Transfer Level	Specific Spending	Specific Spending	Spending v CoS	Spending v CoS	Spending v CoS	District v PHQ
West'n	34%	69%	-		16%	33%	-	1%	20%	100%
NIP	19%	87%	-		4%	49%	17%	-	24%	45%
WNB	19%	75%	-		7%	15%	-	14%	230%	100%
Morobe	27%	49%	-		23%	33%	-	-	-	-
Enga	23%	-	-		13%	26%	-	-	20%	-
SHP	62%	78%	-		43%	19%	239%	-	15%	-
Central	83%	100%	-		-	1%	67%	4%	1%	-
ENB	101%	88%	98%	LLG	151%	-	103%	3%	40%	80%
WHP	85%	-	40%	various	114%	-	-	-	21%	-
Madang	49%	87%	-		37%	49%	-	-	9%	70%
Gulf	92%	82%	-		45%	160%	150%	-	-	-
EHP	101%	77%	-		107%	69%	223%	8%	0%	-
Simbu	101%	-	8%		113%	-	-	-	24%	-
Oro	59%	100%	-		90%	-	-	-	26%	100%
ESP	21%	77%	25%		27%	10%	-	-	15%	40%
MBP	78%	89%	66%	District	80%	-	-	5%	184%	-
Manus	10%	-	-		-	31%	-	-	41%	-
Sand'n	50%	87%	-		86%	7%	69%	-	18%	81%



















Source: NEFC cost and expenditure information and author's calculations.

**Table 1 summarizes the results of the analysis by comparing (in percentage terms) the spending in priority activities against the estimated cost of undertaking those activities.** Comparing spending to cost estimate helps to get a sense of how close government is to spending an adequate amount to enable the service to be delivered. In interpreting this table there is a need to be mindful that the National Economic and Fiscal Commission (NEFC) cost estimates are very conservative. In reality even more funding is likely to be necessary and could be put to good use—so this is a bare minimum comparison. The table also includes other interesting data that helps form a snapshot spending profile for each province on frontline priority activities.

**Table 2 creates a profile of aggregate spending to support frontline rural health activities by province.** The table is ordered by fiscal capacity and highlights in the last column the provinces that appear to have spent relatively low levels on frontline service delivery activities. It also details the province's funding base and the estimated cost per head to deliver rural health services at the frontline. Six provinces representing one-third of the population spend little on frontline services

relative to what is estimated to be necessary.<sup>6</sup> Despite having high per capita costs, Milne Bay and Gulf provinces spend relatively higher amounts to support frontline rural health activities.

**Table 2: Rural Health Provincial Profiles**

Province	Region	Population	Fiscal Capacity Ranking	Funding Profile	Cost per head to Deliver Health Services	Frontline Spending Compared to what is Required
Western	Southern	 153,304	1	High OSR	Very high	Low
New Ireland	Islands	 118,350	2	High OSR	High	Low
West New Britain	Islands	 184,508	3	Mixed	High	Medium
Morobe	Momase	 539,404	4	High OSR	Medium	Low
Enga	Highlands	 295,031	5	Mixed	Low	Low
Southern Highlands	Highlands	 546,265	6	Mixed	Low	Medium
Central	Southern	 183,983	7	Mixed	Very high	Medium
East New Britain	Islands	 220,133	8	Mixed	Medium	Higher
Western Highlands	Highlands	 440,025	9	Mixed	Low	Higher
Madang	Momase	 365,106	10	High Grant	Medium	Medium
Gulf	Southern	 106,898	11	High Grant	High	Higher
Eastern Highlands	Highlands	 432,972	12	Mixed	Low	Higher
Simbu	Highlands	 259,703	13	High Grant	Low	Higher
Oro	Southern	 133,050	14	High Grant	Medium	Medium
East Sepik	Momase	 343,181	15	High Grant	High	Low
Milne Bay	Southern	 210,412	16	High Grant	Very high	Higher
Manus	Islands	 43,387	17	High Grant	Very high	Low
Sandaun	Momase	 185,741	18	High Grant	High	Medium

Source: NEFC cost and expenditure information and author's calculations.

## Summary

**For a majority of provinces—specifically those that are reliant or somewhat reliant on national grant funding—there has been a real improvement since 2009 in the levels of funding and spending on frontline rural health services.** More spending is happening on rural health facilities and, it seems, on outreach patrols. There is now a timely need to look deeper at the ways in which this funding is directed and utilized to ensure that this increased funding is efficiently disbursed and reaching the right levels to be spent on the right things.

**There does seem to be a need to systemize and streamline the way in which rural facilities (including outreach activities) are funded.** It seems that this decision is currently left largely to the holder of the funds to determine. So either the provincial health manager or the church health manager makes the decision on what, if any, funding is allocated to specific facilities. A standardized practice seems critical and equitable. Achieving this standardization will also necessitate the

<sup>6</sup> This proportion (one-third) excludes the National Capital District (NCD) and the Autonomous Region of Bougainville (ARB). Spending and cost estimates are 2010 amounts.



clarification of the role responsibilities of the various actors in the rural health sector which is, of itself, a very timely endeavor.

**Worryingly, the analysis shows that provinces with higher levels of own-source revenue (Western, New Ireland, West New Britain, Morobe and Enga) do not allocate and spend anywhere near enough on frontline rural health.** Rural health in these provinces is likely to struggle until this practice changes. More internal revenue support to increase their rural health budgets is needed urgently.

**It is expected that the information gleaned from this analysis, the prospective field research and the ensuing discussions will help to form a clearer picture of where funding and spending on frontline service delivery is currently at, and what needs to now happen to make the next series of improvements.** The fieldwork should focus on provinces with higher spending levels on priority activities and observe and record the effectiveness of that spending. For example, Southern Highlands, East New Britain and Milne Bay provinces have all spent relatively large sums in the facility operations space. Each has adopted a different funding modality but what can be learnt from their experiences. There is also an opportunity during the fieldwork phase to focus on provinces that do spend on maintenance (for example, Highlands, Momase and Central provinces) and see what arrangements work well.

## Background

### The Reform of Intergovernmental Financing Arrangements (RIGFA)

In 2009 the Papua New Guinea (PNG) government implemented the new intergovernmental financing arrangements that saw significant increases in transfers to the provincial level to support the delivery of basic services. These arrangements are often referred to by the acronym RIGFA—the reform of intergovernmental financing arrangements. RIGFA was based on the principle of equity and seeks to ensure that funding goes to those provinces that need it most and is, therefore, targeted at the delivery of basic services. RIGFA provided funding under a set of function grants for major service delivery sectors. One of these is the health function grant which is specifically for the support of rural health services. Another of RIGFA's features was the establishment of Minimum Priority Activities (MPAs). As the name suggests, MPAs are activities of fundamental importance to the service delivery mechanism and provinces are required to demonstrate that they are appropriately funding these activities first.

**It is important to note, however, that not all provinces benefit the same under RIGFA.** Those provinces with higher levels of internal revenue (including GST and resource revenues) are expected to commit a significant proportion of that revenue to their service delivery responsibilities. As a consequence, provinces with higher levels of internal revenue get proportionately less from function grants. The importance of this should not be lost—rural health services in provinces with higher levels of internal revenue are proportionately reliant on that internal revenue for their funding. If those provinces with higher levels of internal revenue do not allocate internal revenue to support rural health then rural health services will not be delivered effectively.

### The Cost of Services Study

**The *Cost of Services Study* was an ambitious piece of analytical work completed by the NEFC in 2005.**<sup>7</sup> Expenditure references in this report are often benchmarked to the *Cost of Services Study* estimates. The Study sought to establish an estimate of the operational costs necessary to support sub-national administrative and service delivery activities. Costs were estimated at provincial, district and local levels and reflect the existing levels of infrastructure and staff numbers and the geographical realities that are relevant to conducting government business across Papua New Guinea.

**It would be wrong to assume that the cost estimates in the Study are necessarily adequate to meet all service delivery needs.** The costing study was prepared for the purpose of establishing relativities between provinces in terms of the cost of their expenditure mandates, as a basis for dividing up a limited pool of funding. A primary objective in designing the methodology for the cost study was to be extremely conservative in the estimates, so that every single element of the costs could be readily justified. The NEFC wanted to be certain that it could confidently assert that any reduction in funding below the level of these highly conservative estimates would result in a reduction in service levels. For this reason the cost estimates should be viewed as a bare minimum benchmark while, in reality, the cost of providing rural health services is likely to be much higher.

---

<sup>7</sup> The scope of the *Cost of Services Study* covers all functional responsibilities of provincial and local governments including rural health. The study does not include the costs of provincial hospitals.

## Chapter 1: Introduction

**The delivery of rural health services across Papua New Guinea relies heavily on its network of rural health facilities and the outreach services provided by rural-based staff.** Rural facilities and outreach patrols are, in a very real sense, the face of service delivery for 85 percent of the country's population who live outside the urban centers. This report explores how well government is funding these frontline services. It also examines whether the right amount of funding is getting to the right staff to ensure that facilities remain open and operational and that this funding helps to ensure that outreach activities happen on a regular planned basis.

**This report looks at the way spending happens, whether enough is spent, and whether the funding appears to be getting to the right level to be effectively spent on the right things.** The report sees the world of service delivery through a fiscal lens. In doing so, it is acknowledged that financial matters are only one of a number of inputs that collectively determine whether things work or not. Finance, however, is a key determinant, and getting money to where it needs to go in an efficient manner and then monitoring its results continues to be a major stumbling block in attaining a substantial improvement in the delivery of rural health services.

**This review involves two phases.** This desktop analysis being Phase One examined how health function grants (HFGs) have improved the quality of spending, the timeliness of the receipt of funds, predictability of funds and allocations to service delivery relative to administration. Phase Two will involve a primary data collection exercise and will examine how HFGs were spent on service delivery priorities and, therefore, contributed to improvements in health outputs and outcomes.

### Framing the Review and Fieldwork

**To help us frame our thinking in an orderly manner we have grouped the main findings of the analysis under the three areas of allocation, accessibility and quality.**

*Allocation of expenditure: Is more being spent on frontline services?*

**Allocating the right amount of operational funding to support service delivery activities is essential.** Allocation in this sense encompasses both the budget and implementation (spending) processes. In the rural health sector this is particularly challenging as operational funding comes from a variety of sources. The findings of this review help answer the allocation question and provide evidence for the fieldwork phase and for additional analytical work.<sup>8</sup>

*Accessibility of funding: Is service delivery money getting to the right place in a timely way?*

**We need to consider the context—what is the ultimate destination of the funding for specific key health activities (that is, what level and location—Provincial Headquarters, District Headquarters or the health facility).** Is the path and approach that is adopted encouraging the Government of Papua New Guinea (GoPNG) and development partner support to move closer to that scenario? Is the funding getting closer to where it needs to be spent?

---

<sup>8</sup> Further analytical work would be helpful in the area of church health services spending.

**Should funding continue to be pushed vertically through the system, cascading through the various levels from the national level to provinces, and districts to facility or is it timely and preferable to go directly to certain levels—for example from national to facility?** If a province-to-facility approach was preferred, what needs to happen to make this an effective and sustainable approach?<sup>9</sup> The findings of this review provide evidence and help inform the thinking and questions to be explored with regard to accessibility in the fieldwork phase.

*Quality and effectiveness: Is the service delivery money being spent well?*

**This review seeks to understand whether service delivery money is being spent effectively.** The review provides a guide to the amount spent and the areas where spending has occurred. This evidence can help inform and guide the fieldwork phase with regard to the quality and effectiveness of the spending.

### **Additional Context and Background Information**

The appendixes provide readers with a background and context of health financing in sub-national Papua New Guinea, a profile and analysis of frontline service delivery activities at the sub-national level, and a discussion of some of the challenges observed and opportunities for improvement.

### **Scope and Limitations of the Analysis**

The review established the following scope for the analysis:

- The report has a sub-national focus on recurrent operational expenditure.
- The expenditure analyzed includes all health spending as recorded at the provincial treasuries. This means spending that circumvents provincial treasuries is not included in the analysis.
- The expenditure data originates from the provincial treasuries that are administered by the Department of Finance. The data is unaudited.
- Importantly, operational grants from government for church-run health facilities are not included in this analysis.<sup>10</sup>
- The Autonomous Region of Bougainville (ARB) is not included.<sup>11</sup>
- Hela and Jiwaka Provinces were created in 2012 and, as such, are not analyzed separately. Neither is their future impact on the intergovernmental funding system discreetly analyzed.<sup>12</sup>

---

<sup>9</sup> Forms of direct facility funding (DFF) are already being trialled in Bougainville, whilst other provinces, such as East New Britain, have implemented their own approach to facility funding.

<sup>10</sup> Operational grants to churches for church-run facilities are a critical part of the sub-national rural health picture. There remains a need to draw a more comprehensive picture that includes these operational grants. For this picture to be meaningful, however, it requires a detailed understanding of the division of functional responsibilities that church-run facilities are required to deliver versus the responsibilities that provincial administrations (government) deliver on behalf of church-run facilities. Once this functional split is understood then funding, spending and costs can be meaningfully compared.

<sup>11</sup> The ARB has a special arrangement within Papua New Guinea that is different to other provinces.

<sup>12</sup> The future fiscal impact of the newly created provinces—Hela and Jiwaka—and the reduction in size of the Southern Highlands and Western Highlands provinces on the intergovernmental system is being clarified by central agencies.

- Estimates of the cost of services have been obtained from information provided by the National Economic and Fiscal Commission (NEFC).<sup>13</sup>
- All information (including expenditure amounts, cost estimates and fiscal gaps) is derived from data provided by the NEFC. Expenditure information originates from the provincial accounting records (PGAS).

---

<sup>13</sup> The Cost of Services Study 2005, adjusted for inflation and population growth.



## Chapter 2: Spending on Frontline Service Delivery Activities in Rural Health

**This chapter discusses the results of the analytical review of rural health spending.** It commences by analyzing the timing of funds transfer from the national level to the provincial level, then moves to painting an overall picture of provincial spending on rural health, and concludes by examining specific spending on each of the priority frontline activities that are essential elements of delivering a rural health service.

**It is relevant to highlight the relationship between MPA 1 (facility operations) and MPA 2 (outreach work).** In reality both activity areas fall under the direct management of facility-based staff. So, while it is appropriate to analyze and consider each activity separately, it is necessary to be mindful that the resourcing and oversight/implementation of the work is conducted by the same people.

### THE IMPORTANCE OF TIMELY FUNDING FROM WAIGANI<sup>14</sup>

**Government operates under the shadow of a fiscal calendar where funding is allocated each year pursuant to the approved budget, with funding then released for spending throughout the year through government's various disbursement mechanisms.** At the year-end the government accounts are closed and the process starts all over again. The effect of this is profound, and is nowhere more evident than at the sub-national level. Those at the frontline are the worst impacted as they wait for the funding to arrive. The irony is that those at the frontline are the real face of service delivery to the 85 percent of people who live in rural Papua New Guinea—and yet getting funding through the government pipeline to the frontline is clearly not afforded the priority it deserves.

#### *Observations*

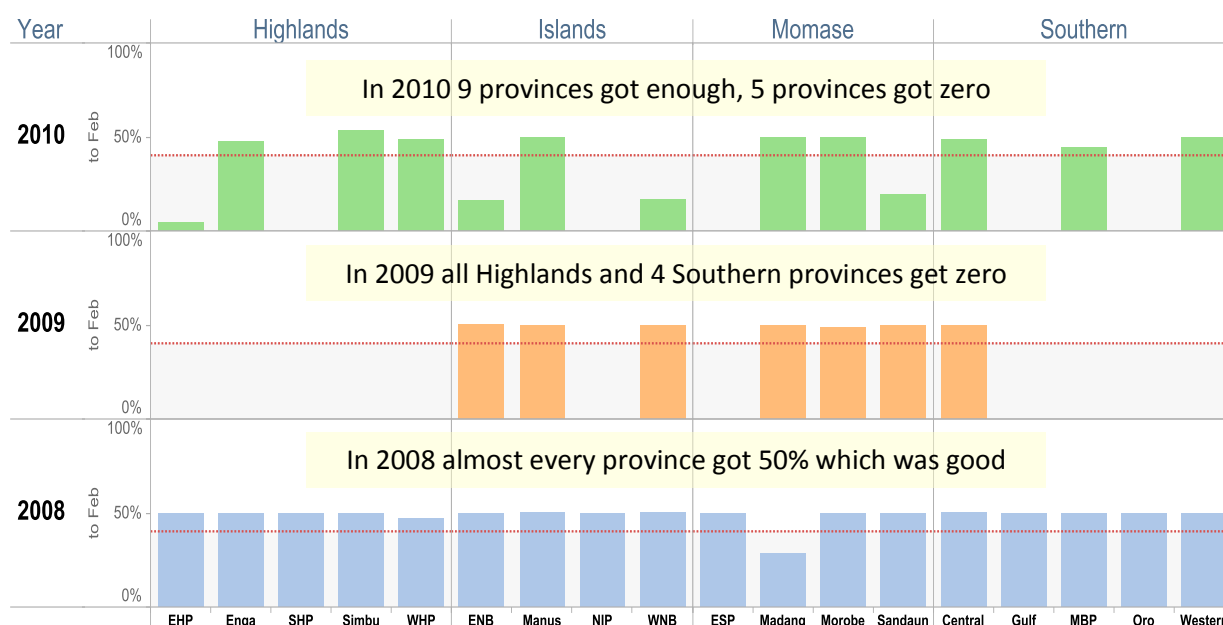
Over the 2008-10 period the timing of cash releases varied dramatically (figure 2.1):

- **In 2008 the Department of Treasury released the warrants for the health function grant in a consistent and timely manner.** Seventeen of the 18 provinces received 50 percent of their transfers before February.
- **In 2009 the picture changed alarmingly. Regional disparity emerged and all Highlands and four Southern provinces got no funding by the end of February.** This raises questions about the ability of these provinces to implement their service delivery plans, to fund outreach patrols and pay for the distribution of drugs and medical supplies, and for facilities to operate.
- **In 2010 the picture changed again as six provinces got nothing by the end of February.** Over this three year fiscal period there were three totally different pictures.

---

<sup>14</sup> Waigani is a suburb of Port Moresby the nation's capital. Most government agencies are located within the Waigani area. In the context of this chapter, 'Waigani' refers to the agencies that fund health at the sub-national level; namely the Departments of Treasury, Finance, Planning and Monitoring, Implementation and Rural Development, and the Department of Health.

**Figure 2.1: Cash Release by February in 2008-10 (by Region)**



**Note**

The shaded area represents the 40% target funding that provinces need to commence their service delivery responsibilities

Source: NEFC warrant release information and author's calculations.

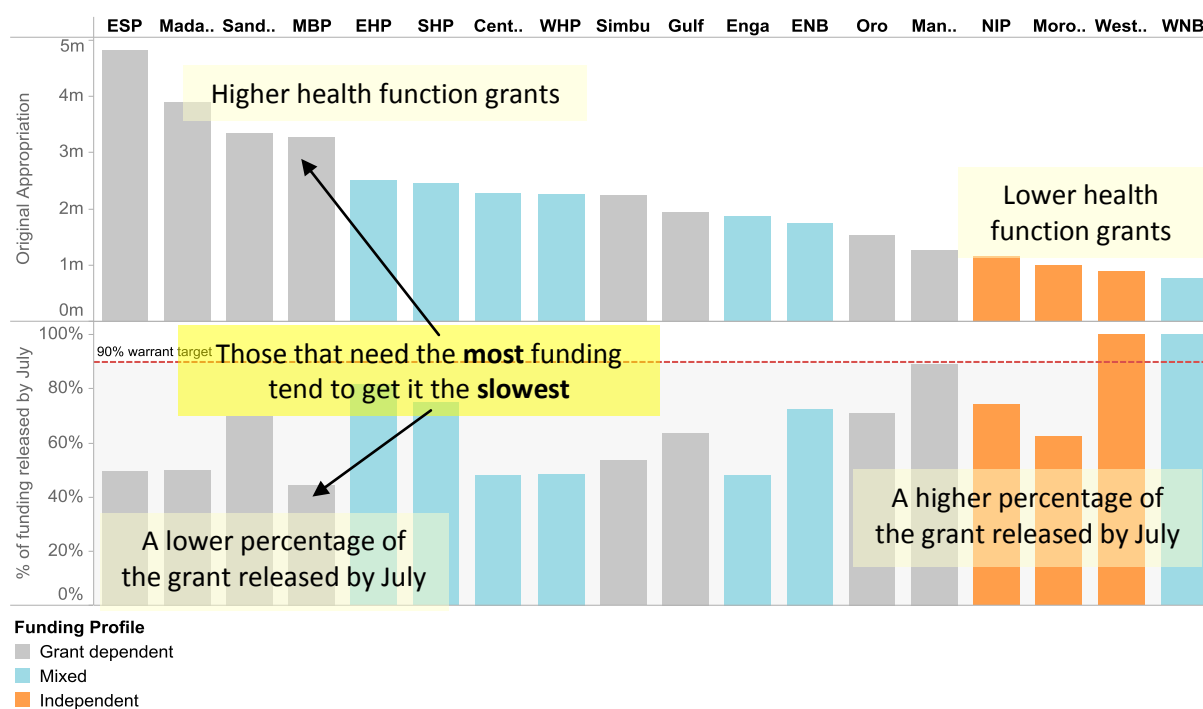
**Achieving a fast and efficient funding mechanism to the frontline should be an overwhelming priority of central agencies.** Anything less will be a major hindrance to service delivery activities. In recent times this topic has attracted a greater profile and discussions are happening between those involved in, and concerned about, service delivery at both the sub-national and the national levels. A consensus is growing which acknowledges that sub-national transfers for service delivery need: (i) the release of a first tranche early in the year to allow activities to commence; (ii) the release of larger tranches earlier to enable provinces to disburse it earlier to lower levels of government or facilities or spend it on services during the year; (iii) a more predictable schedule throughout the year to support good planning and implementation; and (iv) to avoid withholding service delivery funding as a disciplinary measure as this ultimately impacts most severely on the public.

**Figure 2.2 illustrates the percentage of cash released by Treasury to provinces and contrasts it to the Kina value of the function grants.** The provinces that receive the smallest grants are to the right of the graph and the provinces that receive the highest grants are to the left.

**Observations**

- **By the end of July 2010 the percentage of health function grants received varied markedly,** with provinces receiving between 50 percent and 100 percent of their health function grants. Why is there such a large disparity so late in the year?
- **There does appear to be a correlation between the amount of function grant a province receives and the rate at which it is released.** Provinces with large grants tend to get them later in the year, while provinces with smaller grants get them funded more quickly. For example, we can see that three of the four provinces with the largest grants (East Sepik, Madang and Milne Bay) received the lowest proportion of funds by July.
- **This seems irrational, the provinces that get large grants are typically more reliant on grant funding (they have little internal revenue), so they need their grant funding earlier.**

**Figure 2.2: Warrant/Cash Released via Health Function Grant by July (2010)**



### Concerns

- **The analysis shows that funding from the national level lacks the required consistency.** Provinces often do not receive funding early enough, or on a timely basis throughout the year.
- **Operational funding for basic services needs to be a priority cash disbursement.** The nature of service delivery is that it happens throughout the year and funding needs to be available in advance to match service delivery activities and implementation plans. Funding often gets spent at lower levels of government administration. This means the process of getting funding to the level where it is actually spent takes even longer.

**Rural health in every province needs to be treated the same so that they are able to access funding early in the year.** Funding needs to be timely, predictable and consistent. The reality confirmed by analysis of the funding to provinces paints a grim picture. Funding is released in an unpredictable manner that makes it extremely difficult (sometimes all but impossible) for provincial administrations to use these operational funds (health function grants) in a timely and effective manner.

**Early funding is necessary—most funding needs to be disbursed by the end of July.** Given it takes provincial administrations about two to three months to spend or transfer the money received (to districts, LLGs or facilities) it is proposed that 90 percent of funding needs to be released by Treasury by the end of July to ensure that it is well spent on service delivery activities before the end of the year (table 2.1). This target was achieved in 2008 with Treasury releasing 100 percent of funding by the end of April but, by 2010, a much more sobering scenario had evolved.

**Table 3: A Proposed Warrant Release Schedule**

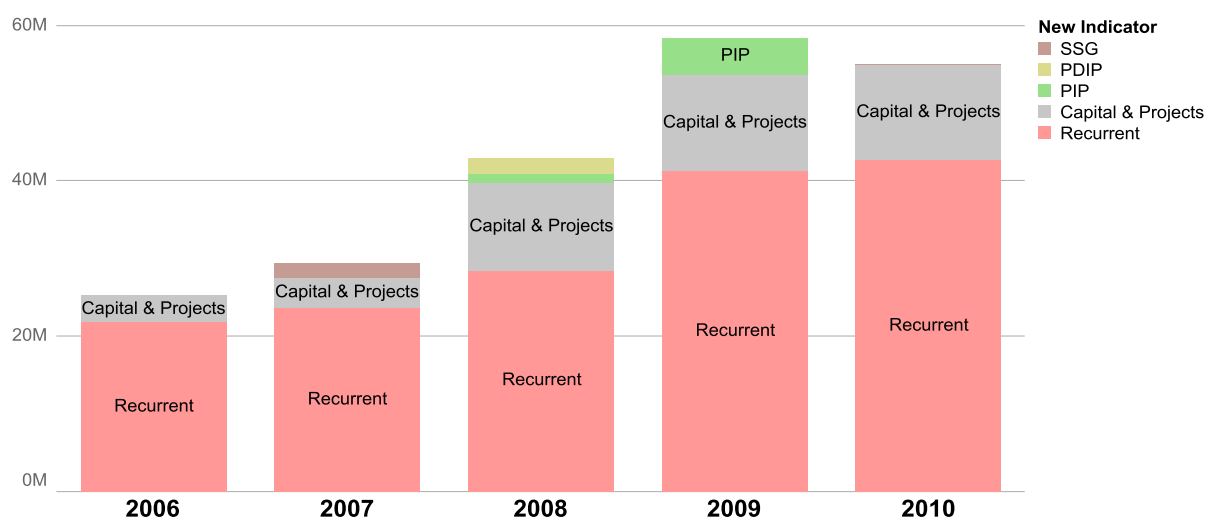
Month	Warrant / Cash	Process at sub-national	Spend / cheque
Jan			
Feb	40%	Processing	
Mar		Processing	
Apr	30%	Processing	40%
May		Processing	
Jun			30%
Jul	20%	Processing	
Aug		Processing	
Sep	10%	Processing	20%
Oct		Processing	
Nov			10%
Dec			
<b>Total</b>	<b>100%</b>		<b>100%</b>

Source: NEFC, The 2011 Provincial Expenditure Review, Taking Stock 2013.

## THE OVERALL PICTURE OF PROVINCIAL SPENDING ON HEALTH

Figure 2.3 presents all provincial spending on health over the period 2006-10 which is mainly funded from the health function grant and from provincial internal revenue. Provincial expenditure also includes some spending from government development sources such as the Public Investment Program (PIP), Provincial Support Improvement Program (PSIP) and Special Support Grant (SSG) that have been spent through the provincial Treasury. The most notable feature is the increasing spending on recurrent goods and services (operational costs) which has been particularly notable with the advent of RIGFA in 2009.

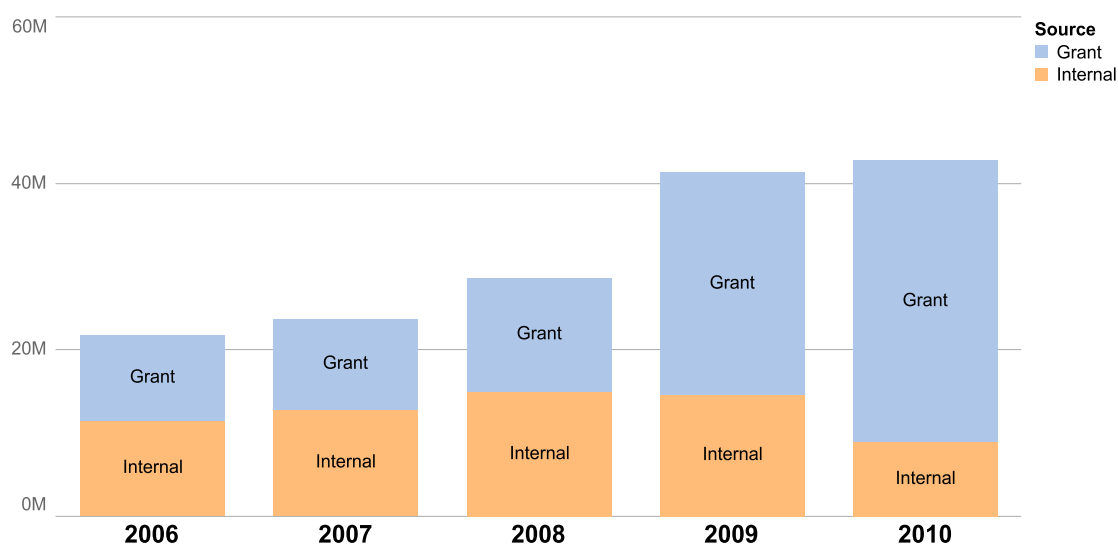
**Figure 2.3: All Provincial Spending on Health (2006-10)**



Source: NEFC expenditure information and author's calculations.

**While recurrent spending by provinces on health has almost doubled over this period, own-source revenue spending has dipped.** Figure 2.4 presents the recurrent spending component of the dataset in Figure 2.3 but highlights recurrent spending from function grants and own-source revenue.

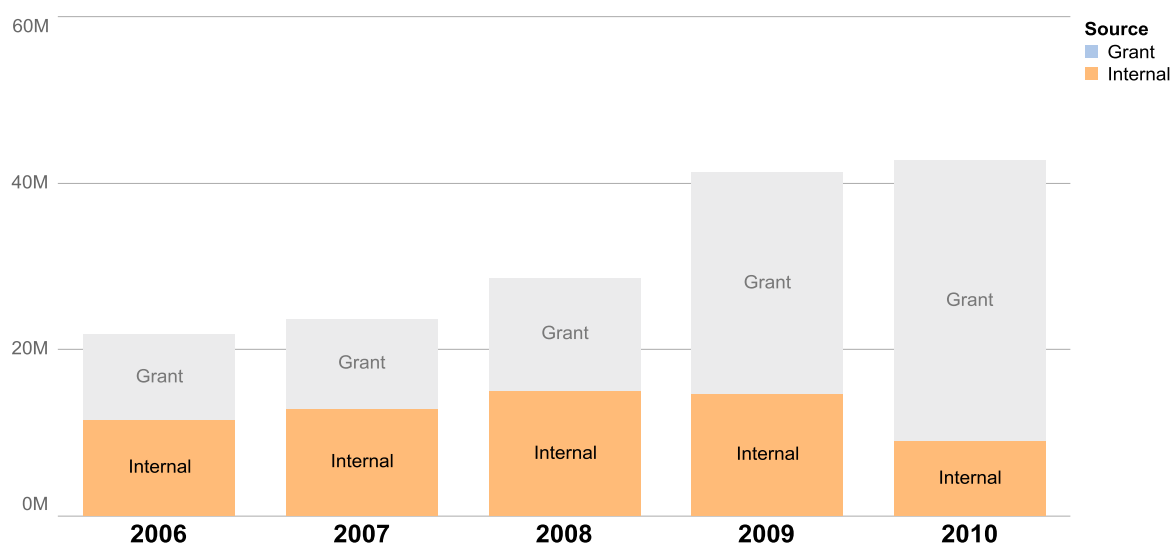
**Figure 2.4: Recurrent-only Provincial Spending on Health (2006-10) (by Source)**



Source: NEFC expenditure information and author's calculations.

**The major drop in total spending on rural health from own-source revenue is reflected in the change in one province—Morobe.** In 2010 Morobe slashed its spending on rural health from its internal revenue budget by K6.7 million (figure 2.6). Morobe had historically spent this amount each year on community health workers—so this review assumes that, in 2010, this cost was met under the national health payroll and Morobe redirected the money it saved away from health.

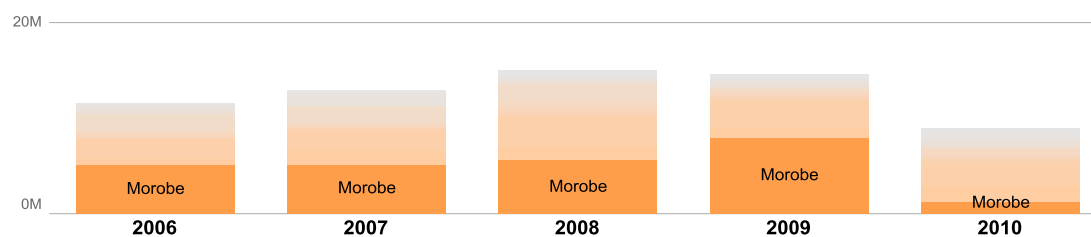
**Figure 2.5: Provincial Health Spending From Own-source Revenue (2006-10)**



Source: NEFC expenditure information and author's calculations.



**Figure 2.6: Morobe's Reduced Spending From Own-source Revenue (2006-10)**



Source: NEFC expenditure information and author's calculations.

### Chapter 3: Spending on the Operation of Rural Health Facilities (MPA 1)

**Rural health facilities are at the heart of the rural health service delivery mechanism.** As such, it is not surprising to find that much of the recurrent cost associated with maintaining its operation is at the facility level. Common facility level costs include:

- rural health center transportation costs (including fuel and maintenance);
- maintenance of medical equipment;
- nonmedical supplies;
- facility maintenance;
- fridge maintenance and gas supplies; and
- health center radio maintenance.

**Facility costs are highly significant and estimated to comprise, on average, about 23 percent of the total of estimated rural health costs for a province.**<sup>15</sup> Indeed, if the estimated cost of outreach work, which essentially is a facility responsibility, is added to the above facility costs the percentage increases from an average of 23 percent to an average of 56 percent of total costs. So over one-half of all operational funding is needed by facilities and needs to be readily available to facility-based staff. That fact alone is highly significant, and shows the importance of developing a clearer understanding of what funding is available to facility staff and what spending does happen at the facility level. The *District Case Study* (DPLGA 2009) suggested that the impost of user fees and reduced accessibility to rural health services such as mothers giving birth at a facility are a result of inadequate funding for facility staff and their operations.

**In Papua New Guinea the churches remain the most significant partner to government in delivering rural health services-with more than 600 health facilities and 3,800 health staff.** Churches run about one-half of all health centers as well as nursing schools and community health worker training schools, while most of the numerous aid posts are government-run. Funding for church health services is provided by the government by way of separate salary and operational grants. There appears to be a lack of clarity over what being church-run means in practice. This includes the set of responsibilities and hence costs that are assumed to be devolved to church health providers and the costs and responsibilities that government retains for government and church-run facilities. The importance of church health services is significant and critical, however, they are outside the scope of this review. It is also important to note that the national and provincial governments have service delivery obligations that include activities related to all facilities—both government-run and church-run.

**The objective should be to have a clear, unambiguous delineation between what services and costs are purchased by government from church health providers and what responsibilities and costs government retains.**<sup>16</sup> In the absence of a transparent arrangement, assumptions will be made, and critical elements of health service delivery will inevitably go unfunded and will adversely impact the service provided to those needing assistance.

---

<sup>15</sup> The percentage for each province will vary due to the differences in the cost structure for each province.

<sup>16</sup> Government pays for church health services via the wage and operating grants it pays each year to church health providers.

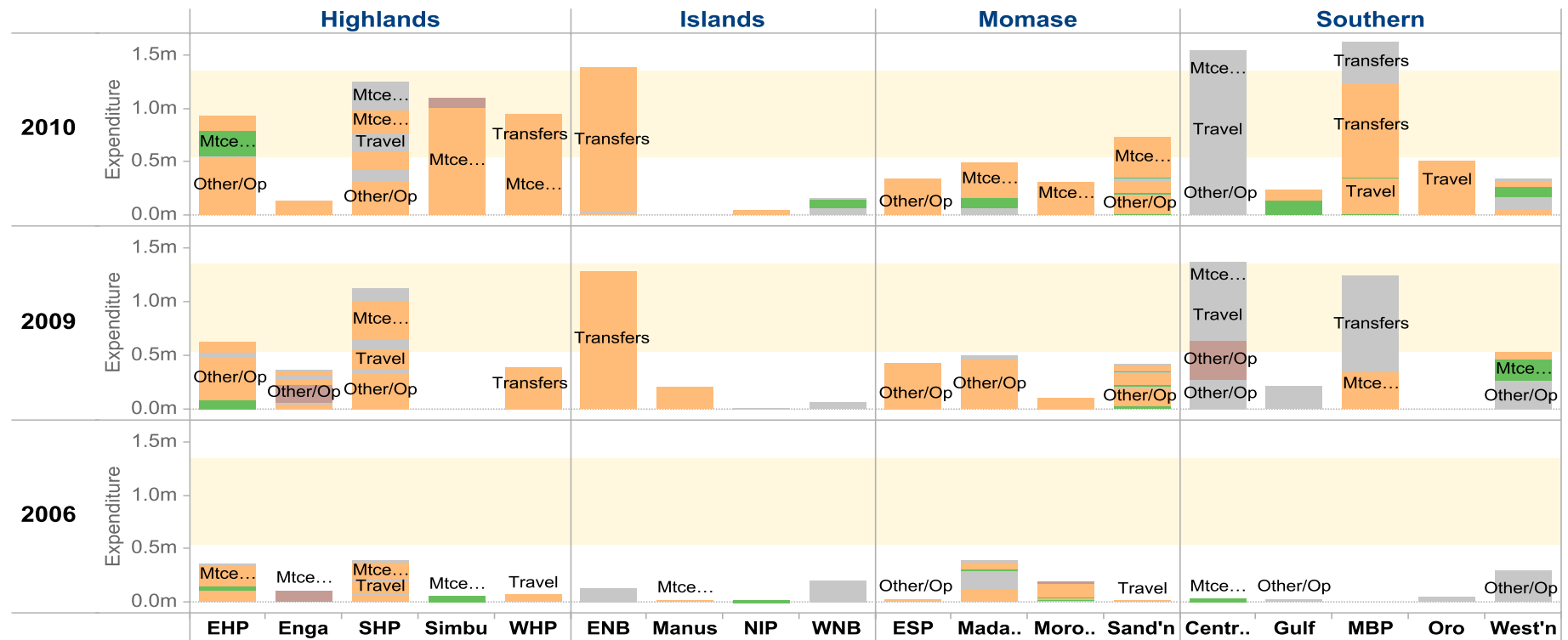
### *Observations*

- **From the 2006-10 spending analysis, the overall picture is one of a clear increase in spending after the implementation of RIGFA in 2009 when government committed increased funding for basic services (figure 3.1).** So the advent of RIGFA does appear to have stimulated increased spending on facilities.
- **This is not true, however, for every province as some provinces (Enga, Manus, New Ireland and West New Britain) spent little or nothing on facilities.**
- **Some relatively large provinces (East Sepik, Madang and Morobe) do not seem to spend as much as would seem necessary.**
- **There does seem to be something of a regional pattern happening, with Islands and Momase regions spending less on facilities (with the notable exceptions of East New Britain and Sandaun provinces).**
- **Only three of the 18 provinces appear to actually transfer significant amounts directly to facilities or to lower levels of government administration for facilities to spend.** Transfers can be seen in Western Highlands, East New Britain, and Milne Bay. What this suggests is that most provinces still retain the money that appears to be for facility activities at the provincial level and facilities then have to 'access' this money for service delivery activities.

### *Concerns*

- **It is often difficult to specifically identify discreet spending on facility operations.** Provinces need to become more disciplined in their coding of this MPA and thereby provide the evidence necessary to demonstrate that this vital area is being adequately funded.
- **Much of the spending that appears to be related to facility operations appears to be managed and processed from the provincial administration.** If this is the case, it raises the question of whether this practice is the best modality for facility staff to access funding for their operations.
- **The rich province conundrum is how to get provinces with higher levels of own-source revenue to allocate and spend on rural health.** If this does not happen, the rural health service in these provinces will be badly underfunded, hampering efforts by health staff to provide an effective service to their communities.

Figure 3.1: Provincial Spending on the Operation of Rural Health Facilities (by Region)



#### Note

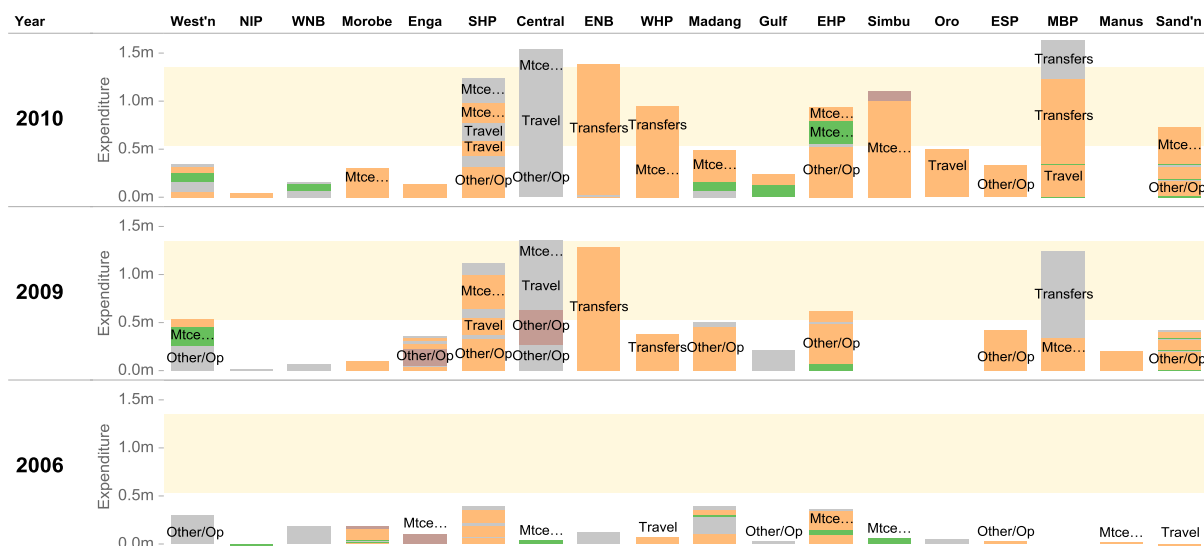
1. The grey coloured spending is less clear as to its purpose. It may be spending to support the service delivery activities being analysed - or not. The other 'coloured' spending can be more readily identified as spending to support the service delivery activities
2. General explanations on spending labels; **Mtce** - maintenance related costs. **Other/Ops** - other materials & supplies and other (items 124 and 135). **Transfers** - to lower levels (items 143 and 144). **Travel** - travel related costs (items 121 and 125)

#### Analysis

- Churches
- District Health
- Facilities
- Aid Posts

Source: NEFC cost and expenditure information and author's calculations.

**Figure 3.2: Provincial Spending on the Operation of Rural Health Facilities (by Fiscal Capacity)<sup>17</sup>**



**Note**

1. The light coloured band reflects the *cost of services estimat* range
2. Provinces began receiving significant increases in funding under RIGFA in 2009 and 2010, 2006 is included as a comparative year
3. The labels (such as Mtce, Other/Ops, Transfers, Travel) are broad expenditure categorisations that indicate what the expenditure was on

**Analysis**

- Churches
- District Health
- Facilities
- Aid Posts

Source: NEFC cost and expenditure information and author's calculations.

**Figure 3.2 presents the same spending on facility operations information, but orders it by fiscal capacity.** Fiscal capacity is a term that describes a provinces ability to meet its service delivery responsibilities given its financial resources or, perhaps put more simply, whether it has enough money. The provinces to the left have more money (relative to their needs) and are typically reliant on their own-source revenues and not so much on national transfers. The provinces in the middle have less money and typically rely on both national transfers and own-source revenue, while the provinces to the right are the least well resourced (relative to their needs) and typically rely almost wholly on national transfers.

*Observations*

- **The five highest funded provinces (relative to their need) seem to allocate the least to rural health facilities.** It invites the question—why is this so, how facilities in these provinces get funded, and whether they are exclusively reliant on user fees.
- **The provinces that are somewhat dependent or very dependent on national grants seem to allocate and spend more in this area.** In this respect it could be concluded that being under RIGFA with its targeted funding approach is having a positive impact.

<sup>17</sup> Spending in this figure is from health function grants and from provincial internal revenue—it does not include spending under the church operating grants. The colored spending is spending that can be specifically identified as spending on the operation of rural health facilities, the grey faded out spending is less certain.



## **Who Should Maintain Facilities**

**Some facilities are currently in such a poor state of disrepair that substantial work is needed to bring them back to a sound standard and to make them an environment where staff and patients are happy to work and to be treated.<sup>18</sup>** There is a need to examine the best means to attend to facility maintenance—whether it should be the responsibility of the facility staff or managed more centrally in a coordinated manner, perhaps at the district or provincial level. If the former, are facility staff best placed to manage it and are they motivated to do so. The decisions reached in this regard need to directly guide the way in which funding is then allocated. If maintenance is to be a facility responsibility then the facility should receive the money, or, if maintenance is best coordinated centrally, then the funding should be managed at that level and by the people responsible—be it district, province or even national.

---

<sup>18</sup> Facility infrastructure audits have been conducted in five provinces; Madang, Milne Bay, Sandaun, Simbu and Western Highlands. In Sandaun Province, only four of the 35 facilities were described as being in 'good' condition. Most facilities required substantial repair or rehabilitation (GoPNG, 2010).

## Chapter 4: Spending on Integrated Rural Health Outreach Patrols (MPA 2)

Rural health outreach patrols in Papua New Guinea are an essential means of achieving coverage in delivering a rural health service—the *District Case Study* describes it as ‘the backbone’ of the rural health service. Facility-based staff typically undertakes either day or overnight patrols and move across the district ensuring that vital health services are available and accessible to the majority. Common facility-level costs that have been grouped as outreach include mobile clinics, school visits and village birth attendant training.<sup>19</sup>

Outreach costs are highly significant and estimated to comprise, on average, about 33 percent of the total of estimated rural health costs for a province (figure 4.1).<sup>20</sup> So one-third of rural health funding is estimated to be needed for outreach work. Outreach activities are typically managed from, and conducted by, facility-based staff. This suggests that funding for the activity is best located as close as practicably possible to the facility staff. It also suggests that getting the funding to this location by the quickest means needs to be a priority. The *District Case Study* recommended direct facility funding. More recently the 2012 Independent Annual Sector Review Report noted the positive impact that direct facility funding in Bougainville was having in health centers (IASRG 2012).

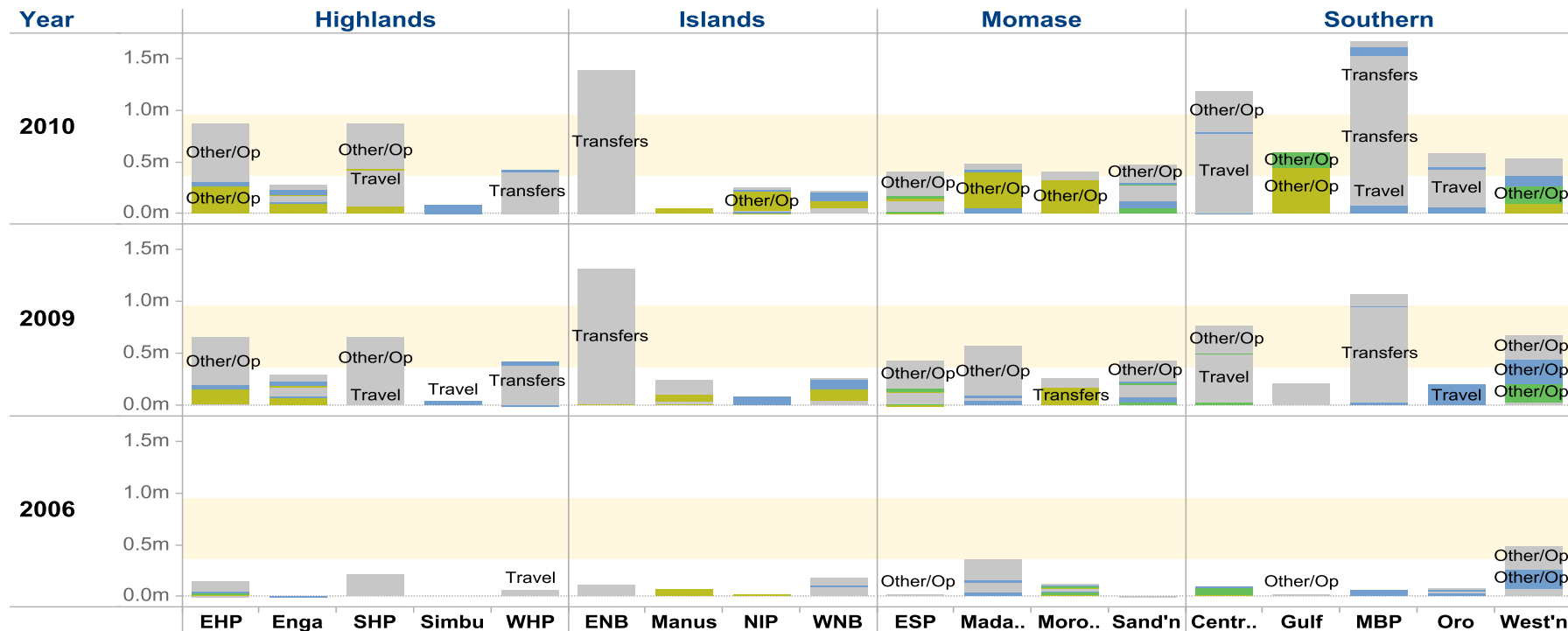
In the absence of adequate recurrent funding from provincial administrations, rural health facilities are left with few sustainable options. As was mentioned in the preceding section, facilities often rely on the imposition of user fees which in turn has serious implications for maintaining the accessibility of the rural health services to those in need. The impact would, therefore, seem to be that outreach is funded from user charges from patients or fewer outreach activities are actually carried out. Given that approximately one-half of all health centers are church-run, there needs to be a sense of clarity as to whether the operational grants provided by government to fund church-run facilities (via NDoH under vote 241) are intended to also fund outreach activities. If those grants are not for outreach work then there needs to be clarity as to where the supplementary funding will come from to meet the cost of outreach.

---

<sup>19</sup> Activity information was compiled from the *Cost of Services Study* that was completed in consultation with NDoH and provincial administrations. The *Study* has been reviewed and updated in 2011 and the results will be released in 2013.

<sup>20</sup> The percentage for each province will vary according to the differences in the cost structure for each province.

Figure 4.1: Provincial Spending on Integrated Rural Health Outreach Patrols (by Region)



#### Note

1. Spending in this graphic is from health function grants and from provincial internal revenue it does not include spending under the church operating grants
2. The coloured spending is spending that can be specifically identified as spending on the rural outreach patrols, the grey coloured spending is less certain
3. General explanations on spending labels; **Other/Ops** - other materials & supplies and other (items 124 and 135). **Transfers** - to lower levels (items 143 and 144). **Travel** - travel related costs (items 121 and 125)

#### Analysis

- District Health
- Facilities
- Family Health
- Immunisations
- Patrols

Source: NEFC cost and expenditure information and author's calculations.

### *Observations*

- **The data presented in Figure 4.1 suggests an improving picture in 2009 and 2010 with much more spending in areas that may be related to outreach patrols than was apparent in 2006.**
- **Unfortunately much of this spending is in grey areas, with nonspecific budget descriptions, that make it less certain that the spending was exclusively on outreach patrols.<sup>21</sup>** This is where better more precise budget descriptions can make it a lot easier for provinces to demonstrate that they are supporting priority areas such as outreach patrols.
- **Consistent with the spending performance on facility operations, however, adequate levels of spending on outreach are not evident in every province.** Enga, Manus, New Ireland, Simbu and West New Britain spent low amounts on outreach.
- **Some relatively large provinces (East Sepik, Madang and Morobe) do not seem to spend as much as appears necessary.**
- **Regional patterns are noticeable—if not necessarily explainable—with provinces within the Islands and Momase regions appearing to spend lower levels on outreach (again, with the notable exceptions of East New Britain and Sandaun).**
- **Provinces in the Southern Region and several provinces in the Highlands Region did have reasonable sums of spending evident.**
- **Only three of the 18 provinces appear to actually transfer significant amounts directly to facilities or to lower levels of government administration for facilities to spend.** Transfers can be seen in Western Highlands, East New Britain, and Milne Bay. What this suggests is that most provinces still retain the money that appears to be for facility activities at the provincial level and facilities then have to 'access' this money for outreach activities.

### *Concerns*

- **As is the case with spending on facility operations, it is difficult to specifically identify discreet spending on outreach.** This is not in itself surprising given that both activity areas are implemented and managed by the same people from the same location. Provinces need to become more disciplined in their coding of this MPA and thereby provide the evidence necessary to demonstrate that this vital area is being adequately funded.
- **Much of the spending that appears to be related to outreach appears to be managed and processed from the provincial administration.** If this is the case, it raises the question whether this practice is the best modality for facility staff to access funding for their operations. The concern is the inefficiency in this modality, the expectation that facility staff will make their way to the provincial capital every time they need funding for operations and outreach. Not only does that sound inefficient but it is also an unwanted disincentive. Ironically, the ones worst off are the more remote facilities that are most in need of readily accessible funding and system efficiency.

---

<sup>21</sup> The broader the selection, the less assurance that it was actually spent specifically or exclusively on the activity being analyzed. Refer to the appendixes for an explanation of the methodology applied.

## Chapter 5: Spending on the Distribution of Drugs and Medical Supplies (MPA 3)

**An essential aspect of rural health service delivery is the need to maintain the stock of basic drugs and medical supplies to health facilities through efficient procurement and delivery systems.** Neither process is quite as straightforward in practice as it sounds. Procuring drugs and medical supplies in Papua New Guinea has long been a centralized function administered by the NDoH and paid for under a central budget.

**Distribution can be divided broadly in to two parts, the first part is the delivery of the supplies to the area medical stores, and the second is getting the supplies from the area store to the many rural facilities.** The arrangement has historically been that NDoH is responsible for the transfer to the area stores and provincial administrations are then responsible for distributing the supplies to rural facilities in their province.

**The distribution of supplies across the rural facility network is, understandably, a demanding logistical task and there have been ongoing concerns over the effectiveness and reliability of the historical approach to distributions.** As such, NDoH with development partner support has, in recent years, been conducting a nationally administered distribution of 40 percent kits direct to rural facilities. In 2012-13 this will be increased to 100 percent kits being procured and distributed under central administration. This is effectively a recentralization of a significant proportion of the distribution function. Under this arrangement, a large proportion of both procurement and distribution will be a national function. That said, it is important to note that, even with the distribution of 100 percent kits, this does not provide all the medical supplies that a province requires. There will, therefore, be a need to maintain a significant 'pull' or 'demand' side whereby provinces procure medical supplies over and above the kits.<sup>22</sup>

**Interestingly, the government during consultations selected the distribution of drugs and medical supplies to be one of the three rural health MPAs.** So, this activity has been widely promoted in concert with the other MPAs as a critical activity for provincial administrations to fund, support and implement. The focus has been on reinstituting the MPAs as part of using the increased function grant funding more effectively. As an MPA, this activity is reported and actively monitored by provinces and national/central agencies.

**There is, therefore, a risk that with the change in the distribution arrangements (that is, 100 percent kits supplied and distributed centrally) there may now be confusion as to which level of government is responsible for the distribution of medical supplies.** The new arrangement, its nature (that is, temporary or indefinite) and the responsibility specifications need to be clear to all parties (health providers and practitioners, provincial administrations, national and central agencies and development partners). This will avert confusion and ensure all parties understand and can support the new initiative.

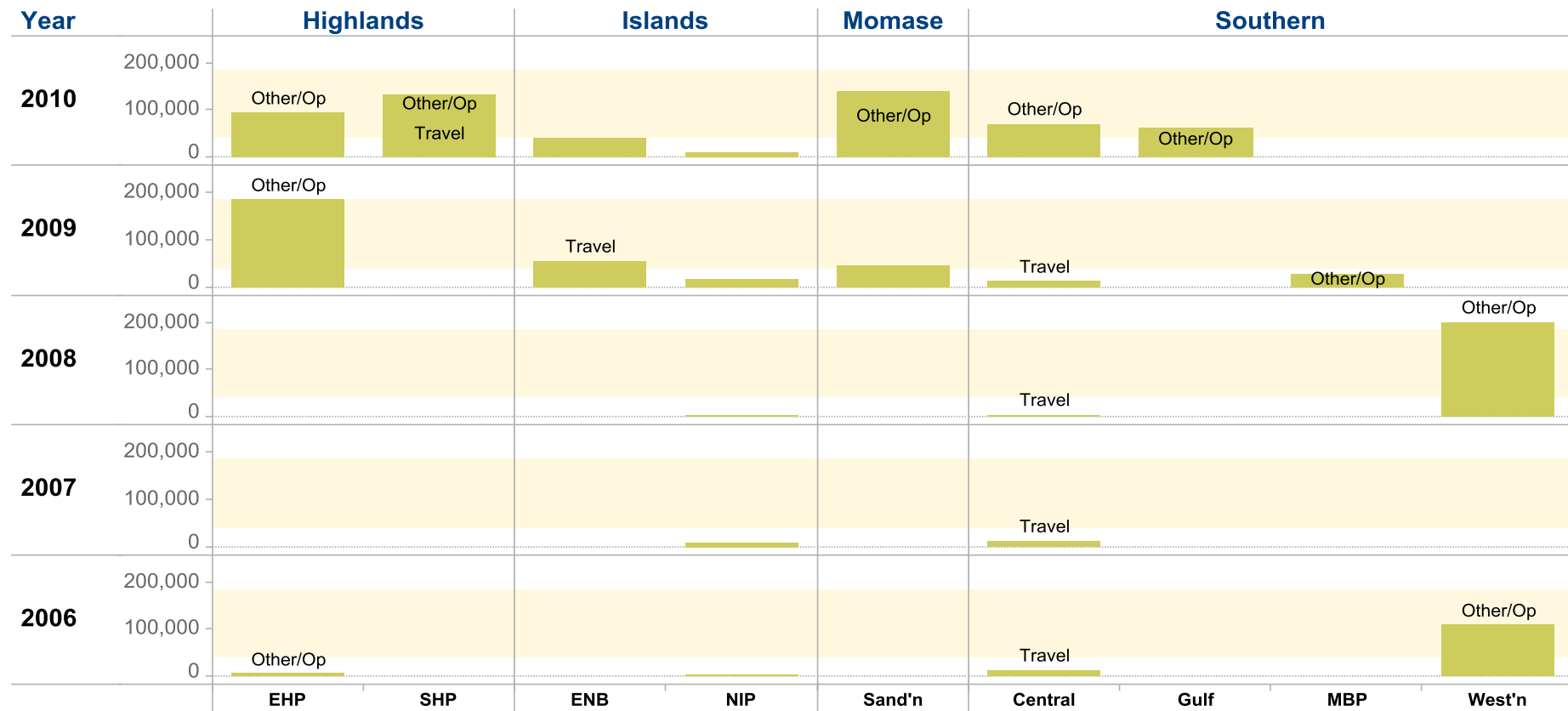
---

<sup>22</sup> Aside from the 100 percent kits there is still a significant distribution activity necessary across the pull system as well as all vertical supply programs (tuberculosis, malaria, HIV test kits, and family planning commodities). Further analysis may be valuable to better understand (and cost) the residual responsibility that remains for provinces under the new approach.

### *Observations*

- **Prior to 2009 provincial spending on the distribution of drugs and medical supplies was pretty much nonexistent (figure 5.1).** That is alarming and provides an explanation as to why this area has been a perennial problem.
- **In 2009 and 2010 there are some early signs of change,** with six provinces allocating spending to this task in 2009 and seven in 2010.
- **This raises the question as to how provincial administrations distributed supplies before 2009** and how do/did the other 12 provinces seek to do so in 2009 and 2010.
- **The reality may be that distribution has relied on a 'demand' or 'pull' modality, whereby the burden is passed on to facilities to uplift the drugs and medical supplies they need when and if they are able.** If this is the reality of past practice then the function of distribution was effectively devolved to the facility level in practice.
- **When seen in this light, the dire lack of financial support for this function from provinces necessitates a response from the national level.** It is simply too critical to be allowed to fail.
- **The concern, as discussed above, is establishing whether this (partial) recentralization is a temporary measure or a permanent realignment of responsibilities from the provincial level to the national.** Defining the arrangement and responsibility is critical.
- **There is also the need to define the distribution functions that remain a provincial responsibility (the 'pull' system).** There is little existing funding being allocated systematically across provinces for any type of distribution. There is therefore a need to better understand and resolve the inadequate funding of this activity.
- **Recentralizing functions has the effect of damaging the institutional capacity that does exist at the provincial level to carry out a task.** When the primary responsibility to distribute basic medical supplies is taken away from provinces, the knowledge, systems and savvy necessary to perform the task will quickly fade. The danger is that in one, two or five years the function is handed back to provinces to dire effect.

**Figure 5.1: Provincial Spending on the Distribution of Drugs and Medical Supplies (by Region)**



**Note**

1. Provinces with no identified spending on the distribution of drugs and medical supplies

<b>Highlands Region</b>	<b>Islands Region</b>	<b>Momase Region</b>	<b>Southern Region</b>
Enga	Manus	ESP	Or
Simbu	WNB	Madan	
WHP		Morob	

Source: NEFC cost and expenditure information and author's calculations.



## Chapter 6: Other Spending Priorities

### SPENDING ON PATIENT TRANSFERS FROM RURAL FACILITIES

**Getting patients with an urgent need to a provincial hospital equipped to meet their condition is a constant challenge in Papua New Guinea.** Most people are based in rural areas, widely dispersed and the hospital could be many hours or even days travel away. The reality is that the burden to get to the hospital is often left to the family of the patient. In this sense, accessing the necessary health care is a matter of 'problem belong you'.

**In a medical emergency it is right and proper for the patient to have access to the right level of medical care, however, the current reality is that the cost to government of meeting the emergency transfer costs of patients to provincial hospitals is prohibitively expensive and unsustainable.** Government is currently unable to provide a standard emergency transfer service. This presents a difficult question, or set of questions—how much funding, if any, should government set aside for emergency patient transfer and then, in what circumstances, should that funding be used. The latter question is a matter for health professionals to deliberate and beyond the scope of this paper, but the initial question is pertinent.

#### *Observations*

- **There has been very little spending on patient transfer in recent years (figure 6.1)—suggesting that provincial health managers in Papua New Guinea do not see patient transfer as a priority activity.** If they did, one would expect to see some evidence of discreet budget allocations of reasonable sums.
- **Seven provinces had 'some' spending, but the amounts were very little and relative to the true costs involved they were quite insignificant.** West New Britain appears to have allocated and spent the most.
- **It is possible that some funding could be accessed from discretionary spending sources such as 'provincial administrators' funds' or 'district support grants' to meet patient transfer costs.<sup>23</sup>** The issue here is one of transparency and sustainability. Relying on unspecified funding is not a sustainable or transparent manner by which to fund this activity which can (often) be a matter of life and death.

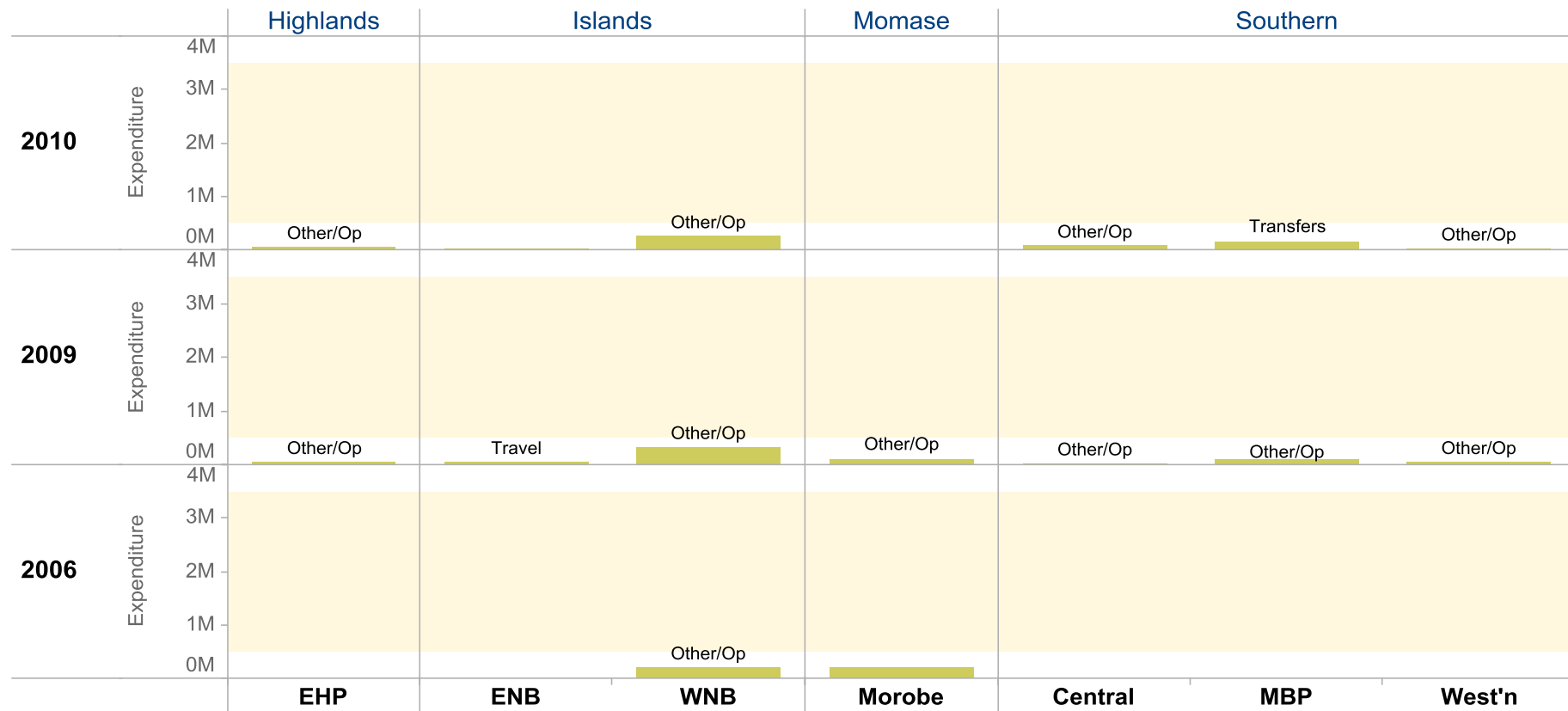
#### *Concerns*

- **There is little apparent funding set aside for transferring rural patients between facilities,** it seems timely for government policy on this matter to be discussed and clarified.
- **If we assume some level of funding should be available for (rural) patient transfer in a province then how much should that be, and at what level should that funding be allocated** to enable an effective transfer arrangement (facility level, district or provincial administration)?

---

<sup>23</sup> Sandaun Province is an example of a province with an individual approach to a service delivery challenge that partly funds patient transfer. The provincial administration currently covers some 60 percent of funding for air charter costs that assists with a variety of activities, including patient transfer.

**Figure 6.1: Provincial Spending on Patient Transfer (by Region)**



**Note**

1. Provinces with no identified spending on patient transfer

**Highlands Region**

Enga  
Simbu  
SHP  
WH

**Islands Region**

Manus  
NIP

**Momase Region**

ESP  
Madang  
Sandau

**Southern Region**

Gul  
Or

Source: NEFC cost and expenditure information and author's calculations.

## SPENDING ON THE PROVISION OF CLEAN WATER SUPPLY

Immediate access to clean water is essential for the running of a rural health facility and, more broadly, community access to clean water is a key requisite for maintaining a healthy rural community. The *Cost of Services Study* which was updated in 2011 identified the provision of water supply, in the form of *tuffa* tanks, as being a key activity in rural health for provincial governments. These costs are significant and estimated to comprise on average just under 20 percent of the total of estimated rural health costs for a province.<sup>24</sup> A Water and Sanitation Service Delivery Assessment (World Bank and Government of Papua New Guinea 2013) has also recently been completed and provides an insight into rural water and sanitation service delivery and financing.

This activity is not specifically noted anywhere in the *Determination Assigning Service Delivery Functions and Responsibilities to Provincial and Local Level Governments (DPLGA 2010)*. This may, or may not be an oversight—but the question remains, if it is not a rural health provincial government responsibility then whose responsibility is it.<sup>25</sup> The *Determination* does assign the monitoring of water quality to the health sector but is silent on the provision, repair and installation work involved.

### *Observations*

- **Spending on water supply (and/or related activities) via the provincial rural health budget has increased in recent years** from 2009 post-RIGFA (figure 6.2).
- **While spending has increased, the level of spending is still relatively low for most provinces.**
- **Relatively large amounts are visible in only two provinces**, West New Britain and Milne Bay.
- **This suggests that provincial health managers in Papua New Guinea do not see the provision of water supply as a priority activity.** If they did, one would expect to see some evidence of discreet budget allocations of reasonable sums.
- **Some rural water supply costs might be paid from another source for either repairing or installing water supply.**<sup>26</sup> Development funding allocations, such as the District Service Improvement Program (DSIP), is a likely potential source. In addition, donor projects and NGOs may specifically address this need at the local level but their coverage is likely to be ad hoc and very limited.

---

<sup>24</sup> The percentage for each province will vary according to the differences in the cost structure for each province.

<sup>25</sup> Responsibility for rural water and sanitation services is discussed in the service delivery assessment, concluding that there is ambiguity in responsibilities for development, operation and maintenance. This is inhibiting investment and development of necessary basic rural water and sanitation services.

<sup>26</sup> For example, in Sandaun Province less than one-half of all health facilities have access to clean water (GoPNG 2010). This may suggest a correlation between the low levels of spending (see chart) and the limited access to clean water.

### *Concerns*

- **There appears to be an inconsistency in whose responsibility this activity is.** The NEFC have identified it as a significant rural health responsibility/cost and yet the *Determination* is silent on the matter. The risk is that in an environment where government funding for services is very limited, activities that are not expressly identified and assigned as a responsibility are likely to slip through the cracks—with the various factors involved assuming (and/or hoping) someone else will be attending to it.<sup>27</sup>

---

<sup>27</sup> The World Bank Water and Sanitation Program is currently providing technical assistance (P144823) to a National Department of Planning and Monitoring (NDPM) led Inter-departmental Task Force to develop a national water and sanitation policy which includes, as a priority, the clarification of institutional roles and responsibilities for rural water supply and sanitation services.

Figure 6.2: Provincial Spending on the Provision of Clean Water Supply (by Region)



**Note**

1. Provinces with no identified spending on water supply

**Gulf Province** - Southern Regio

**Analysis**

■ Environ. Health

■ Water

Source: NEFC cost and expenditure information and author's calculations.

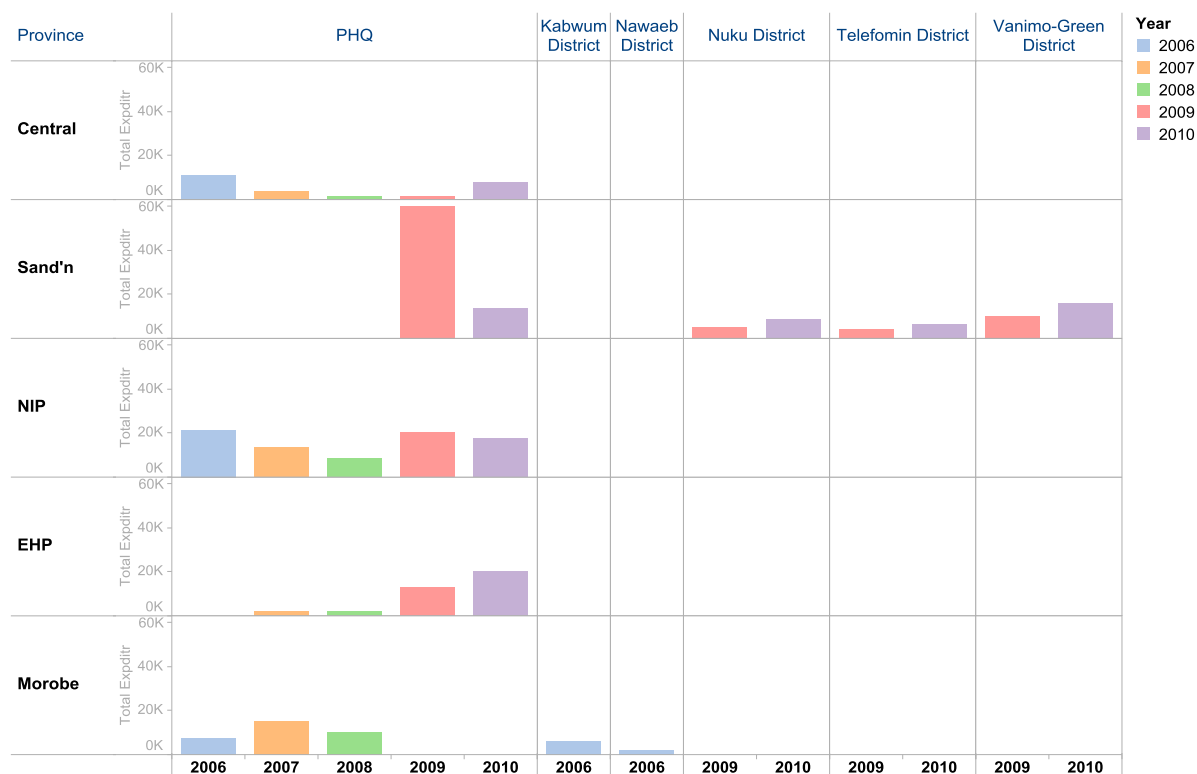
## SPENDING ON SUPERVISION ACTIVITIES

Supervisory activities in rural health typically occur from either the provincial level, where provincial staff conduct supervisory visits to the district level, or from the district level where district staff conduct supervisory visits to health centers. Funding is, therefore, necessary at both the provincial and district levels to support this activity.

### Observations

- **Only five of the 18 provinces have discreetly budgeted and spent money on supervision over the period 2006 to 2010 (figure 6.3).** It is possible, and highly likely, that supervision activities have been funded in other provinces under generic (nonspecific) budget votes. It is impossible to confirm through the budget, however, that this did indeed occur and to identify what amounts might have been allocated and spent on this critical activity.
- **Of these five provinces, the amounts allocated are well below what is estimated to be necessary.** The cost estimates for the five provinces range from K347,000 for Eastern Highlands to K521,000 for Morobe. The highest of the five spenders was Sandaun Province that, in 2009, spent K79,100 (combined total of PHQ and districts) compared to a cost estimate of K506,000. Sandaun Province in 2009 and 2010 appears to have taken a considered approach, allocating funding at the provincial level for monitoring and evaluation and funding three districts discreetly for clinical supervision.

**Figure 6.3: Provincial Spending on Supervision Activities (2010)**



Source: NEFC expenditure information and author's calculations.

## Chapter 7: Summary and Next Steps

### KEY FINDINGS

**RIGFA's focus on providing increased funding to needy provinces targeted specifically at basic priority service activities (first) is clearly having an overall impact in the early years of implementation.** More spending is evident in the basic services 'space'. What is less clear is how much of the spending that is happening in this space is actually getting to the frontline where it needs to happen to make an impact. The challenge is for provinces to more clearly identify spending on basic service delivery activities and not to blur the spending under descriptions that are too broad. Implementation of the new Provincial Chart of Accounts would greatly assist in standardizing coding and bring greater visibility.

**It is very evident that provinces with higher levels of own-source revenue need to allocate much more of it to support rural health.** Relatively little internal revenue is currently allocated and spent on rural health. The table in Appendix 4 clearly demonstrates that 'higher funded' provinces (Western, New Ireland, West New Britain, Morobe and Enga) are spending less on frontline rural health than some other provinces. The implications of this budget practice are dire for the rural health service in those provinces.

**The areas of rural health facility operations and outreach patrols have seen a big increase in spending since 2009.** A high amount of this spending appears, however, to be administered from the provincial level and so it is less clear how much actually gets to the facilities and supports facility-level operations including patrols. There is also an opportunity, and need, to improve the accuracy and clarity of budget descriptions to better demonstrate that facilities are being adequately funded for their operations and outreach patrol activities. Is outreach an activity that is naturally best coordinated and funded alongside facility operations?

**Spending on facility maintenance is relatively prevalent.** One question is how does this maintenance activity get administered? Is it provincially managed or is there a demand/pull arrangement whereby facilities can advise provinces of their needs and provinces then respond? Given that many facilities are in a state of serious disrepair, what is the best arrangement to ensure that the funding intended to address this problem is spent effectively?

**Historically there has been relatively little spending on drug and medical supply distribution.** On one level this is concerning and suggests there was a void where facilities were left to uplift their own supplies, or where they more recently relied heavily upon the 40 percent kits arranged by NDoH and supported by donor partners. On a more optimistic note it could be concluded that this lack of spending on the distribution activity justified the recent recentralization of the procurement/distribution function by the NDoH.

**There is increased evidence of spending on the provision of rural water supply by provincial governments from 2009.** In most cases, however, the amounts are relatively low compared with the estimated requirements. It is possible that other actors—such as donor partners, NGOs, and other government projects—contribute to meeting this need, but the question then becomes the effectiveness of the coordination of the activity.<sup>28</sup>

---

<sup>28</sup> The *Service Delivery Assessment* provides this overall picture and NDPM and the Bank's technical assistance is setting in place coordination mechanisms. A Water, Sanitation and Hygiene Coordinating Committee (WASHCOM) meets on an ad hoc basis to coordinate between government, water utilities and donors.



**Spending to support patient transfer is all but nonexistent—suggesting that there is currently no meaningful systemic government funded/provided arrangement for moving rural patients to higher levels of care in an emergency.** It is assumed that the burden for moving a patient falls on the family, is perhaps occasionally provided by the facility or from an unspecified provincial government funding vote, or simply does not happen and the patient suffers the consequences. Finally, there is little visible spending on provincial and district supervision activities—raising the question of how this is funded.

**Table 7.1 summarizes the results of our analysis by comparing (in percentage terms) the spending in priority activities against the estimated cost of undertaking those activities.** Comparing spending to cost estimate helps to get a sense of how close government is to spending an adequate amount to enable the service to be delivered. In interpreting this table there is a need to be mindful that the NEFC cost estimates are very conservative—in reality even more funding is likely to be necessary and could be put to good use—so this is a bare minimum comparison. The table also includes other interesting data that helps form a snapshot spending profile for each province on frontline priority activities.

**Table 7.1: Summary of Activity Spending versus Cost Estimate (2010)**

Province	Facility Operations & Patrols MPA 1 & 2 (combined)				Facility Operations MPA 1	Outreach Patrols MPA 2	Distribution MPA 3	Patient Transfer	Water Supply	
	MPA 1&2 Spending v CoS	District v PHQ	Transfers % Of Exp.	Transfer Level	Specific Spending	Specific Spending	Spending v CoS	Spending v CoS	Spending v CoS	District v PHQ
West'n	34%	69%	-		16%	33%	-	1%	20%	100%
NIP	19%	87%	-		4%	49%	17%	-	24%	45%
WNB	19%	75%	-		7%	15%	-	14%	230%	100%
Morobe	27%	49%	-		23%	33%	-	-	-	-
Enga	23%	-	-		13%	26%	-	-	20%	-
SHP	62%	78%	-		43%	19%	239%	-	15%	-
Central	83%	100%	-		-	1%	67%	4%	1%	-
ENB	101%	88%	98%	LLG	151%	-	103%	3%	40%	80%
WHP	85%	-	40%	various	114%	-	-	-	21%	-
Madang	49%	87%	-		37%	49%	-	-	9%	70%
Gulf	92%	82%	-		45%	160%	150%	-	-	-
EHP	101%	77%	-		107%	69%	223%	8%	0%	-
Simbu	101%	-	8%		113%	-	-	-	24%	-
Oro	59%	100%	-		90%	-	-	-	26%	100%
ESP	21%	77%	25%		27%	10%	-	-	15%	40%
MBP	78%	89%	66%	District	80%	-	-	5%	184%	-
Manus	10%	-	-		-	31%	-	-	41%	-
Sand'n	50%	87%	-		86%	7%	69%	-	18%	81%

Source: NEFC cost and expenditure information and author's calculations.

The following notes are provided in order to analyze the data presented in Table 7.1 and the expanded versions of this table in Appendix 4.

**Funding Profiles:** Provinces have different funding profiles that reflect their fiscal capacity and where they get their funding from. There are three broad categories: (i) some have a lot of own-source revenue and receive lower grant transfers; (ii) others have little own-source revenue and are largely dependent on national government grant transfers; and (iii) there is a group in the middle who have a mixture of both own-source revenue and grants.

**Cost per Head to Deliver Services:** This compares the cost estimate for frontline service activities in a province to its population (kina cost estimate/population). Highlands' provinces with larger populations, higher population density and reasonable road access typically have a lower cost while maritime provinces and those with largely dispersed populations are more costly. The results in Table 7.1 are then grouped for readability—very high, high, medium and low.

**Frontline Spending Level:** This compares what was spent on frontline service delivery activities in 2010 to what is estimated to be necessary to deliver those services—the cost estimate (actual spending/cost estimate). The results are then grouped for readability—higher, medium and low.

**Facility Operations and Patrols:** These two activity sets (MPAs 1 and 2) are grouped together for two reasons. Firstly, both activities are managed by the same people from the facility and, as such, it makes sense to group them. Secondly, it can be difficult to disaggregate the spending data as precisely as desirable. So there is a risk that spending that may appear to be on funding facility operations is actually funding for outreach patrols and vice versa. Combining the data is one way of removing that risk.

**Spending v CoS:** These columns compare the amount actually spent in 2010 to the cost of service estimate for a particular activity. It shows how close a province is to spending what it needs to support that activity.<sup>29</sup> Central Province, for example, is estimated to be spending 83 percent of what is required on facility operations and outreach patrols—a positive result.

**District v PHQ:** The percentage is the proportion of spending that is flagged as happening at the district level. This metric calculates the amount of spending on an activity that was recorded as spending for particular districts—as opposed to unspecified provincial spending at the provincial headquarters. Spending recorded against a district provides a higher level of confidence that the money was actually spent in and on the district and on frontline activities.

**Transfers as Percentage (%) of Expenditure:** This identifies any observed transfer (item 144) of funds to lower levels of government administration such as districts and Local Level Governments (LLGs). Although there is sporadic spending and/or transfers directed at specific facilities, instances of systemic transfers of grants to rural health facilities direct from provincial administrations could not be identified. East New Britain Province, for example, transferred almost all (98 percent) of its facility funding to LLGs to administer—this suggests a real desire in East New Britain to get the

---

<sup>29</sup> The NEFC *Cost of Services Study* counted all health facilities (both government-run and church-run) in calculating its facility costs. Some of these costs may be offset by the national grants to churches for health facilities. As mentioned in other parts of this report, it would be a useful exercise to identify the activity functions churches are responsible for and those that remain as government functions. The impact on the table above is that provincial spending is being compared to the cost estimate for all rural health facilities both government and church-run. Church operational grants paid via NDoH will offset some of this cost.

funding closer to, and more accessible for, frontline staff carrying out priority service delivery activities.

**Specific Spending:** This compares spending that can be (more) specifically identified as spending on either facility operations or outreach patrols. Both activities have been grouped together, however, each is compared to the relevant *Cost of Services* estimate.

**Drugs and Medical Supply Distribution:** Five or six provinces spent relatively well in supporting distribution in 2010. Some caution should, however, be exercised in interpreting this as such. The NEFC's cost estimate of this activity is not unreasonable but may be overly conservative and, therefore, not fully represent how much it would cost to effectively undertake the distribution activity in practice.

## PROPOSED FIELDWORK

This analysis builds upon the work already completed by organizations such as the NDoH, NEFC and the DPLGA. These parties have, for their own purposes, been analyzing and publishing information on the rural health sector over recent years. The next step is to further test the findings of this report by undertaking fieldwork that seeks to draw an even clearer picture of what is happening at the sub-national level and at the frontline of rural health. The findings can help shape fiscal policy and practice at national and sub-national levels to better support rural health service delivery. A set of proposed fieldwork questions are included as Appendix 7.

## Appendix 1: Country Summary – Papua New Guinea (and Comparators)

Indicator	Papua New Guinea	Fiji	East Asia & Pacific (Developing Only) <sup>1,2</sup>
<i>General Information</i>			
Population	7.014 million	0.868 million	1.974 billion
Population Growth (Annual)(%)	2.2	0.9	0.7
Land Area (,000s of square kms)	452.9	18.3	15,853.4
Gross National Income per capita (US\$)	2,570	4,610	7,266
<i>Health/Development</i>			
Human Development Index Ranking	156	96	n.a.
Life Expectancy at Birth	63	69	72
Total Fertility Rate (Births per Woman)	3.9	2.6	1.8
Under-5 Mortality Rate (per 1,000 live births)	58	16	21
Measles Immunization (% of children 12-23 months of age)	60	94	95
Expected Years of Schooling	6	14	12
Improved Water Source (% of population with access)	40	98	90
Improved Sanitation Facilities (% of population with access)	45	83	66
<b>Government and Administrative Divisions:</b> Papua New Guinea is a constitutional monarchy. The national parliament is elected for a five year term. There are three levels of government–national, provincial and local. There are 20 provinces including the National Capital District (NCD) and ARB.			
<b>Ethnic Groups:</b> Papua New Guinea is one of the most ethnically diverse nations in the world.			
<b>Languages:</b> There are more languages in Papua New Guinea than any other country. There are over 820 indigenous languages although most have fewer than 1,000 speakers.			
<b>Religion:</b> Some 96% of people identified themselves as members of a Christian church, however, many citizens combine their Christian faith with some traditional indigenous religious practices. The major Christian denominations are Catholic (27%), Evangelical Lutheran (20%), United (12%), and Seventh-day Adventist (10%).			

*Source:* Indicators are from the World Bank and UNDP. Information on government, ethnic groups, languages and religion from Wikipedia.

*Note:* 1: With the exception of the data for population and land area all figures in this column are averages across the EAP region. 2: The EAP region covers 24 countries including American Samoa, Malaysia, Samoa, Cambodia, Marshall Islands, Solomon Islands, China, Federated States of Micronesia, Thailand, Fiji, Mongolia, Timor-Leste, Indonesia, Myanmar, Tuvalu, Kiribati, Palau, Tonga, Republic of Korea, Papua New Guinea, Vanuatu, Lao PDR, Philippines, and Vietnam.

## Appendix 2: The Rural Health Context

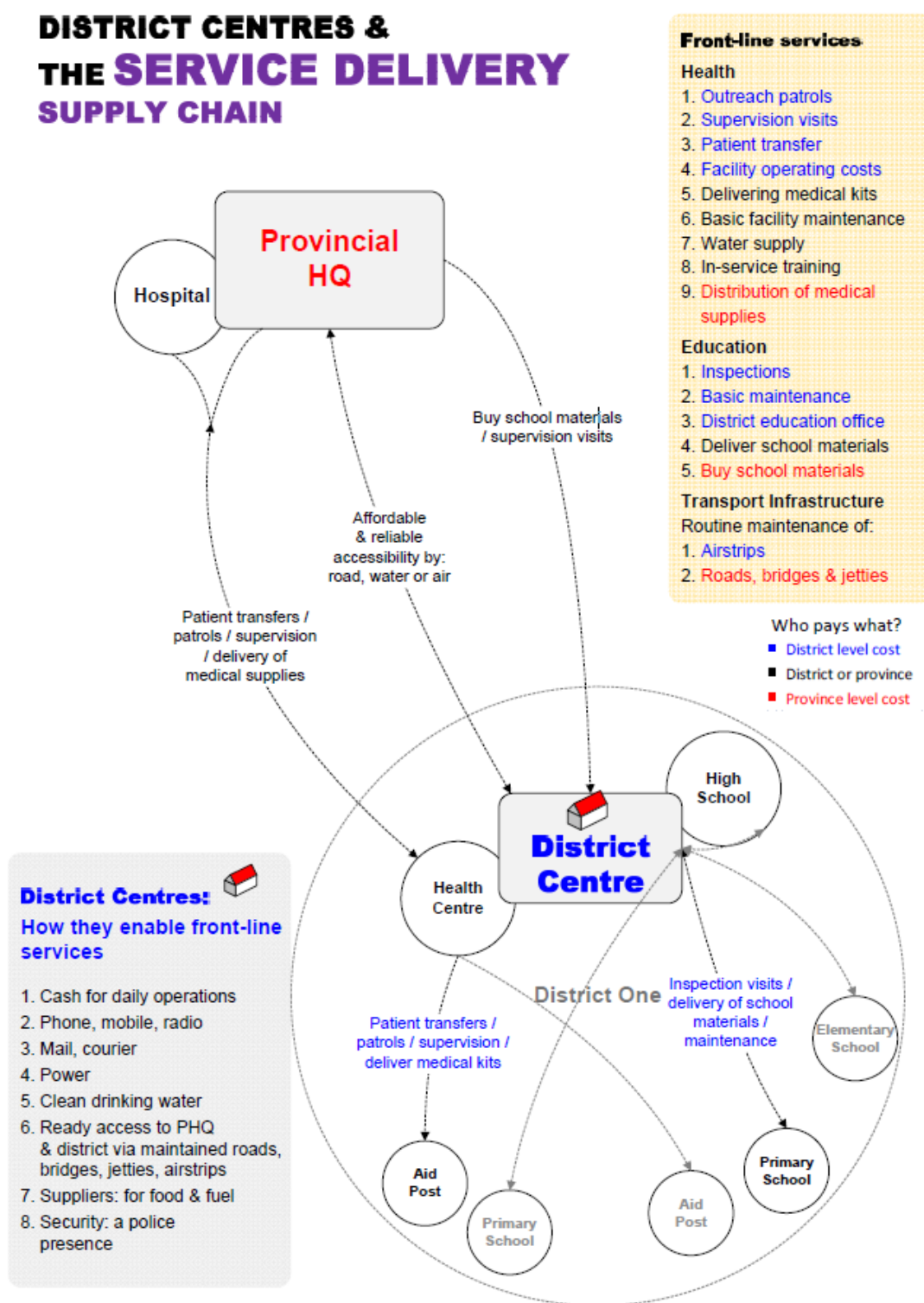
### ***What is the Frontline of Service Delivery in Rural Health?***

The term 'service delivery' is all-encompassing and widely used today—perhaps so widely and commonly used that it can mean many things to different people depending on the context and focus of the particular discussion. The focus of this paper is on service delivery as it relates to the set of tangible priority activities that government has identified as fundamental to its rural health service delivery system. Three MPAs have been agreed and identified: (i) the distribution of drugs and medical supplies; (ii) operational facilities; and (iii) conducting outreach patrols. Other rural health activities are, of course, important but these three MPAs are intrinsic to the functioning of the rural health system in Papua New Guinea and critical enablers for the health staff who operate and deliver the service to the rural majority. Without medicines, functioning facilities and the funding to undertake outreach patrols, the presence and efforts of rural health workers would be rendered somewhat ineffective. In this sense, these activities and ensuring their adequate funding is fundamental to the frontline itself.

The sub-national service delivery supply chain (figure 2.A.1) seeks to depict the operating context in Papua New Guinea for delivering a rural health service or what can be referred to as the 'frontline'. The figure presents the series of actors, facilities, service delivery points, and 'service activities' that need to take place. It provides a sense of how the various elements interrelate and work together, both geographically and relationally. Each element has a purpose and the manner in which they interrelate will help to determine the effectiveness and quality of the service ultimately delivered. For most Papua New Guineans (the rural majority) the district level, with its health centers and aid posts, is the first and perhaps the only accessible level for their primary healthcare needs. Understanding where service delivery happens, or needs to happen, can, therefore, help to shape the way in which the rural health system is funded.

The three MPAs reflect the importance of the district level as they directly impact the work of the district health center by ensuring the health center is operational (adequately funded for its day-to-day activities), stocked with drugs and medicines, and has funding to carry out rural outreach patrols. In addition to these three MPAs that are fundamental to a functioning rural health service, this review has also researched three additional spending activities: (i) by the health sector on rural water supply; (ii) patient transfer; and (iii) supervisory activities. Access to clean water is critical to a healthy community and to the delivery of a safe health service, the transfer of patients to a health facility with the required capacity can be critical to a patient's treatment, and the supervision of rural health facilities provides guidance and accountability. This report has, therefore, added these three activities to the three MPAs and analyzed the spending on each. These six activities are collectively described as frontline activities and are fundamental to the functioning of the rural health service.

Figure 2.A.1: The Sub-national Service Delivery Supply Chain



Source: National Economic and Fiscal Commission 2011.

### **Service Delivery at the Sub-national Level and Where the Funding Needs to Reach**

The MPAs discussed in the preceding section are only part of the overall set of common activities in rural health with a supplementary list of common activities that need to be funded at the sub-national level (table 2.A.1). The first column indicates the (likely) administrative level, the second column the activity, the third column indicates the three MPAs and the fourth column suggests a preferred (perhaps optimal) location for the funding to reside. The table also illustrates the relative weighting of the costs. There are four significant costs: rural health center transportation, outreach patrols, patient transfer and water supply.<sup>30</sup>

**Table 2.A.1: Standard Set of Provincial Health Activities and Cost Centers**

Administrative Level	Activity	MPA	Preferred location of funding	Cost weight
<b>Province</b>	Administration		PHQ	
	Human Resource Development (training)		PHQ	
	Provincial Health Board		PHQ	
	Health information system		PHQ	
	<b>Supervision (province-districts, OIC HC-province, hospital-HC)</b>		PHQ	4%
	Disease Control (province-HC)		PHQ	
	<b>Distribution of Medical Supplies</b>	<b>3</b>	<b>PHQ</b>	
	Health Promotion		PHQ	
<b>District</b>	Rural Health Facilities			
	<b>a. Rural HC transportation (fuel &amp; maintenance)</b>	1		14%
	<b>b. Maintenance of medical equipment</b>	1		5%
	c. Non-medical supplies	1		4%
	d. Facility maintenance	1	Facility	
	e. Fridge gas	1		
	f. Fridge maintenance	1		
	g. HC radio maintenance	1		
	<b>Immunization/MCH (outreach)</b>	2	Facility	33%
	Administration		DHQ	
	DHMC (district health management committee)		DHQ	
	Supervision (district-HC's)		DHQ	
	<b>Patient transfer</b>		DHQ	23%
	In-Service Training (50% receive 5 days p.a.)		DHQ	
	<b>Water Supply</b>		DHQ	19%
	Health Promotion		DHQ	
<b>LLG</b>	Aid Post supplies		?	
	Aid Post building maintenance		?	
	Aid Post medical equipment maintenance		?	

Source: NEFC cost information 2005.

Note: This information is available to provinces via the NEFC Provincial Budget Model (PBM). The cost weightings vary by province. The percentages are indicative only and represent an average from a sample of four provinces. Only costs with an average weighting of 4 percent or more of total costs have been included to ensure major costs are highlighted. The preferred location for LLG activity costs is uncertain hence the '?'.  
  
<sup>30</sup> In reality the transportation and outreach patrol activity costs are effectively a subset of the rural health center budget.



**Some activity costs—such as supervision costs—are relatively small, but they also play a critical role in the delivery of a successful rural health system.** If all these activities were adequately funded in a consistent and timely manner it would ensure that rural health staff had the financial capacity to do their day-to-day tasks. Conversely, if this funding is not in place (or accessible) it invites the question how can a rural health service expect to be delivered?

### ***A System That is Constantly Evolving***

**The context in which rural health service delivery takes place in Papua New Guinea is neither constant nor static.** Changes, some significant, happen on a regular basis and the impact of these changes need to be known and factored in to an understanding of the context. Some of these changes are expressly health related whilst others that are more system-wide impact on the whole government system, including health as well as other areas of government service delivery.

**Two of the most potentially significant changes in the health field are the creation and implementation of Provincial Health Authorities (PHAs) and the procurement and distribution of drugs and medical supplies.** The immediate impact of the PHAs is that there are now two structures of provincial health: (i) the existing structure with provincial hospitals reporting to boards and the provincial rural health area a responsibility of the provincial administration; and (ii) the new evolving PHA structure being trialed in three provinces.<sup>31</sup> This means that initiatives to understand and assist rural health service delivery needs to be cognizant of both structures. In 2011 a decision was made that recentralizes a significant proportion of procuring and distributing drugs and medical supplies to facilities. This is discussed at greater length in Chapter 2.

**One significant government-wide system change which has both fiscal and functionary impacts on rural health service delivery is the formation, in 2012, of two new provinces.**<sup>32</sup> The new provinces, Hela and Jiwaka<sup>33</sup>, face the particular challenge of establishing new provincial administrations and developing the enabling environment that helps a provincial capital function effectively as a center for government administration and service delivery.<sup>34</sup> All four provinces—including the Southern Highlands and Western Highlands—will find their fiscal situation changing as their revenue streams under the new structure become identified and established.<sup>35</sup> This has significance for rural health whose running costs rely on funding from either national transfers or from own-source revenue.

---

<sup>31</sup> Under the trial, provincial hospitals and rural health services will combine under the umbrella of the PHA. The approach offers synergistic opportunities from better coordination of health services across a province.

<sup>32</sup> The analysis in this report is largely historical and, as such, the results and information relates to the existing structures for the Southern Highlands and Western Highlands provinces and not the four newly formed provinces.

<sup>33</sup> The Southern Highlands and Western Highlands provinces have each been divided in two. The Southern Highlands now becomes a smaller Southern Highlands Province and a newly created Hela Province. Similarly, the Western Highlands now becomes a smaller Western Highlands Province and a newly created Jiwaka Province.

<sup>34</sup> Negotiations are in progress whereby the Western Highlands PHA would 'manage' the health services for the newly formed Jiwaka Province. A partnership agreement would be agreed for an interim period (2013-15) until a Provincial Health Office or PHA is established in Jiwaka.

<sup>35</sup> The own-source revenue available to each of the four new provinces is still to be fully established. Once these revenues are clarified, the NEFC can advise the Department of Treasury, with greater accuracy, on the level of transfers appropriate to enable ongoing service delivery.

## Appendix 3: Funding Streams for Rural Health

### *The Various Sources of Recurrent Funding*

**Recurrent funding for frontline rural health largely comes from three sources of public funding—function grants, own-source revenue and transfers to church health providers.** The first and largest is from the function grant transfers—primarily for those provinces that lack own-source revenue. The second source is from a province's own-source revenue—the funding it derives from GST, royalties, and other revenues. The more own-source revenue, the more, in theory, a province should allocate to its rural health service. The third significant source of funding is national transfers to church health providers. Other funding sources include the donor-funded Health Sector Improvement Program (HSIP) SWAp funding mechanism. In recent years donor partners have contributed significant amounts of funding via this HSIP mechanism for recurrent rural health services. Funding for rural health services under a new redesign of HSIP is likely to decline significantly reduce and eventually be phased out by 2017.

**One of the challenges in rural health is the sense of fragmentation of providers and funding.** Not only are rural health services provided by a variety of service providers—such as government and churches—but the funding streams that rural health relies upon are also significantly varied. This dimension of varied funding streams means that not every province can necessarily be perceived in the same way. What may work, fiscally speaking, in Sandaun might not work in Morobe. Sandaun Province is largely grant-reliant for its funding whilst Morobe, on the other hand, is largely grant-independent and relies, in theory at least, on the province's own-source revenue (largely derived from its GST revenues).

**The source of funding for a province (table 3.A.1) can have enormous budget implications.** In practice, for say Morobe Province, if the provincial health manager cannot advocate effectively for an adequate slice of the province's internal revenue budget for recurrent rural health services then the provincial health service will be underfunded, year after year. Conversely, in Sandaun Province which lacks a meaningful internal revenue base, it will benefit from the intergovernmental finance system and will be funded by national government transfers according to its need.<sup>36</sup>

**Health function grants (transfers) have grown by 85 percent over the four year period 2010-13.** This reflects government policy aimed at redressing the decline in recurrent funding for frontline services. Internal revenue is a relatively small contributor to rural health. In 2010 it represented only 11 percent of the overall funding made available or 7 percent of the estimated operational costs necessary to provide a rural health service. Church operating grants have risen by 15 percent over the same period.

---

<sup>36</sup> Through the intergovernmental finance system the national government will seek to fund a province's fiscal need (or funding shortfall) according to the country's ability to do so. So, in practice, not all of a province's fiscal need (shortfall) may be funded under the intergovernmental finance system.

**Table 3.A.1: Funding to Rural Health for Recurrent Operations (millions of Kina)<sup>37</sup>**

Revenue Source	2010	2011	2012	2013
Cost of Services <sup>38</sup>	102.5	108.4	114.9	121.8
Function Grants (budget)	39.2	51.9	64.3	72.6
Internal Revenue (actual exp.) <sup>39</sup>	7.3	—	—	—
<b>Subtotal</b>	<b>46.5</b>			
Church Operating Grants (budget) (for church facilities only)	18.2	19.7	20.9	20.9

Source: NEFC cost information and GoPNG Budgets 2010-2013.

**Function grants, own-source revenue and church operating grants are supplemented by expenditure from the National Department of Health (NDoH) medical supplies budget for rural health facilities.** The procurement of drugs and medical supplies has long been a national function managed by NDoH, however, the delivery of those drugs and medical supplies to rural facilities was a provincial function to be managed and funded by provincial health managers.<sup>40</sup>

**Due to the perceived lack of effectiveness in the procurement (national) and distribution (provincial) process, NDoH (with support from development partners) had, for a number of years, carried out a limited distribution of health kits to facilities.** In 2011 a decision of strategic importance was made to temporarily recentralize the function of procuring and distributing a large portion of essential drugs and medical supplies for rural health facilities. The funding for the procurement of quality-assured 100 percent medical supply kits and distribution to health centers three times a year and aid posts twice a year accounts for approximately one-half of the annual NDoH medical supplies budget.

**It is important to note that kits do not cover all essential medical supply needs, and that certain 'fast-moving' supplies will be consumed more frequently than supplied through kits.** This means that provinces will still need funding to access these supplies through the requisition system and take responsibility for delivering these through their own distribution channels. Furthermore, even while distribution of kits is currently a national-level responsibility, this program requires extensive consultation with provinces and relies on provincial information on appropriate subcontractors for distribution and the most effective routes for delivery to remote facilities.

**The decision to recentralize the procurement and distribution function is highlighted in this report for two reasons.** Firstly, the procurement and distribution of drugs and medical supplies to rural facilities is a fundamental prerequisite for Papua New Guinea's rural health service. If it does not happen reliably then everything else is essentially rendered ineffective. Secondly, and perhaps worryingly, the distribution aspect of this activity is currently identified as an MPA and the responsibility of provincial governments. If the responsibility for the task of distributing kits or all rural health medical supplies has effectively been recentralized, but is not confirmed as a national level responsibility in the long-term (rather than the current temporary response to emergency stock

<sup>37</sup> This does not include funding made available for salaries to provincial health workers from the national level (for public servants or church health workers).

<sup>38</sup> The 2010 *Cost of Services Study* estimate is from the *Provincial Expenditure Review Step Two: The Ripple Effect* (NEFC 2010). The estimates from 2011 to 2013 have been adjusted annually by CPI of 6 percent for indicative purposes only.

<sup>39</sup> The internal revenue amount is 'actual spending' from the internal revenue budget. At the time of drafting this report figures were not available for spending after 2010.

<sup>40</sup> The procurement of drugs and medical supplies by NDoH has not been without its challenges and has seen many reviews and proposals over several years.

outs), there is a real danger, that in several years' time, the task will simply be quietly passed back to the provincial level with the unrealistic expectation that provincial delivery systems will reappear and enable the distribution to then happen efficiently and effectively. That would be an unrealistic hope.

### ***The Varied 'Nature' of Recurrent Funding***

**Not all funding streams are the same when it comes to accessibility and trying to improve service delivery.** National government grants such as the health function grant are tied and conditional. This means the government dictates through the Department of Treasury the ways in which that money can be spent. Whilst the notion of untied funding may seem pleasing and progressive, the reality is that tied conditional funding is often well-appreciated by sector staff who know (in a general sense) that they will get it and the chances of diversion, whilst still present, are a lot less.

**A province's own internal revenue is not tied and it has full discretion on how it allocates and spends this money.** This means sectors such as health have to compete through the provincial budget process for this funding together with the other provincial actors—being other sectors, administrative divisions, and capital/development projects. In better funded provinces that have small grants and large internal revenue resources, there is a unique challenge for sectors such as health to get their voice heard and get their province to allocate more internal revenue to fund rural health operational costs. Evidence suggests that provincial health sectors either do not effectively petition their provincial administration to get adequate operational funding or, if they do petition strongly, the provincial administration lacks the will to meet their request.

**The new intergovernmental financing system, RIGFA, prioritizes the allocation of any new additional amounts of national grant funding to the provinces that need it most.** This means that provinces with larger amounts of internal revenue are expected to use their own resources (internal revenue) to fund their operational costs—including rural health operations. If they do not, the current state of underfunding will continue and rural health in higher-funded provinces and others with higher amounts of internal revenue will struggle to improve due to inadequate operational funding.

**Table 3.A.2 summarizes the main sources of funding that may be available to fund (aspects of) rural health in any province.** The composition of the funding available to any given province will vary depending mainly on their own resources, however, most provinces will receive some level of health function grant, should receive some level of internal revenue funding, will likely be entitled to some funding from donor partners (HSIP), and may perhaps access some amount of 'development funding' for semi-recurrent purposes.<sup>41</sup>

---

<sup>41</sup> It is important to note that development funding is intended for capital/project type spending and not for the funding of recurrent operations. Whilst development funding may be used on occasions for funding aspects of recurrent service delivery, it is not a sustainable source of recurrent funding.

**Table 3.A.2: The Nature of the Funding Sources for Rural Health's Recurrent Operations**

Revenue Type	Budget Control Aspects	Risk of Diversion	Accessibility	Check Book	Approval
National government function grant	Tied to Sector Conditionality - DoT	Low	Can be issues of timing	Provincial or District Treasury	Provincial Administration System
Own-source (internal) revenue	Provincial Administration allocates. Competitive bidding	Higher	May be dependent on accuracy of forecasts and collection	Provincial or District Treasury	Provincial Administration System
HSIP (existing)	Via NDoH. Not integrated into provincial budget processes (off-radar)	Low	Accessible but strong (centrally located) compliance regime	Health Sector	Health Sector
DSIP & DSG (development)	Not intended for recurrent (ad hoc availability at best	n.a.	n.a.	n.a.	n.a.

Source: Author.

### **How Funding Flows From National to Facility Level**

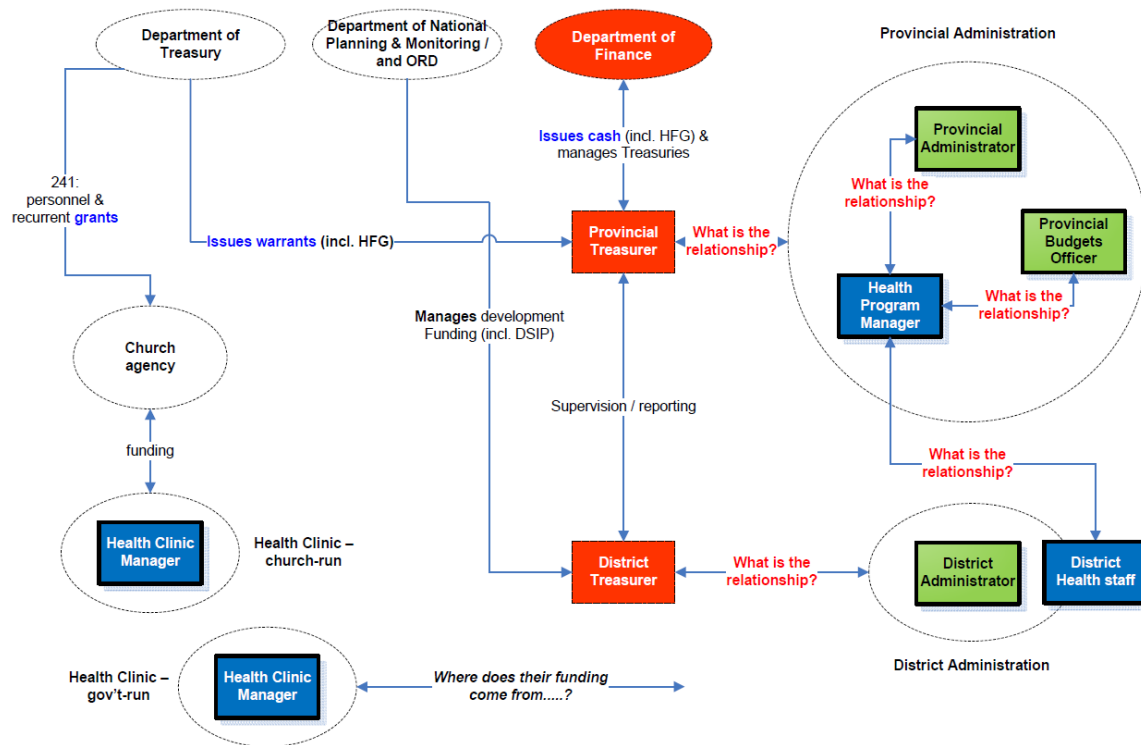
#### **THE PROXIMITY CHALLENGE**

**Figure 3.A.1 helps to visualize the physical context in which the delivery of services happens, it includes the key hubs of the provincial headquarters and in many cases the district headquarters, the facility-level service delivery points and some key activities.** Many rural health service providers (community health workers) are not based in close proximity to their source of funds. Health budgets and funds are often retained at the provincial level and yet many community health workers and facilities are several hours (even days) travel away from the provincial capital.

**To access funds held at the provincial level, the community health worker would be required to travel from their facility to the provincial capital to access funding to support their various activities.** This is often impractical, time consuming and incredibly costly. Assuming it even happens, the transaction cost of the activity becomes very high and therefore the service delivery aspect becomes less efficient. The *District Case Study* (DPLGA 2009) also suggests that, in the absence of ready funding, many facilities revert to user fees to keep operating.

**Figure 3.A.1 outlines in more detail the various participants that need to interact to ensure that health funding reaches the various levels along the service delivery supply chain.** This is the existing context, and it involves multiple participants and relies not only on systems but, just as critically, on interagency and interoffice relationships.

### Figure 3.A.1: Health Fund Flows



*Source:* Author.

*Note:* The Office of Rural Development (ORD) is now known as the Department of Implementation and Rural Development (DIRD).

**Poor proximity to funding source means high transaction costs making it impractical to readily access funding.** Even in cases where the community health worker and facility are in close proximity to the provincial capital, however, it might not be easy for health staff to access the funding. The above figure depicts the context between the national level and the sub-provincial level and the complicated relationships between the provincial treasuries that report to the Department of Finance and their ‘client’—the provincial administration. When health sector staff complain of provincial administration inefficiency they may well be referring to either ‘the Treasury’ or ‘the administration’ or the interplay between both. This separation of roles and accountabilities ensures that this will be a perennial challenge which plays out in different ways in different provinces depending on the personalities involved.

**Even once funds reach the sub-provincial level (typically the provincial Treasury) the funding flow may yet continue to the district Treasury level, the LLG level, or to actual facilities.** Each staging point that funds pass through in reaching their destination is an opportunity for delay and, potentially, for diversion or blockage. This, amongst other reasons, is why the *District Case Study* proposed fast tracking funds to their ultimate destination.

**The sub-national funding system that has evolved with its various actors, parts and pathways provides challenges that impede efficiency.** These challenges include: (i) the absence of a designated budget for an activity or facility; (ii) a failure to inform the sector/facility of their budget; (iii) a failure to inform the sector/facility of the receipt of funds which may be due to poor communication between national and provincial levels of government, between provincial Treasury and provincial administration or provincial administration and sector, or between sector and facility; (iv) the possibility that funds may be diverted for another purpose; and (v) the slow and/or untimely release of funds which may be due to the inefficiency of the national agency or provincial administration.

### ***The Broader Fiscal Picture and its Implications for Health***

**A province may receive revenue from grants, royalties, dividends and other internal revenue such as GST—together this is a province's resource envelope.** This tells us how much money provinces have available to budget and spend. Not all provinces are equal as some provinces have more revenue than others. Provinces with a high resource envelope relative to their costs are in a better position to allocate funds to support service delivery than those provinces with a lower resource envelope. It is important to understand this context because rural health services rely wholly on funding from national function grants (the health function grant) and money allocated through the provincial budget from a province's own internal revenue. The only other significant source of funding available to a province to implement its rural health service in recent years has been the HSIP funding which has grown in significance.

**When there are as many as 20 provinces (plus ARB) it is helpful to group similar provinces to get a sense of the overall context.**<sup>42</sup> Table 3.A.3 divides provinces into three groups depending on their fiscal capacity—those with sufficient funds to meet or exceed the estimated cost of services (100 percent or more) are referred to as high, those with between 50 and 100 percent of what they need are medium, and those with less than half of what they need are low.<sup>43</sup>

**Table 3.A.3: Actual Fiscal Capacity to Fulfill Estimated Cost of Services (2010)**<sup>44</sup>

<b>Group A 100%+</b>	<b>Group B 50-100%</b>	<b>Group C Below 50%</b>
<b>Western</b>	<b>Southern Highlands</b>	Simbu
<b>New Ireland</b>	<b>Central</b>	Oro
<b>West New Britain</b>	<b>East New Britain</b>	East Sepik
<b>Morobe</b>	<b>Western Highlands</b>	Milne Bay
<b>Enga</b>	Madang	Manus
	Gulf	Sandaun
	<b>Eastern Highlands</b>	

*Note:* Bold type indicates provinces with higher ratios of internal revenue.

*Source:* NEFC cost information and author's calculations.

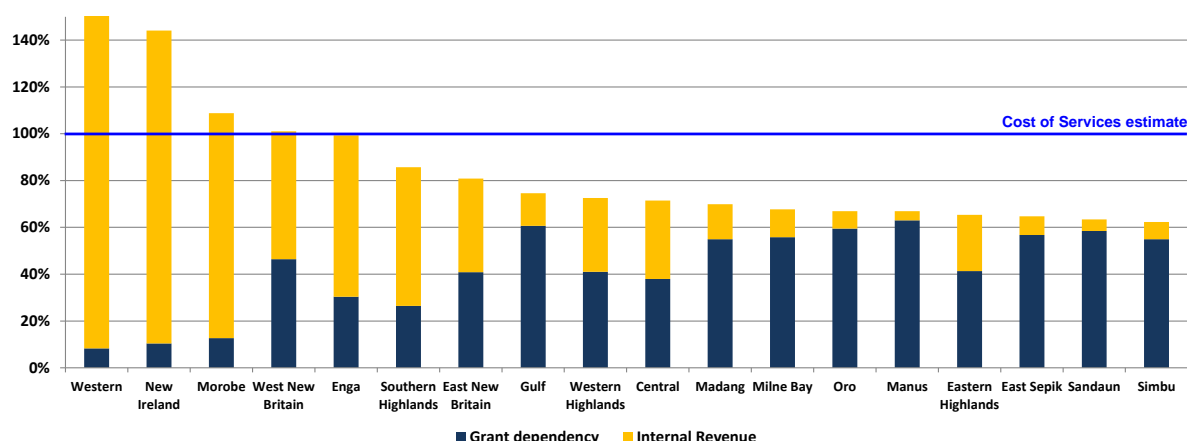
<sup>42</sup> The total of 20 provinces includes the newly created Hela and Jiwaka provinces located in the Highlands region.

<sup>43</sup> The gap between the lows and the lower-medium provinces is reducing due to RIGFA. These are 2010 amounts and with function grants increasing in 2011 and 2012 the scenario for lower and medium funded provinces has improved.

<sup>44</sup> This table shows the province-wide situation for all sectors—it is not health-specific.



**Figure 3.A.2: Estimated Provincial Fiscal Capacity (2012)<sup>45</sup>**



Source: NEFC revenue and cost information and author's calculations.

Figure 3.A.2 illustrates how RIGFA is bringing the fiscal capacity of many provinces closer together or, more specifically, is allocating more money to poorer provinces with the result that the disparity between what a province has and what it needs is closing amongst provinces.<sup>46</sup> The analysis suggests 11 provinces are now clustered between 62 percent and 75 percent. In 2012 eight provinces were overwhelmingly reliant on their function grant funding for supporting service delivery (table 3.A.4). This means national government has the opportunity to strongly guide their priority setting.<sup>47</sup> Three provinces are overwhelmingly reliant on their internal revenue for supporting service delivery while the other seven rely on a mix of grant and internal revenue to support service delivery in their province.

**Table 3.A.4: Estimated Fiscal Capacity (2012)**

Group A <sup>1</sup> Independent	Group B Mixed	Group C Grant Dependent
Western	West New Britain <sup>2</sup>	Madang
New Ireland	Enga	Gulf
Morobe	Southern Highlands	Simbu
	Central	Oro
	East New Britain	East Sepik
	Western Highlands	Milne Bay
	Eastern Highlands	Manus
		Sandaun

Source: NEFC cost and expenditure information and author's calculations.

Note: 1: Group A provinces are heavily dependent on grant funding for operational purposes. 2: Provinces in red font in Group B are more independent of grant funding than dependent. The table shows the province-wide situation for all sectors—it is not health-specific.

<sup>45</sup> The estimates are indicative only. The funding scenario will change in 2013 with the impact of the newly formed Hela and Jiwaka provinces in the Highlands region.

<sup>46</sup> Terms such as *poorer* or *lesser-funded* are relative to what is estimated necessary to provide a basic level of core services.

<sup>47</sup> The national government—through RIGFA and the Department of Treasury *Budget & Expenditure Instructions*—guides the allocation of grant funding to specific sectors and assists provinces to target the allocation within function grants to MPAs.

**In the effort to see service delivery improved one approach is unlikely to be appropriate to every province.** Not only are provinces different in topography, culture, language, and economic base but they are also different in fiscal capacity (that is, how much they have relative to what they need) and also in where that funding comes from.

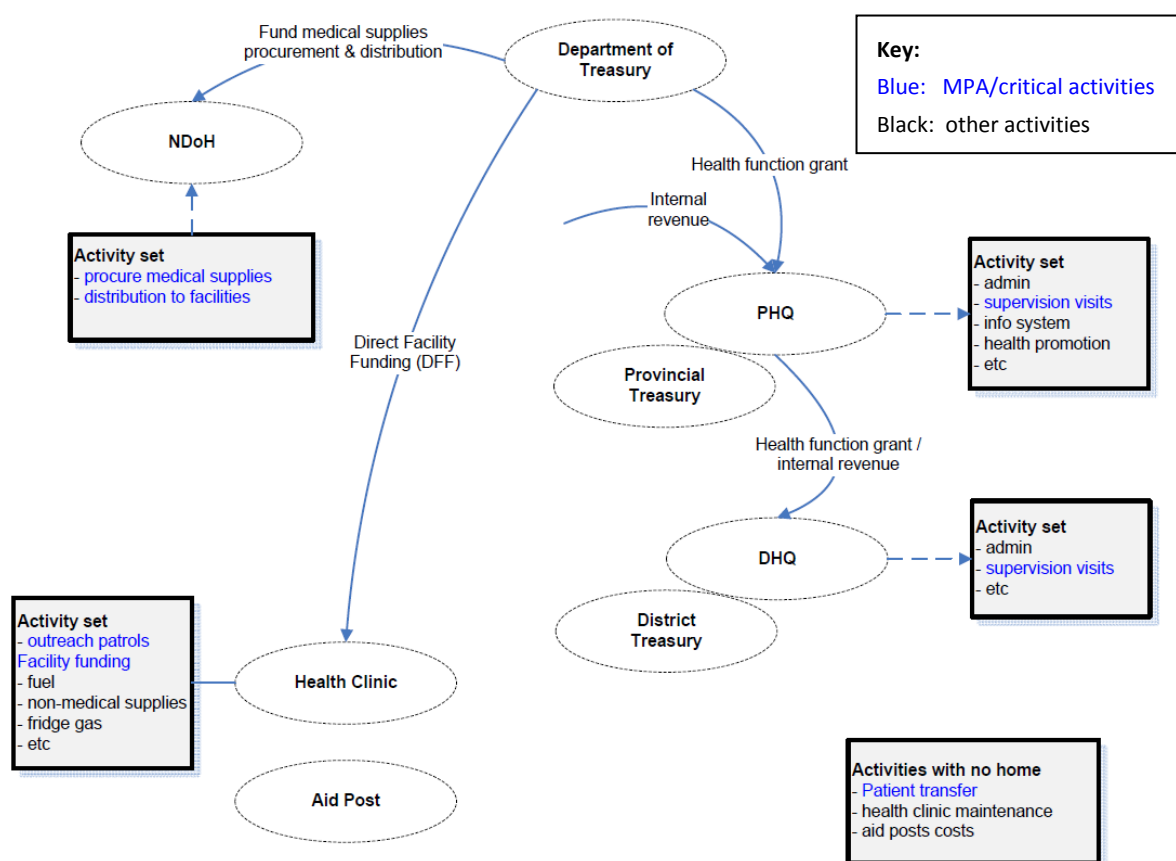
### ***What Might an Improved Health Funding Approach Look Like***

Existing financial arrangements rely heavily on getting funding through the provincial HQ hub which is an interaction between the provincial administration, the provincial Treasury and the provincial health manager. If this interaction at the provincial hub is inefficient then there is a bottleneck to service delivery by frontline health staff that rely on the funding flow. The provincial hub feeds the district and facility levels. It seems timely to reconsider the efficiency of this arrangement and whether it is likely, in the medium-term, to enable the efficient distribution of all activity funding. Is it possible to design a better system, one that identifies the levels of service delivery responsibility and then seeks to fund each level by the most direct method possible? In doing so can a system be designed that recognizes the dual funding arrangements that are the reality of provincial governments (national grants and internal revenue)?

**Figure 3.A.3 outlines a slightly different approach to funding sub-national health that looks at how GoPNG can ensure that the funding of key service delivery activities (highlighted in blue) reaches the right level and the service providers.** Essentially the service delivery activities (and corresponding funding needs) are being identified and packaged as activity sets that need to be delivered at a certain level. It then identifies where that funding might come from by as direct a route as possible. This approach seeks to match funds with core activities (in activity sets that can then be funded) and to get the funds to the right place in the quickest way possible.

**The belief is that, when appropriate, it is better to avoid the bottleneck at the provincial HQ hub than to push your way through it.** Some questions remain to be discussed and debated. Patient transfer is a significant and critical cost, but at what level should this amount sit and in which activity set? What are the implications of assigning this major cost to that activity set and will it work? Although the amounts allocated for health center maintenance and aid post costs are less significant, where should these activity costs be administered from and will it work?

**Figure 3.A.3: A Funding-of-Activities Approach in Rural Health**



Source: Author.

Note: Table 2.1 provides a fuller listing of basic service delivery activities.

### *A mental recalibration (adjustment)*

**In reconsidering where funding resides and how it gets there, a better balance needs to be found between getting the money to where it needs to be spent and the pervading practice of centralized ex ante controls.** There seems to be little merit in significantly increasing the funding at the provincial hub if it fails to then efficiently reach its spending location in a timely manner that results in services being delivered. After all, spending the money according to the financial management rules is insufficient consolation for a failure to deliver services. To arrive at the proposed solution, consideration needs to be given to: (i) matching funds with core activities (in activity sets that can then be funded); (ii) getting the funds to the right place in the quickest way possible; and (iii) determining what fiduciary controls are appropriate. Appropriate in this sense will depend on the amount involved (size) and the efficiency of the controls (that need to be achievable).

**Box 3.A.1: Indonesian Case Study**

Indonesia has implemented for a number of years a policy of pushing money down to the lower levels of government. These amounts are individually relatively small.

In doing so there is an acceptance that the typical government financial controls (that happen when money travels through normal government hubs) cannot be relied upon. But there is a sense that the end justifies the means. The need to get the money to the lower level is more important than the need to push it through conventional (but slow and laborious) systems. There is also a sense that funding these lower levels is the only way to develop their financial management capacity.

The challenge when this approach is taken is to develop an efficient ex post monitoring system and to sensibly consider what action should be taken when things go wrong.

## Appendix 4: Activity Spending versus Cost Estimate

Province	Region	Fiscal Capacity Ranking	Funding Profile	Cost Per head To Deliver Services	Frontline Spending Level	Frontline Spending Per Capita	Frontline CoS Per Capita	Facility Operations & Patrols MPA 1 & 2 (combined)				Facility Operations MPA 1	Outreach Patrols MPA 2	Distribution MPA 3	Patient Transfer	Water Supply	
								MPA 1&2 Spending v CoS	District v PHQ	Transfers % Of Exp.	Transfer Level					Spending v CoS	District v PHQ
West'n	Southern	1	High OSR	Very High	Low	5.3	32.1	34%	69%	-		16%	33%	-	1%	20%	100%
NIP	Islands	2	High OSR	High	Low	2.6	22.3	19%	87%	-		4%	49%	17%	-	24%	45%
WNB	Islands	3	Mixed	High	Medium	6.3	20.3	19%	75%	-		7%	15%	-	14%	230%	100%
Morobe	Momase	4	High OSR	Medium	Low	1.2	12.3	27%	49%	-		23%	33%	-	-	-	-
Enga	Highlands	5	Mixed	Low	Low	1.3	10.0	23%	-	-		13%	26%	-	-	20%	-
SHP	Highlands	6	Mixed	Low	Medium	2.9	8.7	62%	78%	-		43%	19%	239%	-	15%	-
Central	Southern	7	Mixed	Very High	Medium	9.2	25.1	83%	100%	-		-	1%	67%	4%	1%	-
ENB	Islands	8	Mixed	Medium	Higher	7.2	14.2	101%	88%	98%	LLG	151%	-	103%	3%	40%	80%
WHP	Highlands	9	Mixed	Low	Higher	2.7	6.1	85%	-	40%	various	114%	-	-	-	21%	-
Madang	Momase	10	High Grant	Medium	Medium	2.7	12.7	49%	87%	-		37%	49%	-	-	9%	70%
Gulf	Southern	11	High Grant	High	Higher	8.3	20.2	92%	82%	-		45%	160%	150%	-	-	-
EHP	Highlands	12	Mixed	Low	Higher	3.2	8.0	101%	77%	-		107%	69%	223%	8%	0%	-
Simbu	Highlands	13	High Grant	Low	Higher	5.2	8.9	101%	-	8%		113%	-	-	-	24%	-
Oro	Southern	14	High Grant	Medium	Medium	5.3	15.3	59%	100%	-		90%	-	-	-	26%	100%
ESP	Momase	15	High Grant	High	Low	1.5	19.7	21%	77%	25%		27%	10%	-	-	15%	40%
MBP	Southern	16	High Grant	Very High	Higher	11.9	28.1	78%	89%	66%	District	80%	-	-	5%	184%	-
Manus	Islands	17	High Grant	Very High	Low	2.1	27.6	10%	-	-		-	31%	-	-	41%	-
Sand'n	Momase	18	High Grant	High	Medium	5.9	23.6	50%	87%	-		86%	7%	69%	-	18%	81%
max exp (kina)								1,783,278						139,197	250,000	610,000	
min exp (kina)								51,860						9,895	25,000	5,000	
ave exp (kina)								850,233						78,243	97,851	152,526	
ave %								55%	70%			51%	25%				45%
# of zero's									4	13		2	5	11	12	2	10

See explanatory notes on page 41 and 42

(NB: max, min and ave do not include provinces with zero exp)

Source: NEFC cost and expenditure information and author's calculations

Note: Additional information on maximum expenditure, minimum expenditure, average expenditure and average % etc. have been inserted only where the author believes they will add meaning for the reader.

## Appendix 5: Analytical Methodology

**Objective:** To isolate and identify in a systemic manner the spending that appears to support the activity being analyzed.

**Restrictions:** Whilst the health sector in Papua New Guinea does have perhaps the most consistent Chart of Accounts of all the provincial sectors, the MPAs and other priority activities that are analyzed are not as transparent as they could be.<sup>48</sup>

Data	Notes
<b>Facility Operations</b>	<ul style="list-style-type: none"> <li>Rural health facilities include rural hospitals, health centers and aid posts.</li> <li>Common expenditure types include grants and transfers to facilities, travel costs, maintenance costs, and 'other' (item 135).</li> <li>Typical spending modalities include those from PHQ, DHQ, LLG and direct grants.</li> <li>Specific spending includes spending that is designated as being for facilities.</li> <li>The broader classification includes spending designated as 'district health' and provincial 'transfers to churches'.</li> </ul>
<b>Outreach Patrols</b>	<ul style="list-style-type: none"> <li>Specific spending includes spending designated as being for outreach work or immunization activities.</li> <li>The broader classification includes spending designated as 'Facility, district health, or family health'. This is then further narrowed to include only travel and subsistence, operational materials and supplies, transport and fuel, other operational and transfers (items 121, 124, 125, 135, 143 &amp; 144).</li> </ul>
<b>Drug and Medical Supply Distribution</b>	<ul style="list-style-type: none"> <li>Specific spending includes spending designated as being for the distribution of drugs and medical supplies.</li> </ul>
<b>Water Supply</b>	<ul style="list-style-type: none"> <li>Specific spending includes spending that is designated as being for water supply.</li> <li>The broader classification includes spending designated more broadly as 'environmental health &amp; water supply'.</li> </ul>
<b>Patient Transfer</b>	<ul style="list-style-type: none"> <li>Specific spending includes spending that is designated for patient transfer.</li> <li>Constraints: in reality there will ad hoc spending at the provincial level and perhaps some at the lower levels (district) from <i>various broad spending buckets</i> on this activity. Whilst it may be possible to trawl the data at the transaction level to identify this spending, the value in doing so makes it impractical. The spending under this modality is not transparent and unsystematic and as such of limited value in assessing the provinces commitment to this activity.</li> </ul>

<sup>48</sup> Provinces typically follow, to varying degrees, the ten-program structure that was established in health quite some time ago.

## **Appendix 6: An Explanation of the NEFC Analytical Methodology for the Provincial Expenditure Review (PER)**

**The NEFC has conducted an annual review of sub-national spending by provincial administrations since 2005.** The review has a focus on recurrent spending to support the government's priority areas of service delivery—basic education, rural health, transport infrastructure maintenance, supporting primary production, and village courts. The review of the 2011 fiscal year will be published by the Commission in early 2013.

**This appendix provides a short summary in the form of frequently asked questions relating to the methodology employed by the Commission in conducting the review.**

**What expenditure does the PER review?** The review is focused on recurrent goods and services spending by provincial administrations—so the operational spending that enables service delivery activities to happen.

**Does it include payroll and personnel emoluments?** No. Most payroll items are funded centrally from Waigani, Port Moresby. Some payroll items such as casual wages and leave entitlements are paid by the province but these are not specifically the focus of this review.

**Does it include capital?** The PER notes the capital spending recorded in provincial Treasury databases but it does not specifically focus on capital per se. Capital/development spending is large and irregular and outside the scope of this review at this time. Capital/development spending also comes from many different sources and collating this information and synthesizing meaningful messages would be a large exercise—and would serve quite a different purpose.

**Why does the PER focus on goods and services?** Operational funding and spending is critical for several reasons—and yet it is often overlooked in preference to the imperative of funding staff or the more attractive area of development spending and the ribbon cutting that follows. Ironically goods and services funding (and spending) is the area of spending most closely aligned to the key service delivery activities themselves. As important as staff and capital infrastructure spending are, tracking spending in these areas will not help to monitor the recurrent service delivery activities themselves.

**What can be gleaned from a desk review?** A surprising amount. The PER is based on the provinces own spending data and is augmented by spending from any known regular donor source (such as the Health SWAp HSIP mechanism and AusAID's recent education assistance through the Education Capacity Building Program and the Basic Education Development Project. NEFC analyzes the spending by every province in the same manner so there is a consistency in the approach that has been refined over seven years.

**Can you get a sense of whether the money is spent as recorded in the budget?** Yes. Spending is analyzed in a variety of ways to acquire a sense of whether the money was spent as recorded. This includes reviewing both summary and transaction level data. Spending on each function grant is assessed (as good, average, or not good) to get a sense of whether it was spent on the purposes intended. This includes reviewing the transactional level data. Spending on each MPA is also identified and compared against cost estimates. This area of analysis continues to be further sharpened as provincial compliance and coding improves.

Critically the PER is an evolving analytical assessment. In practice this means that each year the NEFC considers what (new or adapted) analysis is necessary to paint as accurate a picture as possible of

the service delivery context in sub-national PNG. New analysis is added to the existing analytical routines to ensure a consistent time series is maintained to plot progress and trends over time.

**How robust is the analysis?** Each year the Commission's analytical team collates the data it uses for the analysis from its various sources. Integrity checks are conducted to test the completeness of the data. The dataset is then cleansed, a painstaking process involving recoding thousands of lines of information, to ensure the data is standardized in a like manner enabling accurate comparison. The data is then analyzed, outliers are identified and validated, and the results synthesized for meaning. The use of transaction-level data in validating the summary level descriptors is somewhat unique. It enables a better assessment of the nature of the spending and helps provide the desktop study with a heightened level of veracity.

This study takes several months of disciplined work by the NEFC team and is inflected with quality assurance processes at strategic points. Notwithstanding the limitations inherent in desktop analysis, the Commission believes the methodology and relevance of the PER is sound. Critically, the Commission internally workshops the findings of each PER and 'tests the results for sense'. Using the NEFC teams' collective understanding of provincial PNG, any material aspects that fail to meet the 'test for sense' are identified and reviewed.

Perhaps the greatest test is the use that the PER results have been put to over a number of years. It has been published and disseminated widely both nationally and provincially—and discussed publicly at length. At every opportunity NEFC has sought feedback on the results and invited comment from provinces—particularly if they have any concerns. On occasion concerns have been expressed, and NEFC has reviewed and acted to allay those concerns.

**Are there limitations to the analysis?** Any desktop analysis on a national basis has limitations due to the nature of the analytical task and the time available for undertaking the review exercise. It is important to understand, however, that any analysis of such a comprehensive dataset will have its own limitations. Even regulatory audits are limited by time constraints, the audit techniques employed, and the underlying scope of the audit itself. The PER sets out to paint a picture of provincial spending and to help us better understand whether spending is aiding service delivery activities.

**How is it known whether the activity actually happened?** You don't. No single monitoring and review technique can give that level of assurance and it is not the PER's intent. The PER is a fiscal monitoring tool, not an audit and is not conducted to monitor physical performance. Monitoring physical performance is a role for other agencies such as DPLGA and national sector agencies, and audit is the domain of the Auditor-General.

**All government systems rely on a variety of monitoring and accountability mechanisms that act collectively to promote and enhance better performance in service delivery.** The PER contributes to this area by comparing a province's actual operational spending to detailed cost estimates and then compares the individual provincial performance against other provinces. Importantly, it has a service delivery focus. The results are published and broadly disseminated and supported by a series of consultations at both the national and sub-national levels. NEFC believes that achieving a high level of transparency and visibility is fundamental to achieving improved performance.



## Appendix 7: Proposed Fieldwork Questions

The following questions emanate from this analysis and can be explored in the fieldwork that is scheduled to follow in 2013. This is merely a sample of relevant questions and there will be others.<sup>49</sup>

### Overarching Questions

#### ***The Disbursement of Funding From the National Level:***

- 1 From our analysis, we can see that the release of health function grants from the national level to the provincial level between years and across provinces has been inconsistent and at times late and slow.
  - a. Why is this? Gleaning national and provincial perspectives would be informative and enable triangulation.
  - b. What can be done to achieve certainty over rural health's major funding stream?

#### ***Influencing the Provincial Budget Process:***

- 1 What can be done to ensure adequate levels of own-source revenue are allocated to rural health?
  - a. This applies particularly to provinces with large amounts of own-source revenue that receive small health function grants.
- 2 How can provinces present their budgets in a way to make spending on priority activities highly visible?

#### ***Efficient Funding to the Facility Level:***

- 1 One of the pressing questions that this analysis poses is what does an efficient system for funding rural facilities look like in PNG? How do we ensure equity between facilities whether they are government-run or church-run? There is currently no way to know—let alone monitor—the amounts of funding that actually get to rural facilities.

### Activity Specific Questions

#### ***Rural Health Facility Operations:***

- 1 Where are funds for facility operations administered from—the provincial administration level, the district administration level, the LLG administration level, or the facility level?
- 2 Where do funds need to be administered from?
  - a. Does the answer to this question vary depending on factors such as the proximity/availability of cash to the facility?
  - b. If so how do we design a framework for deciding on the optimal location for facility funding?
- 3 Are facilities (still) reliant on user fees to fund their operations?
- 4 What is the most effective way in which to maintain facilities?
  - a. Who needs to manage this activity—the facility, the district health officer or the province?
  - b. Where should funds for maintenance be located and administered?

---

<sup>49</sup> The fieldwork conducted during the *District Case Study* (DPLGA 2009) will be a useful reference point in compiling questions suitable for this upcoming fieldwork. There is also other fieldwork being conducted at the sub-national level in Papua New Guinea at this time which the design will want to be mindful of, including some focused in aspects of rural health. This includes the National Research Institute/Australian National University research and the National Department of Education/NEFC work in sub-national education.

**Rural Health Outreach Patrols:**

- 1 Is the assumption that outreach activities are conducted out of rural health facilities correct?<sup>50</sup>
  - a. Where are funds for outreach patrols administered from—the provincial administration level, the provincial hospital, the district administration level, the LLG administration level, or the facility level?
  - b. Since 2009, are increasing amounts of provincial funding now accessible for outreach activities? Gleaning provincial and facility level perspectives would be informative and enable triangulation.
- 2 Where do funds need to be administered from?
  - a. Does the answer to this question vary depending on factors such as the proximity/availability of cash to the facility?
  - b. If so, how do we design a framework for deciding on the optimal location for facility funding?
- 3 Are facilities (still) reliant on user fees to fund their outreach activities?

**Drug & Medical Supplies Distribution:**

As we have discussed, there has been a recent recentralization of this function.

- 1 Is there clarity over who is responsible for the distribution function?
  - a. What is the national responsibility for distribution?
  - b. What is the provincial responsibility for distribution?
  - c. What are the funding implications (if any)?
- 2 Is it appropriate for 'distribution' to remain an MPA?
  - a. If yes, what is the new scope of this MPA for provinces?
  - b. If no, does health need to identify a new MPA?

**Rural Emergency Patient Transfer:**

We need to develop a better understanding of what patient transfer happens from rural facilities to other rural facilities or to provincial hospitals.

- 1 How often does it happen and in what situations? How is it funded—from the provincial administration, provincial hospital, district administration, the sending facility or family?
- 2 Is it appropriate to allocate a budget for patient transfer?
  - a. When should it be used?
  - b. Where should it be located and administered from—at the provincial administration, provincial hospital, district administration, or the sending facility?

**Provision of Rural Water Supply:**

As a guide to what this activity may look like in practice, the *Cost of Services Study* assumes that each year 5 percent of villages in the province receive a new tank based water supply system adequate to provide water for 300 people.

- 1 In practice, we need to develop a better understanding of who provides the water supply (such as organizing the installation and maintenance of *tuffa* tanks) in rural settings.
- 2 Does this responsibility/activity need to be included in the DPLGA function assignment determination?
- 3 If it is seen to be a 'rural health' responsibility:
  - a. Is there an annual program for this work?
  - b. If yes, what is the scope of the program?

---

<sup>50</sup> The underlying assumption in this paper is that outreach patrols/activities are normally conducted by facility staff and commence from the rural health facility.

- c. How is it funded—from the provincial administration, provincial hospital, or district administration?
  - d. Ideally, how should it be funded? Where should the funds best be located for this activity?
- 4 If it is not seen to be a rural health responsibility:
  - a. Then whose responsibility is it perceived to be? Another sector? Is it a development issue—if so whose responsibility is it?
  - b. Ideally, how should it be funded? Where should the funds best be located for this activity?

## Glossary

<b>Capital Expenditure</b>	Describes spending to acquire or upgrade physical assets such as buildings, roads, and equipment.
<b>Cost</b>	In the context of this report <b>cost</b> refers to what it is estimated it will cost, not what is necessarily actually spent.
<b>Cost of Services Study</b>	Describes an NEFC study that estimated how much it costs to support service delivery within a province (health and education) on a district-by-district basis.
<b>Fiscal Capacity</b>	Describes a province's ability to meet its costs. It is expressed as a percentage and is calculated by dividing estimated costs by available revenue.
<b>Funding Gap</b>	The funding gap is the difference between the revenue a province receives and the amount it is estimated it would cost to deliver all the basic services the province is required to provide.
<b>Goods and Services Expenditure</b>	A GoPNG term that refers to operational expenditure/costs. In our analysis goods and services excludes any personnel-related expenditure.
<b>Grants</b>	Describes revenue that a province receives from the national government. Grants are normally provided to provinces for a specific purpose although some grants such as the block grant allow for provincial discretion on their use.
<b>Internal Revenue / Own-source Revenue</b>	Describes all sources of revenue that a province may receive other than national government grants and donor funds. The province makes its own decisions on how to allocate and spend the internal revenue it receives through the provincial budget.
<b>Item Numbers</b>	Refers to the GoPNG budget and accounting chart of accounts. Item numbers are common expenditure classifications used by all provinces such as Transfers being items 143 and 144, and Other Materials and Supplies being item 124.
<b>Personnel Emoluments Expenditure</b>	Describes expenditure that relates directly to staffing costs and includes salaries, wages, allowances, retirement benefits, and gratuities.
<b>Priority Gap</b>	The priority gap happens when a province has the revenue, but chooses to spend its money on other things—not supporting core services.
<b>Project Expenditure</b>	Describes expenditure on a non-recurrent development activity, sometimes related to a project jointly funded by a donor partner.
<b>Recurrent Goods and Services Expenditure</b>	Describes spending that is directed to purchasing the regular routine operational supplies and services, transport costs and routine maintenance of buildings. It does not include personnel emoluments, capital, and project costs.
<b>Service Delivery</b>	Describes what the various arms of government actually do for the people of PNG but more specifically it comprises a range of specific health service delivery activities it would include such as conducting immunization extension patrols, school visits, and training for village birth attendants.

## References

AusAID. 2011. *AusAID Delivery Strategy 2011-2015*.

DPLGA (Department of Provincial and Local Government Affairs). 2009. *The Case Study on District and Facility Funding*.

———. 2010. *The Technical Handbook to the Determination assigning Service Delivery Functions and Responsibilities to Provincial and Local-Level Governments*.

GoPNG (Government of Papua New Guinea). 2010. *Sandaun Asset Report Card*.

IASRG (Independent Annual Sector Review Group). 2012. *Independent Annual Sector Review, Accelerating Health Improvement in Poor Performing Districts*.

Matheson, D., I. Ake, M. Guest, C. Hiddink, M. Korokan, A. Opito, and R. Slattery. 2011. *Milne Bay Province: Health Capacity Diagnostic Report*.

———. 2011. *Western Highlands Province: Health Capacity Diagnostic Report*.

Miller, G. 2010. *Exploring the Fundamental Issues Underpinning Health Service Functionality in Western Province*.

NDoH (National Department of Health). 2011. *Annual Sector Performance Report, 2011*.

———. 2011. *PNG Health Sector Project Planning & Governance Process*.

NEFC (National Economic and Fiscal Commission). 2011. *Step Two: The Ripple Effect. The 2010 Provincial Expenditure Review*.

———. 2011. *The PER Trend Databook*.

PNG. 2011. *Capacity Diagnostic for the National Department of Health*.

Richards, S., D. Matheson, M. Guest, C. Hiddink, A. Opito, and A. Hubert. 2011. *Eastern Highlands Province: Health Capacity Diagnostic Report*.

Sorenson, E. 2011. *Improving health service delivery in Papua New Guinea through partnerships*. Canberra: AusAID.

Thomason, J. 2010. *Papua New Guinea (PNG) Sector Budget Support – An Aspirational Goal?*

World Bank and Government of Papua New Guinea. 2013. *Water Supply and Sanitation in Papua New Guinea Service Delivery Assessment: Turning Finance into Services*.