Decentralization in a developing country: The experience of Papua New Guinea and its health service

Jane A. Thomason, William C. Newbrander and Riitta-Liisa Kolehmainen-Aitken editors
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Foreword

In 1977 Papua New Guinea amended the national constitution and created a new system of decentralized provincial governments, which were given a formal responsibility for health. This book starts with a clear background to the politics of decentralization and the legal and administrative framework in which the new local governments found themselves. It then examines the progress made by the Ministry of Health and the new provincial health departments over the following ten years.

Decentralization is a very political matter, for it concerns the distribution of power and the ultimate control over resources. An analysis of decentralization policies needs to begin, therefore, by clarifying what is meant by this term. The opposite of decentralization is 'centralization' and since both of these processes commonly work together, it is false to talk about decentralization alone. What is important is the desire to move the relative balance of power and responsibility more towards local communities and away from the central government authorities. Decentralization commonly does this by giving more power to provincial levels of government, by setting up parastatal and independent organizations, and by legitimizing a greater role for private medicine and non-governmental organizations. Any analysis of decentralization should, therefore, examine the policies adopted for centralization as well as those for decentralization.

It is difficult to generalise on how decentralization should be undertaken since each country has had its own history and set of experiences. Decentralization takes place within a particular historical context and has been implemented by governments with various political beliefs and ideologies. It has also been adopted by societies with different degrees of state and private control over health. However, many countries instituting large scale reforms of their government have adopted greater decentralization as a way to implement them. In addition, many of the international multilateral and bilateral aid agencies have also promoted such policies, partly as a means of strengthening local government and partly as a way of improving the implementation of large-scale development projects.

Decentralization policies are usually initiated by central governments which issue a national decree and subsequently adopt constitutional and legal changes. Only later are these policies adopted by the health sector, often slowly and reluctantly. It is rare for a Ministry of Health to initiate such changes of its own accord.

Experience shows that it commonly takes at least ten years from the formulation of decentralization policies to their implementation. It is a lengthy process which demands sustained political commitment at all levels. During the early stages the focus is usually on the need to strengthen regional and local health authorities and on establishing new parastatal organizations, such as those for social security, the teaching hospitals or research institutes. Only later does the need for a comprehensive national health plan and an active planning process really become apparent. At this point conflict is commonly experienced between the Ministry of Health and the newly decentralised organizations, with calls for the clarification of their respective roles.
A considerable gap often exists between the carefully worded policy documents and the actual ways in which the policies are implemented. Political interference and opposition are common from civil servants, doctors and other health workers and this, together with patronage and corruption, all affect what the newly decentralized organizations can achieve in practice. In addition, new financial and administrative procedures require a lot of time before they are fully understood and implemented. Decentralization is thus a lengthy process that needs continuous development and adaptation if it is to improve the coverage, efficiency and effectiveness of a nation's health services.

This book is an excellent and detailed example of decentralization in practice, written by professionals closely involved in implementing these policies over several years. The authors are very clear on the general lessons that could be of great value to other countries adopting similar policies. As they point out, the present challenge after more than a decade of experience, is not to recentralize. It is to continue searching, with political support, for the balance between the 'centre and the periphery' that produces the greatest benefits for the people of Papua New Guinea, including improvements in their health status.

J. Patrick Vaughan
1 July 1991
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PART 1

Background to decentralization
The decades of the 1970s and 1980s saw a resurgence of interest in decentralization among development agencies and governments of many developing countries. The World Bank, the United Nations Development Program (UNDP), the United States Agency for International Development and the World Health Organization (WHO) are among the international agencies which have promoted decentralization of government services. As a result of external and internal influences, a number of countries in Africa, Asia and the Pacific introduced some degree of decentralization of government functions during the 1970s and early 1980s. Such decentralization has frequently included significant changes to the organization and management of health services.

General concepts and issues of decentralization

Decentralization has been defined broadly as the transfer of responsibility for planning, management, and resource generation and allocation from the central government and its agencies to: (i) field units of central government ministries or agencies; (ii) subordinate units or levels of government; (iii) semi-autonomous public authorities or corporations; (iv) area-wide regional or functional authorities; or (v) non-governmental private or voluntary organizations (Rondinelli 1981).

Two major periods of interest in the processes of decentralization in the developing world can be identified (Conyers 1983). The first, in the 1950s and early 1960s, was closely associated with the transition from colonial rule to independence in anglophone Africa. Many of the newly independent countries desired a change from the previous, highly centralized forms of government, and sought to establish or strengthen their local governments. In the 1970s and early 1980s, the emphasis of development policies changed from that of maximizing economic growth to one of promoting more equitable growth policies (Rondinelli 1983). In this latter case, the interest in decentralization was more closely associated with improving national development and increasing the extent of popular participation within it.

Decentralization as an ideological principle has taken many forms in practice. The broad classification, developed by Rondinelli in 1981, categorized the major forms of decentralization under four headings: deconcentration, delegation, devolution and privatization. Deconcentration involves the transfer of some level of government authority to lower levels within central government agencies. Delegation transfers managerial responsibility for specifically defined functions to organizations that are outside the regular bureaucratic structure, and thus only
indirectly controlled by the central government. Devolution embodies the creation or strengthening of sub-national units of government, the activities of which are substantially outside the central government’s direct control. Privatization transfers some government functions to voluntary organizations or private enterprises.

Decentralization is commonly a response to a political imperative. Collins (1989) has pointed out that decentralization should be viewed as both a product and a determinant of political conflict. The expectations of its potential to yield improvements in a variety of areas are correspondingly high. In his analysis of decentralization, Smith (1985) outlined eight common expectations which often precipitate the desire to decentralize. Decentralization is presumed to:

• be a more effective way of meeting local needs;
• be relevant to meeting the needs of the poor;
• improve access to administrative agencies;
• soften resistance to social change through popular participation;
• reduce congestion at the centre;
• be necessary for national unity through local democracy;
• enhance civic consciousness and political maturity; and
• mobilize support for development plans.

These high expectations have proved difficult to meet. A growing body of literature indicates that the programs of reform have generally failed to live up to the expectations of governments and the international community alike. In general, the degree of decentralization has been limited. Frequently, it has done little to improve planning and implementation of local development programs. Furthermore, there has typically been little meaningful increase in the participation of the community (Rondinelli 1981).

Decentralization and the health sector

Despite the existence of a wide body of literature on its general themes, decentralization in the health sector has received relatively little critical analysis. Detailed published analyses of health sector decentralization in developing countries are particularly scarce. Recognizing this, WHO sponsored a review of various countries’ experiences with decentralization and published the results in 1990 (Mills et al. 1990).

This WHO publication on decentralization includes brief case studies from ten countries around the world. Decentralization is not only an important theme in health management but also a confused one. While the authors emphasize the complexity of decentralization as a subject and warn the reader about the dangers of generalizing, they do attempt to draw out some common themes and lessons from experience. The country studies seem to confirm that decentralization is usually a policy change at the national level. As such, it is initiated across a number of sectors by the central government. The health sector is usually left to conform to a set of reforms which have been generically designed and not specifically fitted to the circumstances of the health sector.

The authors identify the following expected benefits from decentralization of health services:

• a more rational and unified health service;
• greater involvement of local communities;
• containment of costs and a reduction in duplication of services;
• reduction in inequalities;
• integration of activities of different agencies;
• strengthened health policy and planning functions of ministries of health;
• improved implementation of health programs;
• greater community financing and control;
• improved intersectoral coordination; and
• reduced communication problems and delays.

The implementation issues are discussed by Vaughan in the latter part of the WHO book (Vaughan 1990). He places special emphasis on the complexities of reorganizing the management functions of health services, and on the health financing and personnel issues involved in implementing decentralization.

Decentralization has thus been promoted by WHO and others as a means for improving the responsiveness and effectiveness of health programs (Vaughan et al. 1984a and 1984b; WHO 1984). The World Bank has also endorsed decentralization as a key policy reform towards improving the financing of the health sector (World Bank 1987). Gonzales-Block and his colleagues have, however, argued that decentralization has usually been encouraged from a conviction of its supposed benefits, rather than from a thoughtful assessment of its supposed advantages for health care (Gonzales-Block et al. 1989).

With results of country experience now becoming available, calls for caution and critical review have begun to surface. Collins (1989) stresses that decentralization is not just a technical matter, but a process which involves issues of power and the distribution of resources between social groups. Based on his analytical work in Latin America, he argues that decentralization may in fact reinforce the access to decision making and resource allocation by local dominant groups. He concurs with Conyers’ earlier work (Conyers 1983) asserting that decentralization may in fact be used as a means of strengthening the position of the central government at the local level.

**Evaluation of health sector decentralization**

Conyers, in her 1984 review of the literature on decentralization, pointed to the relative lack of information on monitoring and evaluation of decentralization initiatives (Conyers 1984). While the WHO collection of country case studies enabled the articulation of some of the benefits and implications of decentralization of health services, it did not attempt any in-depth analysis of the broader effects of decentralization on the planning, management and implementation of health services.

A comprehensive review of decentralization is perhaps best undertaken in the context of a single country, as was done by Gonzales-Block and his colleagues in Mexico. Their research suggests that while decentralization of health services in Mexico may have been attractive ideologically, the practical results have been less than encouraging. Decentralization seems to have accentuated, rather than lessened, regional disparities in the contribution of health services in that country (Gonzales-Block et al. 1989).

Further evaluation of individual countries’ experiences with decentralization of health services should provide a valuable contribution to the international debate on its merits and challenges. It was in such a belief that the authors of this book undertook a thorough and critical analysis of decentralization of health services in Papua New Guinea, a country with a decade’s experience with
devolution of health service functions to the provincial level. The results of the analysis are reported in this book. While the book draws on the concepts and issues identified in the general decentralization literature, each of the authors also has extensive practical knowledge of health service decentralization in Papua New Guinea. Many of the authors have worked in the country's health services for several years, while others have been involved in academic teaching and research on decentralization themes in Papua New Guinea.

The book aims to assess objectively the successes and problem areas of decentralization of health services in Papua New Guinea. Special attention is given to the main factors that have facilitated or impeded decentralization efforts. In particular, attention is given to the four main groups of conditions which were identified by Rondinelli (1981) as necessary for effective decentralization. These are: favourable political and administrative conditions, organizational factors, behavioural and psychological conditions and resource conditions.

**Political and administrative conditions**

Political commitment, support from line agencies of the central bureaucracy, strong administrative and technical capacity within central government agencies and ministries and effective channels of political participation and representation for rural residents are the main political and administrative conditions promoting effective decentralization. The issues of political and administrative conditions are addressed in several chapters. Andrew Axline analyses the political and social antecedents to decentralization (Chapter 2); Quentin Reilly discusses the technical capacity of the national health authorities to provide support to the newly established provincial health divisions (Chapter 5); and issues of technical capacity and political participation are also raised in an examination of national health planning by Riitta-Liisa Kolehmainen-Aitken and Jane Thomason (Chapter 11).

**Organizational factors**

Several organizational factors are crucial for effective decentralization. Planning and administrative functions should be allocated to various levels of government in an appropriate manner. Decentralization laws, regulations and directives must be concise and clear. Arrangements for reallocation of functions should be flexible and based on performance criteria. Effective communication linkages are required between the various levels of government. Quentin Reilly describes in detail the way in which health service functions were divided at decentralization between central and provincial levels (Chapter 5); Anthony Regan provides a comprehensive discussion of the legal framework for the transfer of powers (Chapter 4); and the issue of adequate communication linkages is addressed by Jane Thomason and William Newbrander in their review of the financing system (Chapter 8), and by Riitta-Liisa Kolehmainen-Aitken in her analysis of human resource planning, training and management (Chapter 9).

**Behavioural and psychological conditions**

Behavioural conditions are often ignored until they are found to present a major hindrance to decentralization. The attitudes and behaviour of central government officials must change from control-oriented to those that support and facilitate lower level planning and management. At the same time, strong leadership must be fostered at local government level. The cooperation of local-level leaders is critical for effective decentralization. Quentin Reilly describes the strong
opposition to decentralization exhibited by staff at the national Department of Health (Chapter 5), while Peter Lausie and Jane Thomason provide an insight into the effects of the decentralization debate on the management of provincial health services (Chapter 7). Later efforts to develop the managerial capacity of provincial health leaders are described by Douglas Campos-Outcalt and William Newbrander (Chapter 10).

Resource conditions

The most important resource conditions for effective decentralization were seen by Rondinelli to be the transfer of sufficient authority for local government to raise or obtain adequate financial resources; the provision of an adequate physical infrastructure, including transportation and communication linkages; and the development of sufficiently integrated settlement systems. The chapters on the financing of health services by Jane Thomason and William Newbrander (Chapter 8), and on human resource issues by Riitta-Liisa Kolehmainen-Aitken (Chapter 9) both address these key resource issues.

The ultimate test of health service decentralization is whether it has improved the people's health. To provide the reader with the necessary background, Iain Aitken describes Papua New Guinea's prevailing health problems and the development of its health services (Chapter 3). William Newbrander, Iain Aitken and Riitta-Liisa Kolehmainen-Aitken use health service data to assess whether decentralization can be shown to have resulted in any demonstrable change in the health status of Papua New Guineans (Chapter 6).

The book concludes with a summary of the main lessons from Papua New Guinea's experience with decentralization. It outlines some key strategies for the future which, if implemented, will build on the successes of the decentralization efforts so far, while addressing some of its main negative effects.
CHAPTER 2

Prologue to decentralization:
politics and administration

W.A. Axline

Introduction

Papua New Guinea is a country of almost 4 million people inhabiting an area of 462,840 square kilometres. It comprises a mainland territory, which occupies the eastern half of the Island of New Guinea, and a number of islands including the provinces of Manus, East New Britain, New Ireland and the North Solomons. Papua New Guinea is a 'young' country in the sense that it became independent from Australia only in 1975 and first contact between its indigenous peoples and outsiders was made more recently than nearly any other country in the world.

Land tenure in Papua New Guinea is vested in the clan, and all members of the clan have rights to the land for farming, hunting or building their houses. Consequently, there is no landless peasantry. Traditional social organization is simple and democratic. Leadership is acquired through ability, and a system of hereditary chiefs is found in only a handful of these cultures.

The traditional subsistence economy was based on shifting slash and burn agriculture, and on hunting or fishing. Root crops, such as sweet potatoes, taros and yams, were the main staples, although coastal peoples tended to rely more on bananas and sago. There was a certain amount of both local and long-range trade, but mostly in small quantities of valued goods. In the highlands, particularly, pigs are prized and have been raised for consumption at important feasts and for ritual exchanges of wealth between clans.

Modern economic development has been based on tropical tree crops and mining. Only 1 per cent of the land is of high agricultural potential with another 28 per cent being of moderate potential. Copra has been cultivated in plantations since the beginning of the European occupation. Coffee and cocoa plantations were developed after World War II. However, the main feature of the rural economy during the 1960s and 1970s was the development of smallholder plantations, so that now 75 per cent of coffee production and more than 40 per cent of copra and cocoa come from smallholdings. This widespread cultivation of cash crops has resulted in the construction of a very good road network in the highlands, with other roads on a more limited scale in various coastal areas. Larger plantations owned by communities or commercial bodies still exist, and these continue to be worked by migrant labourers, recruited from other parts of the country.
Since the mid-1970s, most of Papua New Guinea's foreign exchange earnings have come from gold and copper mining. Alluvial gold has been mined from different parts of the country since the beginning of the century, but the main source of income, until 1989, was the gold and copper mined at Panguna. The mine was forced to close in 1989 due to problems with landowners. Another large gold and copper mine at Ok Tedi and several other gold mines in the process of development should soon make Papua New Guinea one of the world's major producers of gold.

The educational system has greatly expanded since World War II. Adult literacy is estimated at 33 per cent, and more than 60 per cent of eligible children are enrolled at primary schools. However, less than 40 per cent complete primary school and only 16 per cent have the opportunity of going to secondary school. Papua New Guinea has a wide range of tertiary training institutions, and has largely succeeded in producing its own professional workforce.

The political institutions of Papua New Guinea take the form of the Westminster parliamentary system. The national parliament at Port Moresby has 109 members and the Queen of England, represented by the Governor-General, is Head of State.

Background to decentralization

Papua New Guinea embarked on a process of decentralization at a time when current development thinking emphasized self-reliance, a more equitable distribution of wealth and greater political participation. It is not surprising then, that these aims are reflected in the existing decentralized system of government in Papua New Guinea and, being as ambitious as they were, that they would involve some conflicts and contradictions (Conyers 1976; Ballard 1981; Tordoff 1987).

At independence in 1975, Papua New Guinea adopted a series of policies which, among other things, aimed to overcome two of the legacies of the colonial experience: the high degree of centralization of political and administrative power, and the great geographical inequality of wealth and distribution of government services within the country. These policies were embodied in the creation of a national planning system, with mechanisms for redressing spatial inequalities, and in the creation of a decentralized political system to provide a basis for wider participation in the political process.

The contradiction in these policies lay in the competition for control over the allocation of scarce resources necessary to effect any policy of spatial redistribution. If the national government retained this control, it could reallocate resources from the richer to the poorer areas. If resource allocation was transferred to provincial control as part of a process of decentralization, the means of redistribution would be denied to the central government.

The policy of decentralization that Papua New Guinea adopted was ambitious and led some analysts to argue that the government had denied itself the means to effect any significant redistribution, particularly as regards the delivery of government services.
Political and administrative decentralization

The political context

The conditions and impetus for decentralization came directly from the colonial heritage and post-colonial situation in Papua New Guinea (Premdas and Steeves 1984; Namaliu 1978). Australia's main concern during its United Nations trusteeship of the territories of Papua and New Guinea, was to maintain a buffer against potentially expansionist Asian nations, and there had been little attempt to settle the territory or to bring about economic development. Independence came very rapidly in 1975, with little planning or preparation. Out of this hasty transition to self-government and political independence emerged a new entity with all the formal trappings of a sovereign state, but lacking the underpinnings of a functioning political system. The new nation of Papua New Guinea faced the challenge of effecting major political and administrative changes over a relatively short period of time.

With independence came the formal transfer of power to the State of Papua New Guinea, but this act in itself did not result in the creation of a working political system under indigenous control. It did represent the breaking of the highly centralized control of Canberra, but the greater tasks of Papua New Guineans assuming control over a large and pervasive bureaucracy, bringing this administrative structure under effective political direction, and moving away from the highly centralized bureaucratic structure which characterized Australian rule, still remained.

During the period of self-government from 1972 to 1975, some changes occurred, although the pattern of administration which had developed during colonial rule survived almost intact. The combination of a highly centralized, externally directed administrative structure, with heavy reliance on external resources and little meaningful local participation, was not easily or quickly changed (Griffin et al. 1979; Oram 1973). In the transition from a colonial state which had served as an authoritarian and passive instrument of social control, to a post-colonial state that assumed the role of promoter of social and economic change, the bureaucracy emerged as the dominant political actor. The concentration of resources and skills that came from a long period of administrative rule permitted bureaucracy to participate effectively in, and, in many cases, to dominate all stages of the political process, from policy formulation to implementation (Quiros 1982). In addition, there had been no tradition of political participation in policy making, which placed politicians at a distinct disadvantage compared with bureaucrats who had greater skills, and were less fragmented. This disadvantage was reinforced by the absence of coherent political parties or interest groups around which political interests could coalesce. When formal authority was passed from Australia to Papua New Guinea, bureaucrats had well-developed habits of participating in the political process, and were able to exercise their powers within an already existing administrative structure. Politicians found themselves in an unfamiliar position within the newly created political institutions which had been drawn from an alien tradition. They had neither the practice nor the skills necessary to hold their own in political competition with the bureaucrats.

The process of bringing bureaucratic power under political control continues in Papua New Guinea today. It is conditioned by the fact that politicians are also preoccupied with the establishment and consolidation of their own political base,
and they have to do this within the new decentralized structures through which political conflict is now channelled (May 1981). The slow institutionalization of the political system was reflected in the lingering domination of technocratic administrators in policy formulation, many of whom were foreigners, and in the attempts by frustrated politicians to participate actively in policy implementation, especially where distribution of funds was involved.

The extreme cultural fragmentation and great physical diversity of Papua New Guinea, together with its relatively recent history of contact with outsiders, posed challenges to the development of a homogeneous political culture appropriate to the Western political institutions that had been introduced. In this fragmented diversity can be found a number of different regional styles of politics, ranging from peaceful, pragmatic and conciliatory through a more confrontational ideological and polarized style, to a violent aggressive individualism (Quiros 1982; May 1981). The relatively high degree of political participation found at the local level was in contrast to the centralized system of authority exercised by kiaps (government administrative officers under the Australian administration) at the district level. The formal mechanism for bringing together the various elements of institutional reform was an electoral system based on universal adult suffrage.

The decision to proceed with political decentralization was taken within the broader context of all the preceding political changes: the creation of new political institutions; attempts to bring a dominant bureaucracy under effective political control; and provision of broader participation in the political process within a fragmented political culture.

The decision to create a decentralized system

The Constitution of Papua New Guinea is often referred to as 'autochthonous' owing to the fact that it was adopted after widespread consultation throughout the country, and after extensive study by a Constitutional Planning Committee. This committee recommended a decentralized form of government as a more appropriate structure for governing the wide diversity of people and cultures in Papua New Guinea.

The formal decision to create a decentralized political system in Papua New Guinea emerged from a variety of political factors: (i) the need to restructure the highly centralized colonial system of government and the desire to implement a broad set of national development goals; (ii) the need to unify the country under effective political control through a system that took into account the wide diversity and fragmentation of the society; and most immediately, (iii) the need to respond to micro-nationalist movements and threats to territorial integrity in the form of a secessionist attempt by the people of Bougainville.

The idea of decentralization for Papua New Guinea was not new. Some enquiries into the administrative reform of the 'kiap' system in the 1950s and 1960s had been concerned with effective administration at the district level. The possibility of giving institutional recognition to the existing disparities in political development had been discussed at the District Commissioners' Conference in 1969, and the Australian Prime Minister John Gorton proposed in 1970 that more substantial powers be devolved to regional or district authorities (Ballard 1981:96–8).

In 1972, a UNDP-commissioned team produced a report on development goals for Papua New Guinea which placed emphasis on self-reliance,
development of local control, and decentralization of economic and political power. The eventual adoption of the ‘Eight Aims’ by the government included the commitment to decentralization in principle, a commitment that was followed by formal steps toward implementation (Conyers 1975; Standish 1979; Ballard 1981). As part of the overall preparations for self-government and independence, a Constitutional Planning Committee (CPC) was established in 1972 to make recommendations on the eventual adoption of a national Constitution, including central/regional/local government relations and district administration. The CPC made its final report in 1974, and the principle of entrenchment of provincial government in the Constitution was among their proposals. In a number of more economically and politically advanced districts, for example Bougainville, moves toward provincial government had already progressed significantly, and this was seen by some as a means to reconcile the demands for greater autonomy with the need to preserve national unity.

Some reticence was shown by the national government, however, partly because of a worry that decentralization would create overly powerful political centres in the provinces and reduce the possibility of redressing regional inequalities, and partly because of resistance on the part of national departments over a perceived domination of their powers. Growing controversy and increasing doubts led the government to delete the provision for provincial government from the Constitution in August 1975, an act which was shortly followed by the declaration of independence of Bougainville as the Republic of the North Solomons.

The crisis was eventually resolved with the conclusion of an agreement between the national government and Bougainville in August 1976. It spelt out the conditions under which powers would be transferred to the North Solomons Provincial Government, including the embodiment of these powers in an organic law. The principle of provincial government was to become entrenched in the Constitution, with the Bougainville Agreement providing the basis for the Organic Law on Provincial Government (OLPG) which spelt out the details of decentralization to be applied to all provincial governments in Papua New Guinea.

The role and function of provincial governments

Papua New Guinea is not a federal state, even though there are constituent units called provinces with extensive legislative and executive institutions which are embodied in an organic law. It is more accurately described as a politically decentralized unitary system with clearly marked federal features (Committee of Review of the Financial Provisions of the Organic Law on Provincial Government 1982:49). The system was designed to provide for a strong central government with a significant role for provincial governments through the devolution of power (Watts and Lederman 1975; Wolfers 1978).

The Organic Law on Provincial Government, which is discussed in more detail in Chapter 4, provides for the distribution of powers between the central government and provincial governments. It gives provincial legislatures the power to make laws in three different categories: fields determined to be primarily provincial, fields where the legislative power is exercised concurrently with the national Parliament, and any other areas without national legislation, with certain limitations (OLPG section 20). Generally, the primary provincial powers include matters of a limited and local nature such as licensing, liquor control and
primary schools, while the central government has exclusive powers in foreign affairs, defence and matters of national concern. The concurrent subjects represent virtually all the major areas of activity in which governments legislate in carrying out their task of governing society. These include education, health, transport, natural resources, land and commerce.

The implementation of decentralization

Formation of provincial governments. Amendment No.1 to the National Constitution of Papua New Guinea created a system of provincial government for the country, and the Organic Law on Provincial Government, enacted in March 1977, set out the details of that system. North Solomons Provincial Government had been established on 1 September 1976, and served as a model for the implementation of the broader process of decentralization. Once the formal decision was taken, the difficult process of creating political and administrative structures in the provinces, and the transfer of power to them, lay ahead. The existing system of districts and Area Authorities (councils elected by local governments) provided the basic framework, but few provinces were as politically developed as North Solomons. The provinces of East New Britain, Eastern Highlands, and New Ireland were among the most advanced (Ballard and Colebatch 1976).

The principle of provincial government and the creation of provincial executive and legislative bodies were entrenched in the national Constitution (Part VIA). The OLPG specified the legislative and executive distribution of powers, the financial arrangements for funding provincial governments, and conditions under which they could be suspended. The delineation of national and provincial administrative control over subjects designated as ‘concurrent’ in the OLPG was set out in a Cabinet decision of January 1977 (NEC 19/1977) and adopted in September of that year (NG 10/77). The building of provincial institutions involved establishing and electing provincial legislative and executive bodies, creating a provincial policy secretariat, and establishing and staffing administrative structures in the form of a Department of the Province for each provincial government. The creation of decentralized political institutions was, in comparison, relatively straightforward.

The tripartite division of executive, legislative and judicial powers was established by the national Constitution, leaving provincial constitutions with the principal task of organizing the procedure of provincial governments, since their powers were determined by the OLPG. Provincial governments take the Westminster form that has been adopted at the national level, with a provincial Premier and Cabinet being responsible to the provincial Legislative Assembly. The transition to provincial government involved the setting up of a constituent assembly to prepare a provincial Constitution, the membership of which had to be approved by the Minister for Decentralization. The draft constitution had to be approved by the national government before being submitted to Parliament for approval. A charter was granted to provincial governments by the Governor-General when these steps were completed and when provincial elections had been held. In fact, eight provinces received provincial government status under the provisions of the Provincial Government (Preparatory Arrangements) Act before the OLPG was introduced (Papua New Guinea, Department of Decentralization 1978:11). Until elections were held, provincial governments operated on an interim basis. By September 1978 there were two fully elected provincial governments, North Solomons and East New Britain, and fifteen interim governments (Tordoff 1981:3).
Provincial governments have a legislature with between 24 and 30 members, of whom 15 must be elected, half by direct elections, and others may be nominated (Papua New Guinea, Department of Decentralization [1977]). In practice, provincial governments have chosen direct elections as the rule for selecting members of the provincial Legislative Assembly. The Premier of each province can be elected indirectly, by the Legislative Assembly, or directly by all eligible voters in the province. In some provinces, the Deputy Premier is elected separately, which has caused problems for unified government control and stability where they are members of opposing factions.

The method of choosing the Provincial Executive Council (PEC) as well as the number of members of the Council, is determined by the provincial Constitution. Originally, the PEC was supposed to comprise no more than one-third of the membership of the legislative assembly, but in a number of provinces this rule has been ignored, with nearly the entire membership of the legislature holding a cabinet position in some area. This has occurred as a result of the need to obtain the support of a working majority (often an absolute majority) in a situation where neither political parties nor programmatic policies have provided a basis for organizing a stable coalition in support of the government.

Although provincial governments had the choice of organizing the PEC on the basis of portfolios or committees, all chose the former system, where each minister is responsible for a line division, in spite of arguments that their limited size made the committee more appropriate to their needs.

Administrative arrangements. The creation of an appropriate administrative structure to correspond with the decentralization of political power was a much more complicated task, and the major organizational lines were set out in a consultant’s report, ‘Making Decentralization Work’ (Mckinsey and Company 1977). The main principle guiding the creation of a decentralized administration was the idea of a single unified public service. The organization that was created to carry out the implementation of this structure was the Office of Implementation in the Department of Decentralization. The Mckinsey Report recommended that provincial government status be passed on uniformly to all provinces, rather than progressively, as each provincial government developed the capacity to exercise the powers transferred to it.

The decentralization of a unified public service meant that public servants who were involved entirely or mainly in provincial functions would receive policy direction and control, financial control, and control over public service matters such as transfers, promotions, and discipline from the provincial level rather than from their national departments. This also meant that the departmental headquarters had to be in the provinces rather than in Port Moresby. A new departmental organization was created to provide the administrative ‘shell’ into which these provincial public service positions could be fitted. It involved creating an administrative department of each province, much as each functional division was represented by a department at the national level. These new departments were organized along provincial rather than functional lines with each provincial department having staff assigned to several functional areas according to the organization of divisions with the provincial government. The provincial department is responsible to the provincial government rather than to a national minister. The concept of the provincial department was an administrative expedient that has subsequently been determined to have no basis in law (Regan 1988a).
The transfer of powers to provincial governments and the transfer of public servants from their national departments to the new provincial divisions took place on 1 January 1978 (for Provincial Affairs, Primary Industry, Commerce (Business Development), and Education); on 1 July 1978 (for Health and the Office of Information); and on 1 January 1979 (for the Bureau of Management Services (BMS)). In fact, the departmental structure to which these powers and public servants transferred was the newly formed Office of Implementation, which remained custodian of these powers until the provincial government was legally and politically ready to have them transferred.

All provincial governments had received budgetary control over the three transferred activities of capital works, maintenance, and the Rural Improvement Program (RIP), but only the North Solomons Provincial Government was given budgetary control over the other activities transferred to it. Thus, each provincial organization was initially treated as an activity of the Department of Decentralization within the division of the Office of Implementation, with an Administrative Secretary responsible to the Minister of Decentralization. At the provincial level, the provincial organization functioned as a normal administrative department, and once the provincial government was established and operating, the Administrative Secretary and public servants became politically and legally responsible to the provincial government (Papua New Guinea, Department of Decentralization 1977).

These piecemeal administrative arrangements reflect a response to the needs of adapting a decision for uniform devolution of powers to provincial governments with vastly different levels of political and economic development. Under this system, public servants in the provincial divisions receive policy direction from the Provincial Executive Council (PEC) through the Administrative Secretary, but still receive technical support, advice and training from the national departments. While the arrangement does respond to the potential difficulties of two separate services and two bosses, it also separates the function of direction and control from the activities of training, personnel, and salary matters. It also introduced the possibility of conflict between the national government and provincial governments since the practice was for the Administrative Secretary to be appointed by the national Cabinet (NEC) while being politically responsible to the provincial Cabinet (PEC). This method of appointing Administrative Secretaries for the provinces has been the source of conflict between the national government and several provincial governments in cases where individuals who were not acceptable to the provincial governments were appointed. In 1984, it resulted in a decision of the Supreme Court that the practice is unconstitutional.

The Administrative Secretary provides a key link in policy direction between the political and bureaucratic structures at the provincial level, being responsible to the provincial government and also in charge of the provincial bureaucracy. In fulfilling these functions, the Secretary has the job of coordinating the various divisions of the provincial administrative structure, providing communication between the bureaucracy and the government, and participating in the preparation of the provincial budget. In addition to this, the Secretary is the financial officer, and looks after public service matters in the province under powers delegated to the Secretary from the Public Service Commission in regard to public servants assigned to provincial activities. In some provinces, the Administrative Secretary participates as a member of the Provincial Budget Priorities Committee of the PEC, which is responsible for drawing up the budget to be submitted to the
provincial legislative assembly for approval. The Secretary is, in effect, a buffer between politicians and bureaucrats at the provincial level. In some provinces, a coordinating committee or 'management team' comprising the heads of the various divisions and the provincial planning officer is chaired by the Administrative Secretary.

This structure is complicated by provisions for a separate Provincial Policy Secretariat which provincial governments may or may not choose to adopt. At the head of the Provincial Secretariat is the Provincial Secretary, who does not occupy a public service position. The Secretary and the five other members of the Provincial Secretariat (the size of which is limited by the OLPG to six positions) are directly employed by the provincial government which is entirely responsible for the appointment, conditions of service, and dismissal of the members of the Provincial Secretariat.

The main role of the Provincial Secretariat is to provide policy advice, administrative support, and expertise to the provincial Cabinet, although it was envisaged that in some cases the Provincial Secretary and associated staff would also assist the PEC in providing policy direction and control over the public service (Papua New Guinea, Department of Decentralization 1978:27). A single structure, with the Secretary of the Province as the administrative head, provides clearer lines of authority for policy coordination and direction, and a number of provincial governments which had originally opted for the dual structure have now abandoned the Provincial Secretariat in favour of a single structure.

**Provincial government finance**

In 1980, Keith Hinchliffe pointed out that development policies frequently contain contradictory development aims:

Generalizing, the three most common areas of conflict are first, the financial distribution between the central government and the combined units of decentralized government; second, the control which the centre has over the expenditure decisions of these units; and, third, the financial distribution between the units. (Hinchliffe 1980:820)

In referring to the case of Papua New Guinea, he stated:

... there is no doubt that the decision to base the allocation of provincial grants largely according to the levels of funds actually spent in the provinces during 1976/77 will lead to an ossified pattern of provincial inequality, at least in the short run, and to a reduction in the power of the government to reduce inequalities in the long run. (Hinchliffe 1980:834)

Basing his analysis on the provisions for funding provincial governments, Hinchliffe concluded that the form of provincial financing chosen in Papua New Guinea was likely to prevent the possibility of addressing the problem of provincial inequality. He argued that the government was likely to lose control over both recurrent expenditures in the provinces, and over the uncommitted capital expenditures which are necessary for stimulating greater provincial equality (Hinchliffe 1980:838). This point of view is shared by Berry and Jackson who analysed capital works expenditures in recent years (Berry and Jackson 1981).

The various sources of funding for provincial governments are set out in the OLPG (section 53) and include the following: receipts from taxation imposed by provincial laws; grants from the national government; transferred national taxes; the proceeds of fees and charges collected under provincial laws; returns on, and proceeds of, investments; income from provincial government commercial
enterprises; proceeds from short-term borrowings and loans from the national government; and such other moneys that are lawfully available to it under an Act of Parliament or a provincial law (Chelliah 1981; Manning 1978; Tordoff 1981; Axline 1986a).

Grants to provincial governments

The Minimum Unconditional Grant. The principal source of funding for provincial governments takes the form of grants from the national government. The most important of these grants is the Minimum Unconditional Grant (MUG). Of all the provisions for financing provincial governments, the MUG most clearly underpins the decentralization of political power, since it was designed to provide the basis for provincial governments to carry out successfully the activities transferred to them from the national government.

The formula for the MUG is set out in Schedule 1 of the OLPG, which requires the national government each year to pay provincial governments an unconditional grant adequate to permit the provincial government to maintain government services transferred to them at the level of spending in fiscal year 1976/77 (the base year). The grant is a 'minimum' grant in that the national government is obliged to pay no less than the amount determined by the formula fixed by the Organic Law. It is 'unconditional' in that no formal conditions are imposed on the provincial government with regard to the expenditure of the funds. The MUG is calculated using the mechanism of annual adjustment according to a formula designed to take into account increases in the cost of providing services and changes in the overall government revenue in Papua New Guinea. The first period of the MUG was the half fiscal year July to December 1977 (the fiscal year was adjusted to coincide with the calendar year in 1978), which then became the adjusted base year on which the formula was applied to calculate the MUG for the following year, and so on.

The annual increment in the MUG is calculated as the lesser of changes in 'cost of living' or 'government revenue' from the preceding year. At the least, the formula for calculating the MUG would allow for the maintenance of the status quo with regard to the level of services that were delivered in the base year 1976/77, since it allows for no adjustment for population increases or expansion of existing services beyond that level (Committee of Review of the Financial Provisions of the Organic Law on Provincial Government 1982:63; Garnaut 1978). In addition to not allowing for expansion of activities, the formula also has the effect of freezing the status quo with regard to the unequal level of services existing among different provinces in the base year.

The original and the annually adjusted base year figures used to estimate the cost of these activities included the salaries of public servants. However, the MUG that is paid to provincial governments consists of the adjusted base year figure minus the estimated cost of public service salaries, which are deducted by the national government and paid directly to the public servants with the remainder paid to the provincial government. This means that in any year in which public servants receive a pay increase greater than the increment in the adjusted base year figures, the actual MUG received by provincial governments will increase by less than the annual increment in the formula. Provincial governments have no control over the level of salaries and thus can only limit the amount by which the MUG is reduced by employing fewer or lower level public servants.
Additional unconditional grants. The national government is obliged to make other unconditional grants to provincial governments, in addition to the MUG, under section 64 of the OLPG (Chelliah 1981:17). Unlike the MUG, the amount of any further unconditional grants is not specified. The national government determines the amount of the grants, acting upon the advice of the National Fiscal Commission (NFC), a five-person independent body appointed by the national government to make recommendations on a number of intergovernmental fiscal matters (OLPG sections 76, 77, 78). The NFC is required to base its recommendations on equal grants per head, but may depart from this principle when it believes other factors should be given greater importance (OLPG section 79(4)). Whereas the MUG was designed to allow provincial governments to finance the costs of services transferred to them, the additional unconditional grants were seen as a means to allow new activities to be undertaken, services to be expanded, and inequalities among provinces to be readdressed (Manning 1978).

The derivation grant. The third kind of grant made to provincial governments by the national government is the derivation grant, which is based on the value of exports originating in a province. The amount of the grant is fixed at 1.25 per cent of the value derived from goods exported from that province in the preceding year, minus any royalties paid to the provincial government for that year (OLPG section 63). This means that only provinces from which exports originate receive a derivation grant, and that they will receive only that amount which exceeds any royalties they earn for that year. This exclusion was adopted specifically to prevent the North Solomons Provincial Government from collecting both royalties and derivation grants on its copper production, a consideration which also caused the level of the derivation grant to be fixed at 1.25 per cent (equal to the copper royalties rate) rather than at the higher rate suggested earlier (Tordoff and Watts 1977). Since the derivation grant is based on the production of exports, it is likely to be greater in the more economically developed provinces.

Conditional grants. The national government also makes grants to provincial governments for specific purposes under the condition that the money may only be spent for that purpose. The major conditional grants which provincial governments received from 1978 to 1984 were for projects under the National Public Expenditure Plan (NPEP), which was later replaced by the Public Investment Program (PIP). Provincial governments were eligible to apply for project grants on the same basis as national departments, and the National Planning Office (NPO) (integrated into the Department of Finance and Planning in 1986) makes a distinction between provincial government projects and those of national departments in provinces. Provincial governments participate in the formulation and implementation of the former, but in the latter they may have little or no involvement. These grants, allocated under the national planning system, are the principal tool in the hands of the national government for equalization among provinces.

Revenue from taxation

Transferred taxes. Section 67 of OLPG provides for the transfer of net proceeds of certain national taxes to provincial governments, with royalties, motor vehicle registration and licence fees being specified. In addition, revenues produced by a bookmakers' tax, a cigarette and tobacco excise tax, and drivers' licence fees are transferred to the provinces, net of collection costs.
Royalties are national government revenues, part of which are transferred to provincial governments to compensate for the costs associated with the exploitation of resources. Under section 67 of the OLPG, royalties are payable by the national government to provincial governments with respect to minerals, petroleum, natural gas, timber, fish, and hydroelectricity, although to date only royalties for minerals and timber have been collected and paid to provincial governments.

Provincial taxes and fees. Provincial governments have been given the power to raise their own revenue in the form of certain taxes and fees. Section 57 of the OLPG provides that they have the power to impose a retail sales tax, a public entertainment tax, and a land tax; that they can collect fees for licensing mobile traders, liquor sales and gambling; and that they have the right to impose any other tax previously collected by local government councils. The different kinds of taxes and the rates applied vary greatly from province to province, with some provinces having virtually no provincial tax sources at all (Bird 1983:48-50; Specialist Committee 1984).

The only new taxing source available to provincial governments is the general sales tax, which is perceived by some to be a significant source of provincial government funds, and which is generally regarded by provincial governments as having the potential to become their most important means of provincially generating revenue (Regan 1982; Crawley 1982).

Other revenue sources

Nearly all provincial governments have a ‘business arm’ which engages in a number of commercial activities, and is often called a ‘provincial development corporation’. The term development corporation is used here in a different sense to that commonly used in most developing countries. In Papua New Guinea, these organizations are designed to generate profits rather than stimulate development activity in the province. They often act as holding companies in other ongoing businesses (in some cases outside the province), in preference to establishing new local enterprises. It appears that, in most instances, these provincial corporations are unsuccessful and are a drain on public resources, rather than a generator of provincial revenue (Trebilcock 1982:165-70; Bird 1983:61).

Finally, short-term loans and investments (in the form of term deposits) are another source of provincial government funds which provide limited funding for a number of provinces.

Conclusions

This chapter has described the broad political and social concomitants to the decentralization of powers to provincial governments. The relatively hasty transition from colonial rule to self government and independence, the inheritance of a highly centralized government system heavily reliant on external resources and with limited local participation, and the pressure of a number of micro-nationalist movements, all combined to complicate the process of political and administrative change. The plans for decentralization tried to account for these and many other factors. Many shortcomings in the political, administrative and financial arrangements have been identified but, to date, no major reforms have been implemented. The assessment of decentralization will ultimately lie in an evaluation of the extent to which it has achieved its original goals. This requires a detailed analysis of the way in which provincial governments have been able to deliver services in the areas of responsibility transferred to them.
Part 2

Decentralization of health services
CHAPTER 3

The health services of Papua New Guinea

I.W. Aitken

Introduction
The present structure of the health services in Papua New Guinea is the result of a rational process of development led by the central government since World War II. Non-government health services are limited to a small but growing number of private doctors and dentists working in the larger towns, one hospital and a few clinics or health centres run by the larger mining and commercial companies and some parastatal corporations. Health services provided by churches and Christian missions have been incorporated into the government system and receive subsidies for the work that they do.

Disease patterns and the development of health services in any country are dependent upon the interaction of geography and communications, the distribution and mobility of the population, and various sociocultural, political and economic factors. What is perhaps unique to Papua New Guinea is the extent and speed of the many changes that have and are taking place in the population and in its disease pattern. There is consequently a need for responsiveness and flexibility in the health system. So far, the combination of capable leadership and adequate resources has permitted the development of a health system which has had a remarkable impact on levels of morbidity and mortality. Most of this has been achieved since World War II.

Infant mortality rates before the introduction of modern health services were of the order of 200–250 per thousand live births. By the time of the 1971 census, this had dropped to 134 per thousand and by the 1980 census to 72 per thousand. Over the same period, life expectancy at birth rose from about 30 years to 50 years (Bakker 1986).

This chapter describes the patterns of health and disease in Papua New Guinea and the development of government and church/mission health services to combat these problems.

Patterns of health and disease

Background
Before contact with Europeans, the population of Papua New Guinea consisted of small isolated groups of subsistence farmers with a magico-religious world view and a very simple social structure. The extent of that isolation is indicated by the
presence of more than 700 distinct languages. Many of these languages are spoken by only a few hundred individuals. Some languages are spoken by as many as 10,000, yet the largest is spoken by only 150,000 people. English is now the language of education, but Melanesian Pidgin and Hiri Motu are the two main lingua franca.

The population in 1990 was estimated to be almost 4 million with an estimated growth rate of 2.3 per cent. The average population density in 1980 was 6.5 per square kilometre, though this hides very great contrasts across the country (determined largely by the agricultural potential of the land). The five highland provinces contain 37 per cent of the whole population; the largest high density populations, between 50 and 100 persons per square kilometre, are to be found in their valleys and basins. These have well-drained soils, reliable rainfall and are relatively free of malaria. The other areas of high density are in the hills around Maprik in the East Sepik, with 30 to 50 persons per square kilometre, and on the Gazelle Peninsula of East New Britain which, with its very rich volcanic soils and plantation agriculture, has a population density of over 100 per square kilometre. The vast majority of the country has a population density of less than 5 per square kilometre (King and Ranck 1982).

Settlement patterns are very varied and constantly changing. In the highlands and on the Gazelle Peninsula, the pattern is one of dispersed homesteads. These are also found in some of the more sparsely populated areas with difficult environmental conditions. Most coastal areas have nucleated village settlements. Some of the coastal villages in Central Province may have two or three thousand inhabitants, and some are still built partly out over the sea. Most villages, however, are much smaller, ranging between 100 and 400 people. Nucleation has been increasing with population growth and also with the desire to move closer to urban employment opportunities and to services such as roads, health centres and schools. On the other hand, the great increase in cash cultivation is resulting in the fragmentation of traditionally nucleated settlements as people move away to live on their small plantations.

**Patterns of disease and death**

Papua New Guinea does not have a system of universal registration of births and deaths. Only about 10 per cent of all deaths are registered, and an unknown proportion of sicknesses come to the attention of the health services. Information about diseases and deaths is, therefore, limited to the data collected at health facilities. Table 3.1 illustrates the conditions that are diagnosed and treated by nurses at a typical out-patient clinic. The majority of cases are clearly simple infectious diseases and minor trauma. Figures 3.1 and 3.2 show the causes of admission to and death in hospitals and health centres, and contrast their relative importance at three different times since 1960 (Carrad and Aitken 1987:14). The most important causes of admission and death are the common infectious diseases, including pneumonia, malaria, gastro-enteritis, tuberculosis and measles. Accidents and trauma are also important. (The major tropical diseases of schistosomiasis and trypanosomiasis are not found because the appropriate intermediate vectors are absent.) The most common reason for admission now is for supervision of childbirth, and the second most important cause of death is the group of conditions which arise in the perinatal period. Of these, the most important are low birth weight and prematurity.
Table 3.1  Out-patient diagnoses, Madang Hospital, January 1985 (per cent)

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Children</th>
<th>Adults</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sores</td>
<td>38.2</td>
<td>28.5</td>
<td>34.0</td>
</tr>
<tr>
<td>Malaria</td>
<td>17.5</td>
<td>31.9</td>
<td>23.7</td>
</tr>
<tr>
<td>Upper respiratory tract infection</td>
<td>9.8</td>
<td>6.4</td>
<td>8.4</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>9.0</td>
<td>4.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Otitis media</td>
<td>5.4</td>
<td>2.9</td>
<td>4.3</td>
</tr>
<tr>
<td>Diarrhoea/dysentry</td>
<td>4.9</td>
<td>1.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Scabies</td>
<td>3.3</td>
<td>2.6</td>
<td>3.0</td>
</tr>
<tr>
<td>Anaemia</td>
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<td>1.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Fever/myalgia</td>
<td>2.5</td>
<td>4.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Abscess</td>
<td>1.7</td>
<td>4.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Conjunctivitis</td>
<td>1.3</td>
<td>2.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Abdominal pain</td>
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<td>1.7</td>
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<tr>
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<tr>
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<tr>
<td>(Number)</td>
<td>(1,493)</td>
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</tr>
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Figure 3.1  Leading causes of admission to hospitals and health centres, 1961, 1971 and 1984

The traditional way of life of the Papua New Guinean villager was one which was underscored by the pattern of infectious disease and undernutrition typical of most developing countries. However, the small size of communities and their relative isolation meant that transmission of many diseases was slow and infrequent. Recent increases in the size and mobility of most communities has resulted in very significant increases in the rate of transmission of diseases and the amount of morbidity experienced.

Morbidity rates from acute respiratory infections, diarrhoeal diseases and malaria have all been increasing in recent years. This is indicated in health services data (Carrad and Aitken 1987:69) and in the stories of villagers who describe how, for example, in the old days, coughs were strictly seasonal while they now occur all year round. Diarrhoea and other faecal–oral transmitted diseases have been much less prevalent in Papua New Guinea than in many other developing countries, but are now certainly increasing in frequency. Typhoid has spread in a series of epidemics in the highlands in the last ten years and is becoming endemic. Because of the continuing increase in the size and mobility of the population, it can only be anticipated that the amount of disease transmission and morbidity will continue to rise.

Special problems

Malaria control using residual insecticide spraying began in 1959. By the early 1970s, more than half the population was included in the program and parasite rates had dropped considerably. Since then, however, parasite rates have returned to pre-spraying levels because of changes in both human and mosquito behaviour. People are now being bitten outside their homes in the evenings, so the mosquitoes no longer rest on the insecticide on the inside walls of the houses after biting. Except in the high risk, unstable areas of the highlands and a few coastal areas of economic importance, spraying has, therefore, been discontinued. That, together with the increased transmission consequent upon increases in population size and mobility, and the appearance of chloroquine-resistant malaria means
that malaria is a much more serious problem than ever before (Papua New Guinea, Department of Health 1986).

Tuberculosis was first introduced to Papua New Guinea about a hundred years ago by European and Rarotongan settlers and by Papua New Guineans returning from the Queensland sugarcane plantations. Since then, its spread has largely been through the labour trade. First, it was by people returning to Morobe, Madang and the Sepik from the plantations on the New Guinea Islands during the period before World War II. Since the War, it has been the highlanders who have introduced the disease to the highlands from plantations and the major urban centres on the coast (Wigley 1963). Between 1975 and 1984, the number of new cases each year doubled from 1,800 to 3,600. Tuberculosis is, therefore, emerging as a major endemic disease, mostly in urban and peri-urban communities, but increasingly also in remote rural villages where treatment and control is extremely difficult to supervise (Department of Health 1986).

Sexually transmitted diseases have also been introduced at different times from outside the country. They were a major preoccupation of the health authorities at the beginning of the century and were associated with considerable infertility and population decline in parts of Papua and the New Guinea Islands (Maddocks 1973). In the last twenty years, there have been other major epidemics involving all kinds of sexually transmitted diseases all of which were linked to the spread of urbanization and the road systems, especially in the highlands (Department of Health 1986). A small number of AIDS cases have been diagnosed already, and the potential for spread of that condition is very great.

Protein-energy malnutrition remains a problem throughout the country. The National Nutrition Survey of 1982–83 found 38 per cent of children under five years to be underweight (Heywood, Singleton and Ross 1988). However, the prevalence of malnutrition was found to be less in the highlands and the New Guinea Islands where cash crops have made the purchase of more energy-dense foods from trade stores increasingly common. In urban areas, obesity is becoming a problem among older children and adults, and diabetes and cardiovascular diseases are also becoming more common.

Cancer is being diagnosed more frequently now. This probably reflects a change in the age structure of the population as well as improved diagnostic skills. In men, primary liver cancer is the most frequently diagnosed cancer in the highlands, while mouth cancer, caused by the chewing of the betel nut with lime, is the most common form in coastal areas. In women, cervical cancer is the most common, with mouth cancer second (Department of Health 1986). Other reasons for expecting the rates of these cancers to rise include the spread of the betel nut chewing habit to the highlands and the continued spread of sexually transmitted diseases. The increase in cigarette smoking is likely to lead to diagnosis of more cases of lung cancer in a few years time.

The health services of Papua New Guinea

Beginnings: developments prior to World War II

Papua New Guinean villagers have been looking after their own health care for generations. Many different herbal remedies are used for relief from common symptoms. Serious illnesses, however, are believed to be caused by various forms of sorcery or spirit aggression which require more complex ceremonies and the skills of specialized traditional healers (Aitken 1985). It is hardly surprising,
therefore, that the initial reaction of villagers to the limited care made available at
the beginning of the century by the early European settlers was one of passive
avoidance. For many years few people other than indentured labourers came for
treatment at the established hospitals, and they often presented late when they did
so (Territory of Papua 1908).

The first health services were for the care of the Europeans and the labourers
on the plantations and gold fields. Although pneumonia was recognized as the
main cause of death, it was the epidemics of dysentery and venereal diseases
which were the main preoccupations of the health authorities at the time. In fact,
the first native hospitals in British New Guinea were set up primarily for the
management of venereal diseases (Territory of Papua 1906).

In German New Guinea, there seems to have been a greater concern for the
level of health in the villages. Apart from any humanitarian reasons, the increas­
ing need for labourers on the plantations was best met by maintaining a high level
of health in the villages from which they were drawn. As early as 1903, a system
for training villagers for health work had been started in New Ireland (Radford
and Speer 1986). Initially, the villagers had been trained to work in the hospitals
under the European doctors and medical assistants but, by 1911, there were
twenty of these ‘heil tultuls’ working independently in the villages. The next year,
another ten were sent to Manus. The training was first carried out in Rabaul, but
later it was decentralized to all the native district hospitals. Recruits were given a
three month training and then sent to their villages to promote better village
hygiene and sanitation, to treat minor illnesses and injuries, and to report serious
cases and epidemics to the authorities. They had a lockable box containing dress­
ings, soap and disinfectant, and a few simple medicines. In some villages, there
was even a small building to accommodate a few patients while they were being
treated. While these medical tultuls were exclusively male, there is a report in
1913 of some female health assistants being appoi nted to promote the health of
mothers and children (Radford and Speer 1986).

After the Australian military authorities took over the administration of Ger­
man New Guinea in 1914, labour recruitment was discouraged and the medical
tultul system was allowed to lapse. However, under the civilian administration of
New Guinea between 1921 and 1942, the system was revitalized and, by 1930, the
number of these ‘doktor-bois’ had increased to 2,750. By 1939, there were 4,000
who had been trained either by the administration or the Christian missions
(Newland 1973).

In British New Guinea, later called Papua, no attempt was made to train an
extensive cadre of village health workers. A number of ‘native medical assistants’
were trained in the hospitals, and when the European doctors and medical assis­
tants went on patrols, these men accompanied them to assist in the treatment of
the villagers. The native medical assistants were trained to a much higher stand­
ard than the medical tultuls of New Guinea, so that when, after World War I, it
was decided to expand the program of medical patrols, more of these medical
assistants were trained and were sent on independent medical patrols in the
villages. By 1937, there were 60 native and four European medical assistants
engaged in medical patrols through the villages (Territory of Papua 1938). These
medical assistants were the forerunners of today’s health extension officers.

The postwar years: major expansion

At the end of World War II, the territories of Papua and New Guinea came under
a unified Australian administration. During the first fifteen years after the war,
approximately 20 per cent of government expenditure went to the development of the health system (Bassett and Bell 1973). Much of this went to the construction of a network of hospitals at district and sub-district (later called province and district, respectively) levels, but there was also a large expansion in numbers of both European and Papua New Guinean health workers.

The first major development for the rural areas was the development of the aid post system. Dr John Gunther, Director of Public Health from 1949 to 1957 later described the early postwar period as follows.

Although more than 50 per cent of all admissions to hospital from 1946 for some years were due to skin diseases including yaws and tropical ulcer, it became obvious that the diseases with high mortality were pneumonia, malaria, dysentery, cerebro-spinal meningitis, tuberculosis. All except tuberculosis and malaria would ordinarily respond to the antibiotic sulpha drugs, or penicillin. Malaria could be treated with quinine. If native medical assistants could be trained to recognize these diseases when they occurred in the villages, and then to give the appropriate drug in a measured dose from pictorially-labelled bottles, many lives would be saved... Six such [native medical assistant] schools were established with the aim of placing a thousand native medical assistants in a thousand villages. The village post became known as an aid post and ultimately the native medical assistant became an aid post orderly. (Gunther 1972)

The years after the war also saw a large influx of Christian missions and missionaries, many of whom established hospitals and health centres. They began to receive grants-in-aid from the government to assist them in their medical work. In particular, they accepted responsibility for running a number of specialized hospitals for tuberculosis and leprosy.

In 1957, two major factors led to a reorganization of the Department of Public Health (Territory of New Guinea 1958; Territory of Papua 1958). The first was the recognition of the need for a much greater emphasis on preventive health. The growing numbers of patients attending hospitals and health centres meant that most doctors and medical assistants were preoccupied with clinical care, with less time available for patrolling in the villages. Mobile maternal and child health care clinics had been started in 1953 and rapidly became an important way of providing antenatal care to pregnant women and immunizations to young children. Vertical control programs for tuberculosis and leprosy each started as single doctor units in 1949 and 1950. In order to give greater emphasis to these and other preventive activities such as providing clean water supplies, the Department was divided into five divisions: medical services; preventive medicine; infant, child and maternal health; medical training; and administration (with research and mental health added later).

The second factor was the growing size of the Department. By 1957, there were 97 administration hospitals and 69 mission hospitals, 1,091 administration aid posts and 332 mission aid posts. The Director was responsible for the direct supervision of all health staff from headquarters, and the district health officers (called Assistant Secretaries for Health after decentralization) had no authority over staff or finances. They were certainly not encouraged to liaise with church health workers in the area. All important decisions concerning staff, buildings or finances in a district were kept for the Director’s annual visit. To solve this increasingly unmanageable problem, four administrative regions were created, each under a regional medical officer who had real authority, which could in turn be delegated to district health officers in the case of staff transfers and minor financial matters.
This new organization lasted until 1969 by which time the continuing expansion of the health services, both in size and complexity, led to the abolition of the regional medical officer positions. In fact, it had become increasingly difficult to find people with sufficient experience to staff the regional offices, and there was growing resentment in the districts against this nominal supervision from a remote official unfamiliar with local realities. The 18 district health officers, therefore, received increased authority and each district became an autonomous health area responsible directly to staff at headquarters. Although the budget and the number and types of staff allocated to a district were decided by headquarters, the district medical officers had a great deal of latitude in how and where they might use their staff and money within their districts (Bell 1973a).

The health services were still almost entirely dominated by expatriates, but this period also saw an increase in the number of Papua New Guineans undergoing training for professional health roles. The first formal nursing training had taken place at the Methodist Mission Hospital at Salamo in Milne Bay District in 1926. After that, increasing numbers of mission hospitals opened nursing schools both for hospital nursing and later, after the War, for maternal and child health work. The first government nursing school opened in Port Moresby in 1958. Two more opened, one in Lae in 1964 and the other in Goroka in 1970 (Kettle 1979).

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The first high school for Papua New Guineans opened just after World War II. A few of the first graduates were sent to the Central Medical School in Suva, Fiji, to be trained as assistant medical officers, and the first graduated in 1951. In 1960, the Papuan Medical College was opened in Port Moresby for Papua New Guinea's own medical training program. Later, with the establishment of the University of Papua New Guinea in 1966, the medical program was offered as a university course. The first university medical graduates received their diplomas in 1972 (Kettle 1979).

The rural health centres had been increasingly run by national medical assistants, most of whom had trained first as nurses, and later had received some extra training in diagnosis and treatment, and in health administration. In 1967, the Paramedical College was opened in Madang to train health extension officers and health inspectors. The health extension officer training program was designed to train school leavers specifically for the role of managing rural health centres and bringing community health programs to the surrounding population.

The end of this pre-independence period saw increasing participation by senior nationals in the administration of the health services. One of the first graduates from the Fiji School of Medicine became the first national Minister for Health in 1972. The following year he appointed another early graduate as the first national director of health.

The 1970s: independence and the first National Health Plan, 1974–78

The National Health Plan 1974–78 (Papua New Guinea, Department of Public Health 1974) was published the year before independence, but was firmly based upon the principles of the Eight Point Improvement Plan adopted by Cabinet in December 1972 as the basis of economic development for an independent nation. These principles emphasize national ownership, equal distribution of economic benefits and services, decentralization and self-reliance. The main achievement of the first National Health Plan was the rationalization and formalization of the structure and functions of the health services according to a set of national health
principles. Its other goals, which were only partially achieved, were to check the increasing proportion of resources being spent on urban hospital services and to promote an equalization of health resources between different provinces. (The term 'district' was still in use at the time of the plan, but 'province' will be used here to avoid confusion.) The basic structure and functions of the health services have not changed significantly since that time and will therefore be described here in some detail.

The following principles were adopted as the basis for deciding on the plan's priorities and strategies.

• Expensive health resources are always insufficient to meet either legitimate needs or demands. They must therefore be concentrated in situations where maximum utilization can be ensured.
• Standards of health services should be provided at a level appropriate to community and national development.
• Health services are best received when people and communities are involved in decision-making about their quality and delivery.
• At least some level of health care should be provided to all the people as close to their homes as possible.
• Health services must be delivered in such a way that they are as fully integrated as possible with all sections of health and other services (Papua New Guinea, Department of Public Health 1974).

It was decided that each province would have one provincial hospital in which doctors, together with their more expensive laboratory, X-ray and surgical facilities, would be concentrated. They are the referral centres for clinical problems from the province. Four of the larger provincial hospitals were designated as the regional referral hospitals and have specialist doctors and more sophisticated facilities.

In the rural areas, the most peripheral facility is the aid post, staffed by one aid post orderly (APO). APOs usually serve an average of 1,400 people (range 500–2,000). Most of their working time is taken up with providing out-patient treatment for common illnesses and minor trauma and supervision of the long-term treatment for people with leprosy or tuberculosis. Their job description includes visits to the villages for which they are responsible in order to give advice and education on environmental sanitation, nutrition and other health issues, but the performance in this area is variable and often poor.

The key institution in rural areas is the health centre, usually serving a population of between 5,000 and 20,000 people. It is designed to provide an integrated and comprehensive set of services to that population. The staff usually consists of a health extension officer as the person in charge, two or three nurses, and a number of nurse aides or hospital orderlies. The health centre provides out-patient and in-patient care and covers the majority of the important health problems of the community. Only major obstetric, surgical and complicated medical problems need to be referred to the provincial hospital. Maternal and child health clinics are held by the nurses both at the health centre and in the villages according to a schedule of visits that are undertaken by road, boat or on foot. Disease control activities for epidemics, tuberculosis, leprosy and sexually transmitted diseases are organized by the health extension officer from the health centre. There are usually several APOs in the health centre area. Their supervision, supply and in-service training are the responsibility of the health extension officer and staff. Many health centres are administratively responsible
for a larger population but have one or more health subcentres in the district. The subcentres generally provide out-patient and in-patient care and maternal and child health services to a defined population separate from the health centre, but are not involved in APO supervision or disease control. Some larger health centres may also have a health inspector who, apart from having an inspecting role, is responsible for promoting and facilitating the installation of rural water supplies and latrines.

The principle that some health care should be provided to everyone as close to their homes as possible remains unchanged. At the beginning of the plan period, an estimated 26.5 per cent of the rural population lived more than one hour travelling time from an aid post, and 14 per cent were more than two hours away (Papua New Guinea, Department of Public Health 1974). By 1980, those estimates had been reduced to 18 per cent and 8 per cent, respectively (Provincial Data System 1980). Differences in access still exist between provinces. Sometimes access is poor because of widely scattered small populations that may have to travel by sea, small waterways or over rough mountainous terrain to reach a health facility. In other areas, the poor access at the beginning of the plan was because these provinces were still at an earlier stage of socioeconomic development and facilities had not yet been provided.

Integration of different aspects of the health services was achieved in a number of different ways. The disease control programs had all started at different times as separate vertical programs. By the end of the 1970s, all but malaria control had been integrated with the general health services at provincial and district levels. However, the major integration achieved by the plan was that between government and church health services. For many years, church health services had been receiving grants-in-aid for the services that they had been carrying out, but there had been little planning for the location of different institutions (Hellberg 1973). The result was that there were sometimes two or three health centres competing in one place while other areas remained underserved. The church health services were reorganized and new agreements with the government and the provincial health authorities were made. Some church centres were closed or relocated. Others were reclassified, including one church centre which became the provincial hospital. Altogether, the churches and Christian missions still provide about half of rural health services (Papua New Guinea, Department of Public Health 1974).

Involvement of communities in health care delivery and its quality-control was not achieved. Most attempts to involve the community have involved the building and management of aid posts. In the early years of the aid post system, aid posts and the houses for the APOs were built by village communities. The APO received very little pay, but expected some land from the community and some help in its cultivation from the villagers. In 1960, an Assistance to Councils Scheme enabled some of the longer established councils to assume the responsibility of paying the APOs in their area by reimbursing part of that payment. The scheme also provided subsidies for the construction of water supplies and aid posts (Malcolm 1973).

The problem with that scheme was that APOs, although on long-term secondment to the councils, were still employees of the central government, and the councils were really only acting as conduits for government funds to pay the APOs. The APOs knew this, as did everyone else. Consequently, the councils had no real authority over the APOs and became increasingly reluctant to be involved
in their supervision or discipline beyond submitting periodic complaints. This situation was in no way helped by health administrators who would transfer APOs between different places without any consultation with the councils. There has been no improvement in recent years. Some councils still contribute to the construction and maintenance of the aid post buildings, but the National Executive Council has recently agreed that APOs should become public servants, so they will soon have no direct responsibility to communities or councils.

The 1980s: the challenge of change and complexity

The decentralization of powers from the national department of health to the provincial divisions of health was only one of many different and important changes that have occurred over the past decade. Decentralization has therefore taken place at a time of greater technical and managerial complexity than has ever been experienced in Papua New Guinea before.

The postwar period was a time when adequate resources made possible the creation of a health service which allowed the introduction of some key technical advances, and thereby made a significant impact upon the health of Papua New Guineans. Effective drugs could at last be used for the treatment of pneumonia, tuberculosis, leprosy, sexually transmitted diseases and malaria. Vaccines against a number of important diseases became available, and the spraying of residual insecticide against malaria held out hope of a great reduction in that disease. The real success of the Papua New Guinea health services lay in the development and expansion of an efficient and effective way of delivering these technologies. Standardized treatment regimes, an appropriately trained workforce, and an efficient drug and vaccine supply system combined to achieve a great increase in life expectancy. Management problems arose primarily from the increasing size of the service and the growing number of different programs involved. These were resolved by the delegation of administrative powers first to the regions and then to the provinces, and by the integration of vertical programs into the general services.

Two major changes have taken place in recent years. The first is the emergence of a number of social, biological and financial factors that may significantly reduce the effectiveness of the present health services. The second is the realization that further expansion of curative services is unlikely to produce any greater benefits and that further improvements in the health of the population will require very different approaches.

New technical complexities

As already explained, increases in the size and mobility of the population, as well as other social changes, have resulted in significant increases in the frequency and distribution of many diseases. Acute respiratory infections, diarrhoea and malaria are all becoming more common. Tuberculosis and sexually transmitted diseases, once potentially manageable urban problems, are now becoming much more common in rural and remote areas as well as taking on epidemic proportions in the cities. In addition, diseases such as typhoid and non-gonococcal urethritis are becoming more common and have increased the requirement for laboratory services where previously clinical skills alone were adequate for effective treatment.
Drug resistance is now emerging as a major problem. The successful management of malaria, gonorrhoea and pneumonia has required the adoption of new drugs and more complex management regimes. The introduction of new drug regimes for tuberculosis and leprosy has involved major program changes which are proving very difficult to implement. The main problem is not finding alternative drugs that are effective and cheap, but changing management and reporting systems, retraining health workers, and sometimes having to try to overcome the prejudices of the public who still prefer and trust the old treatments.

Malaria has become a much larger and more complex problem. This is not only because of drug resistance, but also because the residual insecticide spraying program is no longer effective and was stopped in most parts of the country in 1983. As noted earlier, this is not the result of insecticide resistance but of a change in both human and mosquito behaviours so that transmission is now taking place outside the houses, away from the effect of the insecticide. Effective alternative strategies have not yet been found.

Successful adaptation to these changes and complexities generally involves the availability of extra funds for the retraining of the large and scattered health workforce. In fact, this period has seen large real cuts in the health budgets as a result of changes in government priorities. Funds available in 1989 were only 75 per cent of those available in 1985 (Newbrander and Thomason 1989). All aspects of health programs have suffered, but cuts in transport funds in particular have been crippling in some provinces. These cuts have been so severe that many provincial health managers have not been able to maintain services throughout the year. Others have managed to develop imaginative and successful approaches.

The need for health promotion

Provision of primary health care has been the most influential concept in the debate on health care development in Papua New Guinea in the 1980s. A number of primary health care projects have been started during this time, and it was the central theme of the 1986–90 National Health Plan. Much of the polemic of the primary health care movement has been concerned with social equity and the improvement of access to health care. This is no longer a major problem in Papua New Guinea, except for small remote communities and the need to provide more widespread professional care for women in childbirth. Several village health aid and birth attendant schemes have been tried, but with mixed success.

The elements of primary health care that are still weakest in Papua New Guinea concern active acceptance of preventive health measures, such as immunizations and improved water supplies, and the adoption of healthier lifestyles, particularly with regard to diet and hygiene. Immunizations given to children are usually incidental to the treatment of some minor illness for which the child has been brought to the clinic. The incidence of diarrhoea has actually increased despite the installation of water supplies, because there has been no associated improvement in personal and food hygiene practices. Undernutrition is still very common in children under five years of age, even in areas where cash crops have made the purchase of more nutritious foods possible. This situation persists in spite of many health education talks and activities over the years.

Part of the explanation must be found in the continued prevalence of traditional thinking and attitudes and the lack of formal education found among women in most parts of the country. However, the situation is also complicated
by political, social and economic changes that are taking place in communities all over the country. People today are a lot more independent in their attitudes, and there is certainly not the same awe of the government officer that existed in the colonial days. Economic development has given people much greater control over their lives, and travel and exposure to urban and other communities has led to a greater sophistication. People's lives are also much busier than they were, and a visit of the maternal and child health nurses to their village can no longer be assumed to be the only call on their time.

Times of economic and social change provide great opportunities for the transmission of new ideas and values. Health workers are not the only people wanting to be heard. Many commercial and other interests have potentially harmful products and lifestyles to promote in competition with more healthy ones. It is clear, therefore, that health workers have to earn and negotiate the right to be heard by people much more than before. Part of that process and a prerequisite for effective communication of new ideas about health is the demonstration by health workers of a much greater knowledge and respect for people's customs and beliefs and for the other demands upon their lives (Aitken 1986). Thus, the major management and training challenge facing provincial health administrators today is the effective transfer of these attitudes to health workers and the reorganization of health services to make the time and resources available for an appropriate primary health care approach.

For many years, the debate over decentralization of health service administration has focused on the conflict between the generalist at the periphery and the specialist at the centre; the need, on the one hand, for responsiveness to local needs and demands, and, on the other, the need for technical expertise to make the best possible management decisions in the face of changing technical demands (Mott 1976). In Papua New Guinea, this problem grew with the increasing delegation of powers to the provincial health officers prior to independence. Since the creation of the provincial governments, it has become a much greater problem both legally and practically. The challenge for Papua New Guinean health managers at national and provincial levels today is to find a way to resolve this generalist/specialist conflict in the face of increasing need for both local responsiveness and professional expertise to solve an increasing number of technical problems.
CHAPTER 4
The legal framework for decentralization of health functions
A.J. Regan

Introduction
To provide the background necessary for understanding the approaches to and outcomes of decentralization in Papua New Guinea, this chapter outlines the complex legal arrangements for decentralization of governmental activities with particular reference to the health sector.

In 1976, only months after independence, a long political struggle over the distribution of power was resolved in favour of the periphery. As a result, constitutional law was used to wrest significant power from what was seen by proponents of decentralization as an inefficient and unresponsive, bureaucratically-dominated central government. Power was to be redistributed to newly created centres of political power—the nineteen provincial governments. The central aims were improvement of efficiency and responsiveness of government and greater involvement of the people in making decisions about matters which most affect their daily lives (Papua New Guinea, Constitutional Planning Committee 1974: Part 2, Chapter 10).

The Organic Law on Provincial Government (OLPG) was the central legal mechanism intended to achieve these ambitious and difficult political aims. The OLPG was designed not only to create the new centres of power but also to provide a flexible framework for the sharing of both decision-making powers and associated governmental resources between the national government and the new level of provincial government. There was no attempt to define clearly, once and for all, the respective responsibilities of the levels of government. Instead, responsibilities were to vary depending on such factors as relative capacity and political strength. The law was also intended to provide the machinery to deal with intergovernmental problems that might arise in operating a complex, politically decentralized system.

Proponents of decentralization were quick to target health services as an area where major responsibilities should be shared between the two levels of government. As is made clear in other chapters of this book, uncertainty about the division of responsibilities for health services between the levels of government has given rise to a range of practical problems. The uncertainty is to some extent a result of a deliberate lack of legal specificity in the division of responsibilities,
that is, a failure of the legal framework. It is clearly important to understand the legal arrangements if the effects of decentralization on the operation of health services in Papua New Guinea are to be analysed. Furthermore, the health sector serves as a useful case study of the effectiveness of the OLPG as a mechanism for redistribution of power. Not only do health policies impinge directly on the day-to-day lives of citizens but the delivery of services ties up significant fiscal and human resources.

This chapter thus examines the legal framework within which decentralization has occurred and places particular emphasis on those aspects of the framework which most directly affect the health sector. The chapter first identifies the central aims and features of the OLPG’s arrangements for sharing power and resources between the levels of government. The primary focus, however, is upon the way the OLPG arrangements have operated in practice. This discussion is in two parts. The first presents a brief overview of the legal and administrative mechanisms actually used since 1977 to achieve decentralization of health services. The second part examines the extent to which the previously identified features of the OLPG arrangements have been applied in relation to the health sector. From this discussion it will be evident that there are a number of legal and administrative problems concerning the manner in which decentralization of health services has actually been achieved.

Aims and features of the power sharing arrangements

Although the central aim of the OLPG is the transfer of substantial powers away from national government to highly autonomous provincial governments, it deliberately avoids laying down rigid requirements as to what should be transferred. Inclusion of a broad subject heading such as ‘health’ or ‘land and land development’ in the list of ‘concurrent’ legislative powers under section 27 of the OLPG indicates that responsibility for the area was intended to be shared. But there is no indication in the law as to which aspects of such subject areas should be controlled by which level of government. So, rather than providing a definitive division of responsibilities, the OLPG is better understood as establishing flexible processes for continuing movement of powers and resources between the levels of government.

It was expected that, as relative political strengths and capabilities of the levels of government—and of particular provincial governments—changed over time, the movement would be in both directions. In general, the new provincial power centres were expected to take on more activities gradually. Provincial policies attuned to local needs were then expected to replace many aspects of national policies. The roles of many national government agencies—such as the Department of Health—were expected to change from direct provision of services to the formulation and supervision of national policies within which provincial policies would operate and to a general training and supervisory role to ensure maintenance of basic standards.

While the high degree of flexibility in the legal arrangements was an aim pursued by those preparing the OLPG, in practice it has caused confusion and

1 This part of the chapter draws upon material from a contribution by the author in a forthcoming IASER monograph (Regan forthcoming a).
uncertainty, often giving rise to unexpectedly complex administrative and legal problems.

The key features of the OLPG designed to facilitate power sharing can be summarized as follows:

- provincial laws were intended to be the main source of legal authority for the exercise of extensive powers by provincial governments;
- the emphasis on provincial laws was not to prevent delegation of powers and functions under national laws;
- provincial governments were to have control of funds and personnel required to carry out transferred functions; and
- consultative institutions and processes were to deal with problems in intergovernmental relations arising from sharing of powers and resources.

**Provincial laws**

The main source of authority. A mixture of symbolic and practical considerations prompted the Bougainville leaders, who negotiated the contents of the OLPG in 1976, to emphasize the need to exercise provincial powers under provincial laws rather than under delegations made under national government laws. Deriving power from provincial legislation would indicate that provincial governments were something more than local government councils. Their powers would be coordinated with those of the national government rather than a derivative of it. Through their own laws, provincial governments could more readily develop their own policies rather than merely implement those laid down in national government laws. Provincial laws would also provide a more secure basis for provincial powers—they could not be as easily withdrawn by the national government as could delegations.

Categories of provincial laws. The OLPG scheme for the division of legislative powers has been adequately dealt with in detail elsewhere (Ghai and Regan forthcoming). There are eight categories of provincial laws provided for in the OLPG. Only one of which—the concurrent legislative subjects—is of critical importance to decentralization of health functions.

It is worth noting, however, that other categories of subjects have some relevance. For example, provincial governments can enforce their laws—including those on health—by legislating on judicial matters, powers which extend to imposition of fines and other penalties for breach of provincial laws (sections 38–41). Laws on sources of revenue are also of some importance—provincial governments can raise funds by imposing fees for services provided under provincial laws and by imposing taxes. Eight kinds of tax are preserved by the OLPG as ‘exclusively provincial taxes’ (sections 54–60).

The concurrent subjects. Without doubt, the most important category of provincial laws is the long list of 25 concurrent legislative subjects in section 27. The list contains most sectors of legislative activity of modern governments, including health. Absolutely no indication of the appropriate division of responsibility for any of the 25 subjects is provided; rather, the concurrent subjects are intended to be open to both levels of government, though national laws prevail in cases of inconsistency between laws (section 28).

Where national government laws do not already deal with particular aspects of a concurrent subject, provincial governments are free to pass their own laws. Where, however, there is already an extensive coverage by national government
laws on a subject—as is the case not only with health but many other concurrent subjects—the rule on inconsistency of laws on the concurrent subjects can give the misleading impression that national government can virtually exclude provincial government laws. If this had been the case, and given that decentralization in Papua New Guinea involved divesting powers from an already established central government, there would have been little chance for provincial laws to become the main basis for the exercise of provincial powers. Accordingly, provisions in the OLPG ensure that there is room for the laws of both provincial and national governments to cover different aspects of the concurrent subjects. By sharing in legislative activity, the levels of government would of course be sharing in policy making.

Thus the OLPG establishes rules—and mechanisms to enforce them—intended both to ensure that concurrent subjects are open to provincial laws and that the pre-existing wide coverage of the subjects by national laws can be reduced (Ghai and Regan 1988:16). The main rule limits national legislation on the concurrent subjects to matters of ‘national interest’ and only to the extent that such matters are of national interest.

Mechanisms for enforcing that rule are provided in section 29. First, through provisions on notice and consultation on proposed national laws on concurrent subjects, sections 30 and 31 seek to ensure a provincial voice in determining the aspects of concurrent subjects which constitute matters of national interest. Provincial input can be enforced, however, because lack of consultation may be grounds for challenging the validity of an act of the national Parliament (section 31(5)). Second, section 114(3) enables provincial governments to take the initiative in determining which matters constitute national or provincial interest for the purposes of section 29. A provincial government can require the National Executive Council to secure the repeal of a law on a concurrent subject providing that the law does not affect the ‘national interest’.

The result is that there is considerable scope for sharing legislative responsibility for the concurrent subjects. There is obviously also a concomitant scope for uncertainty and conflict over the appropriate limits of responsibility. These were regarded as matters to be resolved through use of consultative intergovernmental relations mechanisms such as the Premiers’ Council (discussed below).

**Delegations**

Delegations are mechanisms to enable powers and functions vested by law in a particular authority to be exercised by some other authority. Despite its emphasis on provincial law as the main source of provincial power, the OLPG provides a scheme for delegations of powers and functions between governments. The details of the scheme are important for understanding the decentralization of health services for two closely related reasons. First, although provincial governments carry out a major part of the health activities in Papua New Guinea, they do so almost entirely under national rather than provincial laws. This is contrary to what might have been expected when the OLPG was passed, and has persisted some 13 years after the OLPG came into effect. In other words, powers and functions under national laws are exercised by staff under provincial government control. Second, to be exercised properly by provincial staff, such powers and functions must be delegated in accordance with the OLPG scheme. As discussed later in the chapter, there is considerable doubt whether not only health related
functions but many other powers and functions purportedly derived by provincial government personnel from national laws have been validly delegated and are therefore validly exercised.

The delegation scheme depends upon flexibility and requires a high degree of certainty about what has been delegated. With regard to certainty, delegations of powers and functions contained in national laws must be made by an Act of Parliament. This requirement could be met either by individual pieces of legislation delegating particular powers or by a more general enabling law which would permit regulations under the enabling law to delegate specific powers under a range of laws (see Barnett 1977). Flexibility is achieved by the fact that delegations may be made to the provincial legislature, the provincial executive body, members of the executive or persons subject to direction and control of the provincial executive (in other words, provincial staff). It must be remembered, though, that any power or function delegated to the provincial executive or provincial staff can only be delegated as provided by a provincial law.

Underlying most constitutional arrangements in Papua New Guinea is the principle that the powers and functions of the executive branch of government should be controlled by the democratically elected legislature. To this end, delegations to the executive branch must be approved by the provincial legislature, something which may be achieved in various ways. The most obvious are: (i) an omnibus provincial law enabling the executive to exercise powers identified in regulations; (ii) specific provincial laws establishing machinery for the exercise of particular powers—for example, a provincial Act might provide for exercise of the powers of a ‘local medical authority’ under the national Public Health Act Chapter 226; or (iii) a provincial law may provide for the legislature to approve the exercise of delegated powers through resolutions passed on a case-by-case basis.

To date, only the last two methods have been attempted. The passing of provincial machinery laws has been used by some provincial governments in relation to some activities involving concurrent subjects (Regan forthcoming b). The last mentioned method (case-by-case approvals) has been provided for in laws passed by five provincial governments which, amongst other things, require that delegated powers and functions can be exercised only 'with the approval of the Provincial Assembly' (see Executive Acts passed by North Solomons, Central, Gulf, Simbu and West New Britain Provincial Governments). As discussed later in this chapter, the provisions in the provincial laws concerning acceptance of delegations are not followed in practice, contributing to doubts over the legality of the exercise of most delegated powers.

It must also be noted that, although the OLPG envisages that specific powers and functions exercised by a provincial government or staff under provincial control should usually derive from either provincial laws or national delegating laws, this does not mean that every activity carried out by a provincial government must be based in a particular law. Through their general powers under the OLPG to expend provincial funds and control staff, provincial governments can carry out wide-ranging programs that do not require specific legislative support. For example, the undertaking of such things as primary health care programs or construction projects does not usually require any legal basis other than an appropriation of funds and the power to direct staff to do the necessary work.
Transfer of resources required to carry out functions transferred to provincial governments

The transfer of functions to provincial governments would be meaningless unless the transfer of resources—principally funds and staff—needed to carry out such functions were also guaranteed. Through interlocking provisions for the transfer of activities, funding of transferred activities and the assignment of staff carrying out those activities, the OLPG attempts to provide such guarantees.

Transfer of activities. As soon as a provincial government starts to 'carry out' a function (or 'activity') previously carried out by the national government, the activity becomes a 'transferred activity' under the OLPG (Schedule 1). The activity must then be funded by way of the Minimum Unconditional Grant (MUG) (see Chapters 2 and 8). It does not matter which of the principal legal bases for transfer of responsibilities has been used.

There is some overlap in the OLPG between the idea of transfer of activities and the transfer of control of staff. Once staff who previously carried out an activity on behalf of the national government have come under provincial government control, it can usually be assumed that an activity has been transferred. However, activities can be transferred in other ways—certainly through delegations or passage of provincial laws—and in such cases, it seems the intention was for control of staff to follow transfer of the activity.

Determining whether particular activities have in fact been transferred is an issue which causes considerable uncertainty in relation to decentralization of health services. This uncertainty stems from national government decisions made in 1977 designating those health activities carried out by staff transferred to provincial control as having been transferred ('provincial') and others as 'delegated national activities'. Those classified as 'delegated' are not regarded as transferred, a matter with important financial and other consequences.

Financial resources. This aspect of the legal arrangements is dealt with in depth in Chapter 8. There are, however, two points relevant to later discussion of problems connected with decentralization of health functions.

First, the most significant source of provincial government revenue is the MUG which is payable in respect of each 'transferred activity' at levels set in accordance with a formula provided in the OLPG (Schedule 1). Hence, whether or not particular health activities have been transferred has financial consequences for provincial governments. In fact, many activities—including health activities—that have been transferred are not funded under the MUG, raising legal doubts about the validity of the funding arrangements used.

Second, the MUG funding is unconditional—it can be allocated according to the wishes of the provincial government receiving it. The grant is payable in respect of ten main groups of activities (including health, education, primary industry extension) and although the base amount payable for each activity is calculated according to pre-decentralization levels of spending on the activity by the national government, there is considerable scope for reallocation of funding among activities. Reallocation of funds can result in under-funding of important services. There is little doubt that some of the extra-legal funding arrangements outside the OLPG have been developed or kept in place largely because they involve greater national control of funds and reduce the chance of reallocation.

Personnel resources. The transfer of health personnel to provincial control is discussed later in Chapter 9. Only two points relevant to this discussion are
necessary here. First, the public service is intended to be a resource shared between the levels of government, but with those carrying out provincial functions being under provincial government direction and control (OLPG section 47). Thus, when any health activity became a 'transferred activity', all staff carrying out the activity were clearly intended to be under provincial government control. However, as will be discussed shortly, there have been some health activities—those designated as 'delegated' activities—carried out by staff at least nominally under provincial control where it has not always been accepted by the national government that the activities have been transferred. Hence, it has not always been clear which level of government had authority to control staff carrying out such activities. Second, the intent of the OLPG seems to be that provincial governments should have very limited powers to employ staff other than public servants—a limitation which causes problems in respect of health workers who are not public servants.

Mechanisms for intergovernmental relations

In framing the OLPG, it was anticipated that the deliberate lack of specificity in the OLPG about the division of responsibilities between the levels of government would leave scope for uncertainty and conflict. This is one of the reasons why the OLPG provides a range of mechanisms for dealing with potential problems in intergovernmental relations. These include the provisions for consultation between individual governments over sharing responsibility for the concurrent legislative subjects. It was envisaged that consultation would enable the national government to influence policy in the provinces and vice versa, and to facilitate joint policy making. The national government would establish broad national policies after consultation with the provinces, and the details and implementation would then be a provincial government responsibility. The main national forum for consultation and policy making was to be the Premiers' Council (Ghai and Regan 1988:17). Thus, it was expected that the respective legislative roles of the provinces and the national government could be ultimately resolved by the Premiers' Council.

Another area of concern in relation to intergovernmental relations, and one of great importance when considering decentralization of health services, was that the MUG (and other important elements of the financial package made available to provincial governments under the OLPG) tended to preserve existing levels of quite marked inter-provincial inequality. The OLPG attempted to address this issue by providing for special grants—additional unconditional grants—to redress the balance. They were to be allocated by the national government after receiving advice from an independent and expert body—the National Fiscal Commission.

Some conclusions: expected versus actual outcomes

Although the OLPG provisions comprise a relatively coherent body of rules for sharing powers between the levels of government, there have been some unexpected outcomes during the first 13 years of their operation. The health sector provides a prime example of the dissonance between anticipated and actual outcomes. In practice, provincial laws have been of extremely limited importance, both as a legal basis for the exercise of powers and as policy-making instruments. Instead, provincial governments have carried out not only most of their health activities but also many other transferred activities under administrative
arrangements of dubious legal validity, and within policy frameworks generally laid down in national government legislation. There has been little consultation over division of legislative responsibility, and little action on inequality. Uncertainty and ambiguity still persist concerning the degree of control that provincial governments have over funds used by provincial government staff in carrying out health activities.

This experience to date can be explained by a range of factors, such as lack of political maturity in many provinces, lack of capacity in central administering agencies and the operation of political and bureaucratic forces opposed to decentralization. Perhaps the major criticism is that the flexibility aimed at in the legal arrangements has created a high degree of administrative and legal complexity (Ghai and Regan 1988). This complexity has been an important factor underlying the lack of adherence to the OLPG arrangements. In particular, it has contributed to uncertainty about the way in which decentralization should proceed. Uncertainty has made it difficult for politicians and staff at both levels to understand the intended operation of the arrangements and has therefore contributed to the tendency for development of ad hoc arrangements outside the law. The reliance upon ad hoc arrangements was particularly strong in the first two or three years of provincial government when there were no clear guidelines for dealing with the massive practical problems involved in transferring functions, staff and funds from existing national departments to the new governments. But some of those arrangements have continued to operate ever since, particularly the arrangements for full financial responsibility and for the funding of 'delegated' health functions in the case of provincial governments with full financial responsibility. Uncertainty, ambiguity and complexity in the arrangements have in turn helped opponents of the provincial government system to evade requirements of the OLPG and thereby retain a far higher degree of centralized control than was anticipated 13 years ago.

Implementing the Organic Law and the decentralization of health services in practice

Reasons for some of the differences between what has happened and what was envisaged by the OLPG can be traced to the administrative mechanisms used to implement decentralization in the 1977-81 period, arrangements which in some respects were made outside the OLPG. In many respects, these arrangements remain in force in 1990—in respect of the health sector and more generally—and their origins and main elements therefore require brief explanation. The somewhat tortuous history of their operation in relation to the health sector requires particular comment.

The mechanisms for implementation of decentralization

The administrative mechanisms used for the initial decentralization of transferred activities (including health functions) to the newly established provincial governments in 1977-78 have been described in detail elsewhere (Regan 1985, 1988b) and so are only summarized here. It must, however, be emphasized that, although the OLPG contained a flexible and coherent scheme for decentralization of power, it did not purport to give guidance on how large-scale transfers of activities and staff from numerous national government agencies were to be made while the nineteen provincial governments were being established. As discussed in Chapter 2, the
initial administrative arrangements needed to achieve these transfers had to be developed in great haste during 1977.

In several ways, these arrangements were not consistent with the framework in the OLPG. Rather, they were \textit{ad hoc} arrangements developed as part of an urgent program designed under the supervision of the coordinating agencies (Public Services Commission and departments of Finance and Provincial Affairs) in order to implement the National Executive Council's (NEC) decisions on decentralization within the tight time-frame set by the NEC. The failure of some aspects of the arrangements to meet the requirements of the OLPG has contributed to a range of interrelated legal and practical problems.

In brief, the main steps in, and elements of, the implementation arrangements were as follows:

\begin{itemize}
\item in January 1977 the NEC identified the activities of all national agencies suitable for transfer to provincial governments (NEC Decision No.19 of 1977);
\item in September 1977, on the basis of a consultants' report (Mckinsey and Company 1977), a further NEC decision identified the staff of only some of the national agencies for immediate transfer (NEC Decision NG10 of 1977);
\item the latter decision distinguished between two classes of activities to be transferred, namely 'provincial' activities (those identified in the January decision) and 'delegated national activities', which were to be identified by national government agencies from among activities listed as 'national' in the January decision;
\item the national government was intended to retain a higher but unclear degree of control of 'delegated' activities but staff carrying them out were to be answerable to provincial governments;
\item as recommended by Mckinsey and Co., transfer of both categories of activities and the staff carrying them out actually took place in two stages, an initial 'notional' transfer of staff into the Department of Provincial Affairs followed (once a provincial government became operational) by transfer to provincial control through the newly created public service departments of the provinces;
\item those departments were established for all provincial governments during the 1978–81 period during which time all activities and staff should have been transferred; and
\item in 1978, concern about the accounting and budgeting capacity of most provincial governments led the Department of Finance to develop, and persuade the Premiers' Council to accept, the concept of full financial responsibility whereby the national government retained control of funding of transferred activities by determining the amounts payable without reference to the MUG formula and paying it to the departments of the provinces rather than paying it to provincial governments through the MUG.
\end{itemize}

In general, these arrangements were effective in achieving the limited but highly complex task of implementing decentralization. But the continued operation of what should have been only interim measures has given rise to ongoing problems (Regan 1988b, forthcoming a).

There is one additional aspect of the implementation arrangements which has not been discussed elsewhere. It concerns the role of NEC Decision NG10 of 1977 relating to 'delegated national activities'. There is very little in the decision
concerning this new class of transferred activities. They are not defined, merely described as activities which the NEC had earlier (in NEC 19 of 1977) identified as 'national' but which should be:

... delegated to the Provinces on an agency basis where the relevant National Department believes it is more functionally efficient to do so. (NEC Decision No.10 of 1977, paragraph 2(b))

It thus appears that the identification of the activities to be delegated was a matter for the discretion of individual departments. Little else was said about them in the decision itself. Nevertheless, a general idea of what was intended can be gathered from comments in the McKinsey and Co. consultants' report, Making Decentralization Work, which was referred to with approval in both NEC Decision NG10 and the Policy Submission which gave rise to the decision. It was evident that staff carrying out such functions were to 'report to the provincial government' while the role of national government departments was to be to 'formulate national policy, provide technical support, and have overall training responsibilities, communicating directly with field officers on these matters'. Apparently aware of the dangers inherent in such arrangements, the report indicated somewhat ambiguously how they were to be avoided. First, conflicting instructions were to be avoided by it being 'the provincial government which finally instructs the development officer in the province'. Second, in case of conflict, national policies and standards were to be 'enforced through negotiations'.

While it was evident that the 'delegated national' activities were intended to be in some way distinct from those designated as 'provincial', nowhere was the basis for the distinction made clear. In particular, were the legal arrangements for the transfer to and exercise by provincial governments and the funding of those functions to be distinct from those for other functions? Lack of clarity on those issues has been at the root of ongoing confusion about the transfer to provincial governments and the ongoing control and funding of a wide range of 'delegated' health functions.

Application of the implementation mechanisms to health functions

An outline of the main steps which have contributed to present legal and related administrative problems in the decentralization of health services is as follows.

- NEC Decision 19 of 1977 identified 'provincial' health functions regarded as appropriate for transfer, functions including rural health services (health centres and subcentres and aid posts, malaria control services, ambulance services and so on).
- NEC Decision NG10 of 1977 directed the Department of Health to transfer both the 'provincial' and—at that stage—unidentified 'delegated national activities' to the Department of Provincial Affairs.
- At about the time of the last mentioned NEC decision the Department of Health identified the 'delegated' functions, the major one being administration of provincial hospitals.
• Only some of the 'provincial' health functions were transferred to the provinces, the rest—including malaria control—remaining with the Department of Health apparently contrary to the NEC decisions.

• The mechanism used to transfer the provincial functions was the transfer of relevant personnel into the Department of Provincial Affairs—a step which took place in 1978—and from there into the departments of the provinces. Funding was provided through the MUG in the provinces with full financial responsibility and through the departments of the province in the other provinces.

• No arrangements were made to delegate relevant powers and functions under national laws necessary for the continued exercise of the transferred functions by the staff under provincial government control.

• Because of opposition in the Department of Health, it was not until 1982 that any action was taken to transfer control of the 'delegated' and other health functions previously directed to be transferred.

• Largely because of pressure from senior health officials in the provinces, in June 1982 the national government agreed to transfer 'full administrative responsibility' for the delegated functions to the provinces as from January 1983 (NEC Decision 65 of 1982), those functions including hospital, laboratory and ambulance services, malaria control and sexually transmitted disease control programs and various other functions.

• As from 1983, the staff carrying out the delegated functions came under provincial government control; but, in all provinces, funding was provided through the departments of the provinces rather than the MUG.

Three elements can be identified from this history which are vital for understanding the legal and administrative arrangements for decentralization of health functions. They are (i) the politics of the decentralization processes; (ii) the funding of the delegated functions; and (iii) the general uncertainty of the arrangements for the exercise of the delegated health functions by provincial governments. This last issue also raises questions about the changing nature of the politics of decentralization once the implementation period was complete.

The politics of decentralization. In the three year period prior to the OLPG coming into effect (the period when debate about decentralization was most intense) and in the implementation phase in the three to four years after it was passed, some of the strongest opposition to decentralization came from those sections of the national bureaucracy with the most to lose. During the implementation phase, nowhere was the opposition stronger than in the Department of Health. The Secretary of the Department was prepared and able to ignore Cabinet directions on transfer of the delegated functions. He was able to do so because of lack of commitment to decentralization among key ministers and bureaucrats. In addition, provincial governments were having difficulties in managing the functions they had already taken over and so were not overly enthusiastic about taking on significant new functions. Thus it was necessary for the senior health bureaucrats in the provinces to force the changes through.

Provincial governments were not much involved in pushing for decentralization of the delegated functions. Indeed, when the decision to transfer control of the functions was announced there was some concern among provincial governments that they might be forced to take responsibility for running provincial hospitals without adequate financial provision being made. The concern is not surprising as there had been little prior consultation with provincial governments.
and it was known that the costs of maintaining these hospitals were likely to escalate rapidly, much faster than the MUG formula would have been able to provide for. The matter was raised at the national Premiers' Council Conference in October 1982 resulting in a resolution calling for deferral of transfer of responsibility (Resolution PC31/5/82). A flurry of activity in the Department of Health satisfied the provinces that ultimate responsibility for funding remained at the national level, and the new arrangements were implemented in the 1983 national budget and endorsed by the Premiers' Council Conference in May 1983 (Resolution PC 4a/6/83).

The funding of delegated health functions. Although the functions are arguably 'transferred activities' for the purposes of MUG funding (in that staff carrying out the functions are under provincial control), they are funded through the departments of the provinces in the same way that most transferred functions are funded in the eleven provinces without full financial responsibility. Hence, in relation to funding for the delegated health functions, the accounting and planning problems caused by the full financial responsibility arrangements are experienced even by the eight provinces that have achieved full financial responsibility. The chief attraction of these arrangements for national government health officials is that provincial government politicians have little control over the funds. These are arrangements which, though of doubtful legal validity, have been generally to the satisfaction of the provinces as they have ensured that the provinces are not responsible for the funding of provincial hospitals.

The uncertainty of the arrangements for delegated functions. In a speech made in Parliament during the 1983 budget debate, and later quoted as the official policy of the Department of Health, the then Minister for Health, Mr Martin ToVadek, stated that although provincial governments were to have control of the staff carrying out the functions, there was not to be full transfer of the functions. Provinces were to have only administrative control with 'ultimate responsibility' for the functions remaining with the national government. Support and assistance were to continue to be supplied by the national Department of Health (Papua New Guinea, Department of Health 1982). The continuing national control was mainly evident in the funding arrangements for the functions.

Provincial government health functions and the organic law program

Having examined not only the aims and intended operation of the OLPG but also the ad hoc administrative arrangements used to achieve decentralization of particular functions, we are now in a position to evaluate the extent to which the arrangements for decentralization of health functions are consistent with the OLPG. In doing so we will not only consider the legal and related problems that arise from lack of consistency but also assess the extent to which the high aims of the OLPG have been met. For convenience, the following aspects of the OLPG arrangements are considered separately: the legal basis for the exercise of health functions by the provinces; funding of provincial health functions; control of provincial personnel carrying out health functions; and the impact of the mechanisms for management of intergovernmental relations.

The legal basis for the exercise of health activities by provincial governments. As a result of the history just outlined, the national government regards all the decentralized health functions carried out by provincial governments as being in one of two categories: the transferred functions which the provinces took
responsibility for from 1978, or the delegated functions dealt with by the NEC in 1982. There are a few additional health related functions which have been taken on by some provincial governments on their own initiative—for example, East New Britain Provincial Government has passed a law dealing with provision of services to physically disabled persons. In the main, however, provincial health activities are restricted to those taken over from the national government.

There are clearly established provisions in the OLPG concerning the legal bases upon which provincial governments are intended to exercise powers and functions. In particular, where staff require powers under law, these powers should be provided either under provincial law or through a valid delegation of the relevant power under a national law.

Certainly, there are many health functions transferred to, and carried out by, provincial governments where no law is necessarily required. As already seen, a decision to carry out a primary health care campaign should normally require nothing more than an allocation of funds and directions to staff. But there are many other activities where law is needed—for example, staff carrying out quarantine or infectious disease control, or health inspections of restaurants and food bars. It remains unclear whether the OLPG provisions concerning the exercise of legal powers by provincial staff are being complied with, both generally and more specifically in relation to health functions carried out by staff under provincial government direction and control. These issues and the practical implications of failure to comply with the OLPG are now considered.

Provincial laws. There is very little provincial government legislation dealing with health matters, and provincial personnel derive very few powers from such laws. As of 1990, five provincial governments had passed provincial health acts, which do little more than provide structures and procedures for the administration of health services carried out by both provincial health personnel and by church organizations. A typical law is the East New Britain Health Act 1988 which largely follows the model of provincial laws dealing with administration of the education sector. It provides for a Provincial Health Board, which has responsibility for developing a provincial health plan, and for general oversight of operation and development of health services in accordance with the plan. There are a few other provincial laws which touch on health related matters—for example the East New Britain Provincial Government law providing for services to the disabled (the Disabled Board Act 1988) and the New Ireland Rural Sanitation and Hygiene Act 1980. They are of little significance, the former being of limited scope, the latter never having been implemented.

The initial and most obvious reason for the limited provincial legislation on health matters is the extensive existing coverage of national laws dealing with health related matters. There are over 800 pages of national government laws dealing with matters directly relating to health (see Chapters 226–38, 365 and 398 of the Revised Laws of Papua New Guinea) whereas most provincial governments have passed no laws at all on health related matters.

As discussed earlier, the intent of the OLPG is that there should be room for significant sharing of legislative cover on concurrent subjects such as health. Section 114(3) is designed to enable provincial governments to initiate moves to open the subjects of their own laws. In 1984, the Premiers' Council expressed concern about the legal and practical problems caused by the limited scope for provincial laws on the concurrent subjects (Papua New Guinea, Premiers' Council Secretariat 1984:162). It resolved that the national government should carry out
a general review of the concurrent subjects with a view to leaving room for provincial laws on matters of provincial interest (Premiers' Council Resolution PC 15/7/84). No action has been taken to implement the resolution nor has there been any serious move by the provinces to pressure the national government to do so. In addition there has been no action by the provinces under section 114(3) in relation to health.

New policy initiatives are likely to be the major spur towards legislative developments by the provinces. Among the more significant reasons for the lack of movement toward greater sharing of legislative responsibility for the concurrent subjects is the lack of policy-making capacity at the provincial level. In addition, most provincial governments have enough difficulty managing their existing functions without concerning themselves with developing new policies on health and other concurrent subjects. As far as most provincial personnel are concerned, they have sufficient powers under national laws to carry out their existing health functions effectively, and there is therefore no special reason to move towards exercising those powers under provincial laws. The possible legal problems with the exercise of powers under national laws are not well understood, and it is to a discussion of these issues that we now turn.

Delegations. The only way, within the OLPG, for provincial staff to have any legal basis for exercising powers and functions under national government health laws would be for valid delegations of those powers and functions to be made. On this basis, there must be considerable legal doubt about the validity of the arrangements for decentralization of health functions agreed to by the NEC in both 1977 and 1982. The main problems arise from the fact that the scheme for delegations under the OLPG has not been utilized.

Problems arise with the many powers and functions under existing national government health laws vested specifically—or by delegation—in particular public service or other official positions. For example, the Public Health Act Chapter 226 vests many powers and functions in medical practitioners, health inspectors, other public servants and local medical authorities. Almost all such positions came under provincial control either in 1978 or 1983. The OLPG provides for staff assigned to provincial control to exercise powers under national laws through delegations under the scheme in section 43. However, powers and functions of provincial staff under national laws have neither been delegated by national law nor accepted under provincial law as envisaged by section 43. This has potentially serious practical consequences, for the exercise by either staff or politicians of powers which have not been validly delegated could be the subject of legal challenge. For example, the exercise by doctors of the draconian powers they hold in relation to infectious diseases under sections 14–47 of the Public Health Act or by a health inspector of powers to close down a restaurant or school for breaches of health regulations could be challenged by those adversely affected by the exercise of the powers.

The potential problems arising from failure to comply with section 43 were brought to the attention of the national government by the Premiers’ Council in 1989; it proposed action by both the national government and provincial governments to ensure that the requirements of section 43 were met (Premiers’ Council Resolution PC 16/12/89). As of late 1990, there is no evidence of any action by either level of government to regularize the position in relation to health or in relation to any other sector.
Funding of provincial health functions. The clear intent of the OLPG that transferred functions be funded by way of the MUG has been circumvented by the national government in various ways. This is particularly evident in relation to health functions. If, as argued earlier in this chapter, the transfer of control of staff to a provincial government amounts to transfer of the functions those staff are carrying out, then both the provincial and the so-called delegated health functions have been transferred to the provinces and so should be funded under the MUG. The fact is, however, that only the provincial health functions are so funded, and only in the eight provinces with full financial responsibility. There is serious doubt about the legality of funding transferred functions other than by way of the MUG; in any event, funding through the departments of the province is unconstitutional, for the departments themselves have been held by the Papua New Guinea Supreme Court to have no legal basis (SCR No.1 of 1984; Morobe Provincial Government v. The State and Somare [1984] PNGLR 212). To date, the national government has ignored the Supreme Court ruling and continues to allocate funds to the departments of the provinces, apparently oblivious to the legal problems involved (Regan 1988b). Thus the arrangements for funding not only the provincial health functions in the provinces without full financial responsibility but also the delegated health functions in all provinces must be of doubtful validity.

In relation to the funding of the 'delegated' health functions, some provinces do not want provincial hospitals (the most costly items) to be funded under the MUG while the present MUG formulation applies. Equally, the national government would be concerned that funding of hospitals under the MUG might result in allocation of funds away from the hospitals.

To deal with these concerns, it may be argued that the provisions of section 65 of the OLPG should apply. Section 65 permits payment by the national government of conditional grants 'for any purpose agreed on' between the national government and a provincial government. In other words, although the OLPG envisages transferred activities being funded by way of the MUG, if it is 'agreed', then it may be possible instead for them to be funded by conditional grants. This argument provides more flexibility than any other alternative, and so is more in keeping with the needs of a decentralized system. Conditional grants would enable national control through the nature of conditions attached. Such grants are allocated to provinces directly, and accounted for by provinces themselves, rather than allocated and retained within the national budgetary and accounting systems. Hence, at least in the provinces with full financial responsibility, the dual accounting system would be less necessary.

As part of budget reform (eventually planned to extend to all provincial governments), new arrangements for funding two of the provincial governments with full financial responsibility—East New Britain and Madang—were made in the 1991 National Budget, passed in November 1990. These involve using conditional grants for all functions that had previously been funded through the departments of the province, the sole exception being the provincial hospitals (Papua New Guinea, Department of Finance and Planning 1990: Part 2, 418–26).

Amendments to the OLPG, which would regularize the position by enabling provinces without full financial responsibility to be funded as if they were public service departments rather than by the MUG, were published in the National Gazette in November 1989. They had not been fully debated in Parliament by the end of 1990.
Senior officials in the Department of Finance and Planning advised that the hospitals should continue to be funded through the departments of the provinces due to insistence by the Department of Health that the tightest possible control be kept of hospital funding (personal communication December 1990). The position of the Department has little to recommend it, in that conditional grants can be used to impose just as tight a set of controls as the funding through the departments of the provinces but without the legal, administrative and planning problems associated with the latter.

**Provincial government health personnel.** Prior to 1983, problems were experienced in the discipline of staff carrying out non-provincial health functions in the provinces. This issue was resolved by the 1982 decision on the delegated functions, whereby the staff carrying them out were placed under provincial control. One other legal problem relating to provincial health personnel concerns the fact that aid post orderlies carry out provincial health functions. As foreshadowed earlier in the chapter, the issue arises because although the OLPG purports to restrict provincial government use of personnel who are not members of the public service, aid post orderlies fall into that category and so, strictly speaking, should not be employed by provincial governments. The problem seems to have arisen because of an oversight at the time the OLPG was being drafted. It is expected that the problem will eventually be resolved by incorporating orderlies into the public service.

**Mechanisms for intergovernmental relations.** The Premiers’ Council and the National Fiscal Commission have failed to play their anticipated roles in relation to the health sector. The Premiers’ Council was expected to play a vital role in determining the division of responsibility between levels of government (as well as in resolution of more general disputes). Likewise, the National Fiscal Commission was expected to be active in promoting equality of service provision within provinces.

Because questions of division of responsibilities have not been matters of major controversy, the Premiers’ Council saw no need to step forward. The provincial governments instead tended to accept the national government’s decisions on such matters. Indeed, as noted above, the transfer of control of the delegated functions was more the result of pressure from health bureaucrats than political pressure from the provinces or via the Premiers’ Council. In fact, transfer of part of the delegated functions—provincial hospitals—was initially opposed by the Premiers’ Council at its 1982 conference. The reasons for the lack of provincial government concern on such matters are much the same as those noted for the lack of provincial government laws on health matters. This is not to say that the Premiers’ Council has not played any role at all in relation to the health sector. It has provided a venue for the discussion of misunderstandings (for example, concerning the delegated functions, as discussed at the 1982 and 1983 Premiers’ Council conferences). The national Department of Health has passed on information through the Council, for example, in presentations to the 1986 and 1990 conferences concerning the National Health Plans to be implemented in the following five-year periods (Papua New Guinea, Premiers’ Council Secretariat 1986, 1990). Particular provincial governments have also used the

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3 There was a move in the Premiers’ Council in 1981 for the transfer of the malaria control programs (Papua New Guinea, Premiers’ Council Secretariat 1981:140–2; Premiers’ Council Resolution PC 20A/4/81). Like most resolutions of the Council, it had little impact on the national government.
Centralization of Papua New Guinea's Health Service

Council to raise matters of concern over health, for example, Southern Highlands in 1979 about the lack of a malaria control program in the Province, and East New Britain in 1988 about the need for tighter legislative control over illicit drugs.

The National Fiscal Commission has had almost no impact on inter-provincial equalization despite high hopes held for it when the OLPG was passed (Manning 1979:10). It was expected that the national government would allocate large amounts of funds as 'additional unconditional grants' under OLPG sections 64 and 79 which were to be distributed largely on an equalization principle according to the Commission's recommendations. In fact, due to bureaucratic and political opposition and indifference to provincial government, such small amounts of revenue were made available for these purposes that the grants were entirely discontinued after 1984. After that, equalization was supposed to become the concern of the National Public Expenditure Plan—later the Public Investment Program (Papua New Guinea, Department of Provincial Affairs 1984: Volume 2:66-71). In fact, there is no evidence of there having been any serious commitment to equalization of services at any time since the provincial government system began (Axline 1986b:102-9).

In summary, then, the mechanisms designed to facilitate intergovernmental relations have been disappointing in their operation. This is due in part to the lack of serious concern over distribution of responsibility for health functions and in part to the lack of national government commitment to the goal of inter-provincial equalization which consequently made the National Fiscal Commission redundant.

Conclusions

While it has not been possible here to assess the extent to which the general aims of decentralization have been met (for example, greater governmental efficiency and responsiveness), some general conclusions can be drawn about the performance of the OLPG as the vehicle for effecting the decentralization processes.

The establishment of nineteen provincial governments as new elected governments, and the distribution to them of functions and resources previously held by a highly centralized bureaucracy, is an impressive achievement for any country. Given the general circumstances of newly independent Papua New Guinea and the strong bureaucratic opposition to decentralization, this achievement is greater still. In this overall sense, there is no doubt that the OLPG achieved its aim.

However, many of the OLPG's other aims have fallen by the wayside. More than 13 years after the OLPG was passed, provincial government laws continue to be almost irrelevant as a basis for the exercise of provincial health functions. In general, provincial governments continue to be largely delegated providers of health services rather than joint policy initiators with the national government as envisaged by the OLPG. Even the powers they do exercise are not securely vested in the provincial governments in accordance with the OLPG scheme for delegation of powers between governments. Other aspects of the OLPG are not observed or are clearly breached. They include funding and staffing arrangements. The delegation and funding arrangements have resulted in the national government having much greater control of provincial governments than had been envisaged by the OLPG.

There is clearly room for changes to bring the process of decentralization more into line with the OLPG's original aims. In particular, action is needed to ensure
that provincial health staff exercising powers under national government laws do so in accordance with valid delegations within the OLPG framework. Such a move would lessen the likelihood of the actions of provincial staff being subjected to legal challenge. Further, funding arrangements for decentralized health functions should be changed, the simplest way being to fund at least the 'delegated' functions (those decentralized in 1983) by way of conditional grants rather than through the departments of the provinces.
CHAPTER 5

The transition to decentralization

Q. Reilly

Planning for decentralization

Decentralization was first raised as an issue in the health sector at the 1972 District Health Officer’s Conference in Port Moresby. At this conference plans for the administrative decentralization of health services began to take shape. These plans culminated in a submission to the National Executive Council (NEC) in 1976, recommending the way in which responsibilities for health functions should be divided.

Those functions that were to be entirely the responsibility of the national Department of Health were to be national functions and those that were to be entirely the responsibility of provincial governments were to be ‘transferred’ or provincial functions. A third category comprised delegated functions. Delegated functions were national functions to be performed by provincial health staff under the direction of the provincial health officer (called the Assistant Secretary of Health after decentralization). The national Department of Health was to budget for these functions in consultation with the provincial health officer. Financial allocations were to be given to the provinces to carry out these functions. A headquarters monitoring system was to be set up to ensure that these functions were carried out correctly. It was envisaged that most of the delegated activities could be given over completely to the provincial governments in the future. Table 5.1 lists the division of functions in the health sector.

In accordance with the NEC directives, a Provincial Government Section was established in the Department of Health in August 1977. The duties of the unit were to organize the Department’s decentralization by liaising with the Department of Decentralization and others. This paper describes the period of transition between the decision to decentralize and the final implementation of that decision.
Table 5.1  Division of health functions under decentralization

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<td>• Health centres</td>
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<td>• Home medicines and self care</td>
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<td>• Health committees and health boards</td>
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<td>• Ambulance services</td>
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<td>• Family health services</td>
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<td>• Supervision of disease control programs</td>
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<td>• Malaria control</td>
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<td>• Extension services</td>
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<th>Nationally retained</th>
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<td>• Ultimate responsibility for all hospitals and medical, dental, nursing, preventive health and disease control services</td>
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<td>• Monitoring of standards of health service activities across the country and ensuring satisfactory standards are maintained</td>
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<tr>
<td>• Pharmaceutical services</td>
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<tr>
<td>• Mental health, radiotherapy and specialist medical services</td>
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<tr>
<td>• National health legislation, planning, policy formulation and evaluation</td>
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<tr>
<td>• Medical training</td>
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<tr>
<td>• Provision of services to the Medical Board, Nursing Council, Standing Committee and ad hoc organizations relating to the functions of the department</td>
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The plans and their implementation

An eight-step plan for decentralization of health functions was prepared. The steps were as follows:

• prepare a detailed organizational structure for each province;
• establish budgets and administrative procedures;
• revise Department of Health staffing;
• establish post of Administrative Officer for provinces;
• establish agreements with provinces for delegated activities;
• develop relationships with provincial governments;
• reduce inter-provincial differences; and
• promote positive relations between provinces and the Department of Health.

Step 1—Prepare a detailed organizational structure for each province by:

• dividing staff and physical facilities into the three groups (national, delegated and provincial);
• identifying positions to be created or abolished in the province;
• confirming organizational structures; and
• amending duty statements.

Implementation. The division of staff and facilities into the three groups—national, delegated national and provincial—was relatively straightforward. The
main problem was that the Department of Health would not release financial control for the staff performing delegated activities. Their activities and their salaries would continue to be funded by the national Department. In the public service structure, however, they were to be members of the provincial department with the Administrative Secretary as their departmental head.

It was not possible to construct complete organizational structures for each health division of every province because of poor records kept at the Department of Health. The section of the Department which dealt with staffing did not know what positions were available in provinces or who filled them. Partially successful attempts were made to construct staffing lists for each province in liaison with provincial authorities. 'Bulk' positions—that is, positions of similar level that had been used in any province—were allocated to specific provinces.

A similar problem was found with duty statements, which were out of date and not specific to the tasks to be performed. However, the new duty statements only transferred each position to the particular provincial department from the Department of Health and were not otherwise updated. These amended duty statements were then sent to the Public Services Commission for their records.

**Step 2: Establish budgets and administrative procedures by:**
- establishing budgets for the three groups (national, delegated national, provincial); and
- confirming costings with Finance Department.

**Implementation.** The budget was established by reconstructing final expenditure figures for 1977. Expenditure figures were divided by functional responsibility into provincial, delegated national and national. Later, the delegated national and national functions were combined to give one national Department of Health costing. The separation of functions financially was a straightforward matter. Confusion arose, however, over the delegated activities being funded nationally while the staff performing these activities belonged to the provincial department.

**Step 3: Revise Department of Health staffing by:**
- identifying staff previously engaged in functions now taken over by the province;
- identifying new roles and writing duty statements; and
- identifying staff reductions.

**Implementation.** Most staff in the national department resisted revising the departmental structure as many officers felt their position was threatened. Clerical workers residing in Port Moresby thought that they would be transferred to the provinces. Technical officers saw that their administrative power would be diminished. Many of these technical officers were not well qualified, which made them uncomfortable about their new role as expert and technical advisers.

A committee of three senior officers from the Department was established to restructure the Department of Health. This committee's terms of reference were to remove much of the administrative workload from departmental staff, to ensure that position holders were well qualified to be advisers to the provinces and to rearrange public service levels of positions to fit the new activities. The committee recommended that the number of major departmental divisions be reduced from five to two.

Many senior officers of the Department rejected the proposed new structure and some counter proposals were suggested. The resistance resulted in no action
being taken to change the structure of the Department. It was thus exceedingly difficult to effect any staff reductions. This lack of response reflected the general lack of compliance with decentralization by the Department of Health administration.

Step 4: Establish post of administrative officer for provinces by:
   - creating a new position for each province;
   - writing a handbook on budgeting and monitoring;
   - running training courses for administrative officers; and
   - posting administrative officers to provinces.

Implementation. The provincial structure needed modification to allow for the creation of an administrative officer responsible for budgeting, receiving and collecting financial reports and monitoring the activities to be delegated to the provinces. The Public Services Commission was approached to create the posts of administrative officer for each province. It took a year to convince the Public Services Commission of the need for such positions, and the positions were eventually advertised two years later. The selection of officers to fill these positions was made in conjunction with the provinces and usually a person already in the province was selected. Because of staff changes and resistance in the Department of Health, no training course was held for these officers.

Step 5: Establish agreements with provinces for delegated activities by:
   - laying down procedures and standards of performance;
   - preparing written agreements on carrying out delegated activities;
   - agreeing on monitoring procedures; and
   - preparing written agreements for training institutions to use provincial establishments.

Implementation. Agreements to be signed by the Secretaries of the Department of Health and the department of each province were drawn up so that provincial health institutions and staff could be used to help with the training of health workers. Training of health workers was designated a national activity (except for nurse aide training) and thus agreements were necessary for their training to take place in the provinces. Many training institutions were integrated into service activities, and limits to the use of service staff in training and trainees in service work had to be set down. An eight-point document was produced, and this was taken to each province for signature. Most provincial secretaries or administrative secretaries signed the agreement for training health workers, though it was viewed by some as an infringement of provincial rights. The problem was later resolved and the agreement was signed by all provinces.

Agreement on arrangements for delegated activities to be carried out by the provinces was less easily reached. When activities are delegated to another authority to carry out, the authority delegating must be able to measure whether the delegated activities are being performed satisfactorily. This requires the setting of standards for the activities and then monitoring to see if these standards are achieved.

The Provincial Government Section of the Department requested that suitable standards be set for all delegated activities by the Department of Health. These standards were then to be monitored using the administrative officer of each province as coordinator. Except for nursing, however, no standards were set down by the national Department of Health. Thus, the delegated activities were
given to the province to perform without establishment of expectations or any proper form of monitoring or control. The only real exception to this was the malaria program which, because of its highly centralized organization, had developed methods of monitoring anti-malaria activities.

The lack of overall standards for delegated activities resulted in the provincial health officers having extensive influence on the health programs in their provinces. In provinces with an active and experienced provincial health officer, this was an advantage; programs were well run and health service standards were maintained. In those provinces which had less capable officers, the lack of standards and monitoring proved to be a serious problem.

**Step 6: Develop relationships with provincial governments by:**
- ratifying agreements between the Department of Health and provincial governments;
- visiting each province to brief the provincial government and health staff on the transitional arrangements;
- agreeing on information flows and channels, between provincial officers in charge and headquarters;
- determining arbitration mechanisms for handling disputes; and
- identifying issues most likely to cause contention in future and seeking their resolution.

**Implementation.** Staff from the Provincial Government Section of the Department of Health visited all provinces, except one, to talk with provincial staff and explain decentralization. A circular was sent to all health staff from the Secretary for Health informing them that, in June 1978, most health workers would be transferring from the Department of Health to the department of the province in which they were working. Efforts were made to explain the workings of decentralization to the more centralized sections of the Department of Health, especially the malaria service.

The flow of information was to follow the administrative structure through to the divisional head. Technical reports would be sent to the national Department of Health and administrative reports to the provincial Administrative Secretary. Financial reports on delegated activities would still go to the Department of Health as it funded the operation of delegated activities. Disputes between the national and provincial departments were to be solved by the provincial and national Executive Councils. Before such action was taken however, the two Departmental Secretaries would confer and attempt to resolve the problem. In practice, this mechanism worked informally and many minor problems were solved by the provincial health officer contacting Department of Health officials.

To promote communication, a monthly newsletter was established to disseminate information and also to attempt to keep close relationships between the provincial Health Division and the Department of Health. This publication was called *Provincial Health News* and remained in circulation for about eight months. Unfortunately, when the Provincial Government Section of the Department was disbanded, it was not continued. There were a few editions put out by provincial health officers, but communication and other problems limited the newsletter's lifetime.
Step 7: Reduce inter-provincial differences by:

- updating the inventory of health resources;
- identifying large variations in health status between provinces through the National Health Plan;
- allocating health expenditure between provinces on the basis of need; and
- constructing three-year health plans for each province.

Implementation. None of the elements of this step were accomplished.

Step 8: Promote positive relations between provincial officers in charge and health headquarters by:

- circulating a monthly information paper; and
- developing an administrative handbook for provincial officers in charge.

Implementation. The monthly information paper ceased production in June 1978. The Provincial Health Officer’s handbook was never produced because, after the disbanding of the Provincial Government Section, no other section of the Department of Health was assigned responsibility to develop the handbook.

Proper plans were developed for management of the transition to decentralization in the health sector, but the implementation of the eight-step plan was poor. There were two major reasons for this: first, many of the Department of Health staff did not appreciate and understand decentralization and, as a consequence, sought to resist its implementation; and second, the personnel and establishment records had been very poorly maintained making it administratively difficult to make the necessary changes.

Decentralization problems

Resistance to change

Early in 1980, two years after decentralization officially took place, a meeting was called at the Regional Training Centre for the New Guinea Islands to discuss the decentralization of health functions. The Administrative Secretary for East New Britain gave a paper noting that there had been problems with the transfer of administrative and political powers related to health which resulted in ambiguity, ill-defined authority and responsibility relationships, and in some instances, duplication of positions and services. He further pointed out that ‘the provision of assistance from Headquarters personnel has virtually broken down completely with very little meaningful advice being given to the province’s health personnel’.1

Later in 1980, at the annual meeting of provincial health officers, the Secretary for the Department of Western Highlands addressed the meeting on his experience of decentralization. He saw the shortage of skilled labour as a major constraint to improving services in his province. The other major problem areas were political interference, the attitude of national departments and the disintegration of national unity. He further listed the problems of resistance to decentralization from departmental officers at the national level.

1 From a paper delivered by the Secretary for East New Britain at the Vunadidir Conference on Decentralization, 1980.
They fear a loss of control and a decline in status, so they totally oppose any decentralization and refuse to delegate any decisions.

They try to totally ignore decentralization in the belief that it is only a passing phase, that provincialization will be dropped in a couple of years, and that the departments will be centralized to Port Moresby.

They politely remember to ask the provinces their opinion about some matters, informing them of *fait accompli* decisions on some others, but not really considering that they are real, proper independent government departments who have the power or capability to make any major decisions.

They totally withdraw from doing anything, refusing to make any decisions, and saying to any question that is asked ‘That’s for provincial government to decide’. This usually happens when it is a problem that Port Moresby has never been able to solve, and the provincial government is given no staff or any resources to tackle it.²

As if to emphasize the criticisms made by the two Secretaries, the divisional heads of the Department of Health presented a paper at the same conference, in which they proposed that most of the delegated activities should become national and be administered directly from Port Moresby. The group was determined not to relinquish control over the country’s health services. The paper stated that the Department of Health was now withdrawing the delegation of all delegated functions. It also advocated one or two minor activities to become fully transferred instead of delegated. The reason stated for these changes was the confusion over the interpretation of the word ‘delegated’. This proposal was not well received by the provincial health officers. As a result, the relations between the Department of Health and the provinces continued to deteriorate.

Another important factor that adversely affected relationships between the Department of Health and the provincial departments was that many of the provincial health officers were expatriates, whereas the Department of Health staff were predominantly Papua New Guineans. Some of these provincial health officers were forthright proponents of decentralization and were seen by some of the Department of Health staff as direct threats to their power.

### Staffing problems

The physical decentralization of the Department of Health did not include the staff and salaries section. All health workers continued to be paid through this section which was one of the least efficient sections of the national Department of Health, and considerable problems in staff payments continued to occur after decentralization. Instances were known of staff not being paid for six months after returning from recreation leave. In late 1983, a provincial staff unit was set up in the central government offices and this responsibility was removed from the Department of Health.

Various ‘posting committees’ continued to exist in the Department of Health after decentralization. These committees served a useful purpose in allocating new staff to provinces and helping solve inter-provincial staff shortages and redress inequities. However, these committees initially exhibited a tendency to

² From a paper delivered by the Secretary, Department of Western Highlands, at the 1980 Provincial Health Officers’ Conference.
arrange inter-provincial transfers of provincial staff without consultation. Instances of these committees asserting provincial powers occurred as recently as 1981. In one case, the health extension officer appointment committee interfered with the already arranged transfer between two provinces of a hospital secretary. This bureaucratic interference resulted in the person losing his position. The actions of the Department of Health continued to strengthen the provinces' belief that they could do a much better job if the finances and authority were transferred to them.

**Monitoring of standards**

Most sections of the Department of Health did not take up the new responsibility of visiting provinces and providing technical advice. This lack of guidance was serious in provinces with inexperienced provincial health officers. Eventually, the national medical officers brought the lack of direction and management from the national Department of Health to the attention of the politicians. The first instance of this was in early 1982 in a controversy about the standard of health care at the Port Moresby General Hospital. Shortly after, trainee health inspectors and health extension officers held a strike to point out the inability of the Department to post them upon graduation. Public service employment problems had created a situation where some provinces required health extension officers but could not employ new graduates, because the new provincial health establishments had not yet been created.

**Transfer of power**

The 1981 Papua New Guinea Health Divisional Heads Conference resolved that implementation of full decentralization of all national delegated functions should begin immediately with the malaria program. Other important resolutions were that the national Department of Health should carry out budgetary control of national delegated functions on a level comparable to that exercised by the Division of Provincial and Statutory Institutions of the Department of Finance; that the functions of hospitals, malaria control and environment should remain as tied grants; that provinces which believed more positions were needed must negotiate any change in establishment directly with the Public Services Commission and Finance; and that the role of the national Department should become one of providing advice and support to provinces as well as facilitating coordination between provinces.

A further resolution at the same conference was that staff transfers to a province must not occur without the approval of the secretary of the provincial department.

There continued to be, however, resistance in the Department of Health, to these resolutions. In response, the Minister for Health in May 1982 had two NEC policy submissions drafted with the purpose of ensuring proper decentralization of health services. The first was entitled 'Restructuring and staffing of the Department of Health Headquarters' and sought approval to recommend appropriate changes to the organization, positions, functions and duties of staff at the Department of Health, with particular regard to top management structure and staffing.

The second submission was to seek NEC approval for the implementation of measures to ensure decentralization of finance and staff employed on nationally delegated health functions, in accordance with NEC Decision 19/77 NG10/77.
and the Organic Law on Provincial Government (OLPG). The text of the submission stated that the Cabinet decisions had not been followed and that transfer of staff and funds to the provinces in accordance with NEC decisions and compliance with the OLPG would overcome many of these problems. The submission recommended that the funds for delegated activities previously given to the Department of Health be provided directly to the provinces from 1 January 1983 and that the Public Services Commission actively assist the Department of Health and the departments of the provinces in arranging the orderly transfer of staff engaged in these functions from national to provincial staff positions.

The latter submission was passed by the NEC in June 1982; the recommendations contained in the former were incorporated into the NEC resolution on the 1983 budget in November 1982.

Naturally, the Department of Health staff were not pleased with these submissions and the Secretary for Health wrote a letter to the Minister of Health demanding an apology. The Minister responded that there would have to be personnel changes and an improved performance by the Department of Health to fully implement the 1977 NEC decision. In July 1982 the Secretary for Health went on long leave and the Minister for Health called in a senior experienced provincial health officer to become acting Secretary. Not only was the new acting Secretary for Health from a province but he was not ethnically a Papua New Guinean. This caused an uproar among the divisional heads of the Department of Health. Public protests were made by the divisional heads. However, support for their protests was not forthcoming from the health worker unions or field health workers.

In October 1982 the Premiers' Council passed a resolution requesting the national government to defer the transfer of hospital and other health functions pending satisfactory consultation and negotiation between the national and provincial governments (1982 Premiers' Council Resolution—Publication of Premiers Council Secretariat). The Minister for Health, however, was adamant that the NEC decision would be implemented on time, and further consultative meetings were arranged at an administrative level between the provinces and the new acting Health Secretary. In the 1983 budget brought down in the November sitting of Parliament, the funding for the health delegated activities was given under the provincial vote numbers and not under the Department of Health vote numbers. The Cabinet decision associated with the budget also called for a reorganization of the Department of Health as well as a review of some areas of national health policy.

The basis for the negotiations and consultations with the provinces was the Department of Health circular memorandum number 173/82 of 7 December 1982 entitled 'Administration of health functions in the provinces'. Meetings were held both in regional centres and the national capital between senior officers of national and provincial departments.

This circular emphasized the need for improved working relationships between provincial departments and the national department for the betterment of health services. The consultations between the provincial and national department senior officers proved to be satisfactory and decentralization took place on 1 January 1983. Only the Morobe Provincial Government remained hesitant about taking over the responsibility for managing the country's second largest hospital—the Angau Memorial Hospital at Lae. This transfer of responsibility in Morobe was fully effected late in 1983.
Restructuring

Using the new functions of the Department as a basis for consideration, a committee consisting of representatives from the Public Services Commission, Departments of Finance and Health, the National Planning Office, the World Health Organization and the University of Papua New Guinea drew up a new structure for the Department of Health. The committee decided that six divisions should be placed directly under the Secretary's Office. The new Department should use committees to gain expert advice and help it in its policy and technical decisions.

The Public Services Commission approved in principle the new structure in February 1983. In the same month, the acting Health Secretary was confirmed as the new 'permanent' Health Secretary thereby confirming the government's determination for change.

At the NEC meeting held to discuss the 1983 budget, a decision was made to retrench public servants whose positions were affected by changes in government policy or economic cuts in government funding. Those who had their positions abolished were placed on a redundancy list and offered either voluntary retrenchment or a different position if one could be found. If no funded vacant position could be located for the redundant worker, then the worker was retrenched. With decentralization of health activities and the reduction in the size of the Department of Health in 1983, a large number of employees were placed on the redundancy list.

Many departmental officers who had been opposed to decentralization and to the changes in the Department of Health took voluntary retrenchment. Some experienced officers who were from provincial health divisions and health training institutions were brought in to replace those who left the Department. These staff changes resulted in an improvement in the working relationship between senior departmental officers and the provinces. Morale among staff at headquarters also improved. All the committees associated with the new structure were properly established by early 1984.

At the 1983 Premiers' Council, the premiers passed a resolution supporting the decentralization of health functions. The premiers were satisfied with the consultation that had taken place between the provincial departments and the Department of Health concerning decentralization. They also expressed their approval of the organizational and administrative changes that were taking place in the Department of Health.

Conclusion

It took five years, from 1977 to 1982, for the implementation of decentralization to be finally completed. Strong resistance to change was encountered from those who stood to lose the most, namely the senior staff of the Department of Health. Bureaucratic problems, particularly in matters of staffing, hindered the smooth transfer of powers, and health service standards were adversely affected during the transfer period. This decentralization of health functions marked only the first step in the long road to making decentralization work to the benefit of the population as a whole. The remainder of this book considers the results in more detail.
CHAPTER 6

Performance of the health system under decentralization

W.C. Newbrander, I.W. Aitken and R.-L. Kolehmainen-Aitken

Introduction
The ultimate test for decentralization of health services is whether it makes a positive impact on health service delivery and the health of the people. As is true of other sectors (Conyers 1981 and 1983), few researchers have critically examined the performance of decentralized health systems or the resultant changes in health indicators (Gonzales-Block et al. 1989; Mills et al. 1990), even though the expected benefits of decentralization have been widely discussed in the literature (Djukanovic and Mach 1975; Vaughan et al. 1984b).

Decentralization in Papua New Guinea dictates that the provinces set their own health service priorities within overall national guidelines, that they estimate the financial and human resources required, prepare and defend their submissions with central government departments, supervise health service activities, and monitor progress. A full assessment of the decentralization experience in Papua New Guinea requires not only an investigation of the components of the health system (such as its organization, finances, planning, human resources and management), but also a study of its actual performance in delivering services and influencing the health status of the people.

It is the purpose of this chapter to investigate whether decentralization has had an effect, positive or negative, on the delivery of health services in Papua New Guinea. The effects of decentralization can be evaluated in several ways. This chapter uses two complementary approaches. The first section reports a statistical data analysis of health service utilization in an attempt to identify any changes which may be attributable to decentralization. The second is an extended commentary on these findings which examines those factors which are normally the major determinants of health service performance.

Statistical analysis of the impacts of decentralization

Design
The study examines the impact of decentralization on the performance of the health system. The ultimate purpose of the health system is to improve the health status of the population. However, health status is dependent on a number of factors in addition to health services. Further, factors directly affecting the health system may take a prolonged period before they influence health status.
indicators. The post-decentralization period in Papua New Guinea has been quite short and may not yet show such effects in health status indicators. It was therefore decided that health service performance indicators, rather than health status indicators, would be the best measures of any effects of decentralization. The study focused on maternal and child health (MCH) service performance because these services directly affect high-risk population groups, and the data were readily available.

The successful provision of MCH services in Papua New Guinea depends on committed staff and regular transport for mobile clinics. These services are particularly vulnerable to organizational changes which may influence management, such as supervision, availability of necessary equipment, and financial and human resources. Decentralization introduced fundamental organizational changes, and can thus be postulated to have affected MCH service performance.

MCH services and their delivery are affected not only by the health infrastructure and its organization but also by many factors external to the health system, such as the social, economic, demographic and political characteristics of the population. These factors must be accounted for in the model used to test any hypothesis on the impact of decentralization.

Model specification

Based on the postulated benefits of decentralization as described in the literature, it was hypothesized that decentralization should improve MCH indicators. Because other factors have a bearing on MCH indicators but are not directly related to decentralization, the general model for the statistical analysis was:

\[ Y = f(R,D,P,D) \]

where

- **Y** = dependent variable
- **R** = resource factors
- **D** = demographic factors
- **P** = political factors
- **D** = decentralization

Dependent variables

The measures chosen for the dependent variables were indicators of the health system’s ability to deliver basic health services for mothers and children, and considered essential to the improvement of their health status. For the first analysis below (examination of raw data), the total number of institutional births was used as the dependent variable. This provides an indication of the health system’s accessibility to the population.

Antenatal clinic coverage is a measure of outreach. This dependent variable was used in the second step of the data analysis, the paired t-test. The coverage was calculated by dividing the total number of antenatal mothers seen at the clinics by the estimated number in the target population (the expected number of pregnant women in the province for that year).

The level of immunization coverage is an even more critical indicator of the ability of the health system to deliver services. For this measure, the DPT (triple antigen) immunization coverage of children under one year of age was chosen for the third step of the study, the regression analysis. DPT immunization requires three doses for complete protection, so only the third dose coverage figures were
used. The coverage was calculated by dividing the total number of third dosages given to infants by the estimated target population in the province for that year. The latter had been calculated on the basis of 1980 census data, updated by the provincial growth rate to the respective year.

**Independent variables**

Variables other than decentralization were included in the regression analysis to reflect resource availability and socioeconomic and political factors which could have an impact on the performance of the MCH system. The independent variables chosen and their anticipated effect on the dependent variable, DPT immunization, are described below. The specific measures used for each of these variables are summarized in Table 6.1.

<table>
<thead>
<tr>
<th>Table 6.1 Independent variable measurements</th>
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<tr>
<td><strong>Resource factors</strong></td>
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<tr>
<td>NURS</td>
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<tr>
<td>AUTO</td>
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<td></td>
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<tr>
<td><strong>Demographic factors</strong></td>
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<tr>
<td>EDUC</td>
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<td>GROW</td>
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<tr>
<td>DENS</td>
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<tr>
<td><strong>Political factors</strong></td>
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<tr>
<td>ISLD</td>
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<tr>
<td></td>
</tr>
<tr>
<td>HIGH</td>
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<td></td>
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<tr>
<td>MOMA</td>
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<tr>
<td></td>
</tr>
<tr>
<td><strong>Treatment factor</strong></td>
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<tr>
<td>DECN</td>
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**Resource factors.** The ability to deliver basic services is a function of the inputs available. Nurses are the most important health care providers of maternal and child health services. Great inequities exist in the distribution of nursing staff among the provinces (Kolehmainen-Aitken and Shipp 1990). To account for this and the varying need for nurses, which depends on the population served, the number of nursing officers per capita for each province was used as the measure of this variable, denoted as NURS. It was expected that this would be positively related to the dependent variable, that is, the higher the number of nurses per capita, the higher the immunization coverage.

Some provinces have the advantage of greater economic resources and development. Attempts were made to gather annual data on the actual supplemental funds provided by provinces to the health sector. Such historical data were not available for all years covered by this study. As a result, a dummy
variable, AUTO, was used for each year to signify whether the province was financially autonomous that year. These were the provinces which were granted full financial responsibility (FFR). As discussed in Chapter 8, the provinces with full financial responsibility have greater flexibility in determining the allocation of provincial funds. Some of the financially autonomous provinces also have greater economic resources available to them, which allows them to supplement the minimum unconditional grant (MUG) to finance provincial health services. The expected direction of the coefficient of this variable could not be specified, because it depends on political priorities. If health is a priority to the political decision makers in the province, the health sector will receive a greater share of provincial resources, resulting in increased immunization coverage.

**Demographic factors.** Demographic characteristics of the population are a key element in determining the provision and utilization of health services. For this, three variables were used: school enrolment, population growth rate, and population density.

The variable EDUC measured school enrolment as a percentage of possible enrollees. This was a proxy for the literacy rate of the province since those data were not available. Educational level was included for two reasons. First, a more highly educated population is more predisposed to use basic health services, especially MCH services. Second, if decentralization results in improving local participation in decision-making for health services, provinces with a more educated population will be more likely to develop health services that people want and will use. This factor is expected to have a positive coefficient since the higher the province’s educational level the greater the use of health services and thus the wider immunization coverage.

The variables GROW (population growth rate) and DENS (population density) were used to measure some of the key characteristics of the provincial population which affect health service coverage. A high population growth rate makes it more difficult for the provincial health system to meet the needs of the population. As a result, immunization coverage may be lower compared with an identical province with a smaller population growth rate. The greater the population density, on the other hand, the easier it is to reach a greater proportion of the provincial population with basic health services such as immunization. Thus, it was expected that GROW would have a negative coefficient, and DENS a positive coefficient.

**Political factors.** The disparities in financial resource allocations for health among the regions are noted in Chapter 8. There are other historical, economic and developmental factors that result in some regions being more highly developed and self-sufficient than the provinces of other regions. For example, half of the financially autonomous provinces are in the Islands region. This group of provinces has a greater opportunity to provide increased financial resources to health services. Regional differences can also result from differing rates of political development. Again, the Islands region has a greater political maturity and voice than the other regions. The purpose of these independent variables was to identify factors unique to each region. Three dummy variables, ISLD, HIGH, and MOMA, which characterize the political differences among these three regions relative to the fourth region, Southern, were used. Thus, there was no expectation of the direction of the coefficients of these variables.
Decentralization factor. The primary question of interest was whether there was a significant difference in the provinces’ delivery of MCH services after the introduction of decentralization. A dummy variable which took the value of one for the post-decentralization period and zero for the pre-decentralization period was employed for this variable. The coefficient of this variable was the key indicator of the effect of decentralization on the DPT immunization coverage, the dependent variable.

Sources of data

Because the decentralization of health services in Papua New Guinea occurred largely as a result of a political process, no special effort had been made to collect baseline data prior to its implementation or to monitor its progress afterwards. Thus, this study had to rely on data collected through the national government’s health information system and other routine reporting systems. Data were obtained from a variety of sources: the Department of Health’s records, the National Statistical Office, and public documents, such as the 1986–90 and 1991–95 National Health Plans.

The quality of health data for Papua New Guinea has been questioned (Carrad and Aitken 1987). Because the provinces provide input to these data, the primary concern about data reliability is two-fold. First, error may enter due to misinterpretation of the Department of Health’s instructions for submitting data. Second, these instructions may not be uniformly applied by all provinces. The sources and causes of problems have, however, been found to be rather uniform among provinces. Thus, data problems which exist are assumed to be fairly similar across provinces.

The unit of study was the province, the level to which power had been devolved. There are nineteen provinces and the National Capital District (NCD) in Papua New Guinea. Because the NCD is surrounded by Central Province, many people from that province receive health services in the NCD due to the availability and ease of access. As a result, population and performance indicators for Central Province and the NCD were combined for this study to reflect better the cross-boundary exchange of people and the overall coverages of services.

Acknowledging that positive and negative changes in the health system take place over time and that decentralization is a process, not an immediate intervention, data were collected for several years in an attempt to capture such changes. Full financial decentralization of health services was introduced on 1 January 1983. Thus, the data reflect the intervention as occurring between 1982 and 1983. Because complete historical data were not available for each province for most of the study variables until 1980, the three-year pre-decentralization period selected was from 1980 through 1982. The data for the years 1983–86 represented the period after decentralization was introduced. The statistical analyses were made using the SPSS+ statistical software program.

Data analysis results

The dependent and independent variables specified above were measured on an annual basis for the seven years, 1980–86, from nineteen provinces. This yielded nineteen data or observation points for each year. Although data were available for two additional years, these were not included because in 1987 and 1988 the health sector experienced substantial cuts in its funds in real terms due to revised
government priorities. This sudden aberration had a definite influence on the provision of MCH services.

**Trend evaluation.** The first step in the data analysis was the examination of some of the raw data to determine if any trends clearly emerged. For this, the dependent variable, deliveries in health facilities, was used. Because it is difficult to examine the data for overall trends on a province-by-province basis for the seven years, the provincial data were combined to form regional data. The data are presented in Figure 6.1.

**Figure 6.1** Total deliveries in health facilities by region, 1980–86

Figure 6.1 shows a general rising trend, starting in 1980 and continuing through the first year of decentralization, 1983. Institutional deliveries over the next two years declined before showing an upward trend again in 1986.

Examining the trends by region and year provides mixed impressions. The Islands region showed no real change or only a slight increase at most; Southern region did not have much of an overall change in the post-decentralization period (two years were above the pre-decentralization levels and two below); Momase region showed an overall slight increase over time; and the Highlands showed a steady increase over the years examined.

**Paired t-test.** A paired t-test was performed as the initial statistical test of the hypothesis with antenatal clinic coverage as the dependent variable. It used the average antenatal clinic coverage for each province for the pre-decentralization (1980–82) and post-decentralization (1983–86) periods. The results are shown in Table 6.2.
Table 6.2 Results of paired t-test of antenatal clinic coverage before and after decentralization, 1980–82 and 1983–86

\[
\begin{align*}
\bar{X}_d &= 6.099 \\
S_d &= 10.876 \\
t &= 2.379 \text{ (Significant at the 0.05 level)}
\end{align*}
\]

Since the t-statistic was positive, we can conclude that there was a statistically significant increase in antenatal clinic coverage in the decentralization period. The t-statistic was in the direction expected, as decentralization is supposed to result in positive health service delivery changes. Caution must be exercised in this interpretation, however. The t-test is not a powerful statistical tool for testing the hypothesis since it does not control for factors which may have affected MCH performance simultaneously with decentralization. Thus, only limited confidence is placed in the conclusions reached from this test.

Regression analysis. Next, regression analysis was used to test the hypothesis of a positive impact of decentralization on MCH performance because it allows for the control of factors other than decentralization. The DPT immunization coverage for children under one was the dependent variable tested, with the resource, demographic, political and decentralization factors as independent variables. Ordinary least-squares regression of untransformed variables was performed on the dependent variable. DECN, a dummy variable used for the post-decentralization period, was the variable of primary interest.

Table 6.3 summarizes the coefficients of each independent variable, their t-value and the \( R^2 \) of the regression. Only one coefficient, AUTO, attained statistical significance. The low \( R^2 \) indicates that very little of the variation in the dependent variable was explained by the independent variables, including the variable of interest, DECN.

Table 6.3 Results of the regression analysis of DPT immunization coverage for children under one year, before and after decentralization, 1980–82 and 1983–86 (standard errors in parentheses)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>48.124(^a)</td>
<td>(24.785)</td>
</tr>
<tr>
<td>NURS</td>
<td>-0.001</td>
<td>(0.001)</td>
</tr>
<tr>
<td>AUTO</td>
<td>-9.899(^b)</td>
<td>(4.428)</td>
</tr>
<tr>
<td>EDUC</td>
<td>0.461</td>
<td>(0.466)</td>
</tr>
<tr>
<td>GROW</td>
<td>-0.901</td>
<td>(1.948)</td>
</tr>
<tr>
<td>DENS</td>
<td>0.266</td>
<td>(0.383)</td>
</tr>
<tr>
<td>ISLD</td>
<td>0.377</td>
<td>(7.252)</td>
</tr>
<tr>
<td>HIGH</td>
<td>13.786</td>
<td>(19.092)</td>
</tr>
<tr>
<td>MOMA</td>
<td>9.550</td>
<td>(10.034)</td>
</tr>
<tr>
<td>DECN</td>
<td>2.715</td>
<td>(4.299)</td>
</tr>
</tbody>
</table>

\(^a\) Statistically significant at the 0.10 level.  
\(^b\) Statistically significant at the 0.05 level.  
Note: All coefficients and standard errors are rounded.
Discussion

Examination of the data in Figure 6.1 indicates varying trends in institutional deliveries by region and over time. Perhaps the main conclusion to be made is that there was no clearly identifiable change in the trends with decentralization. In fact, the number of institutional deliveries had been steadily doubling every 10 years during the previous 20 years (Carrad and Aitken 1987). The drop in numbers during 1984 and 1985 may represent incomplete reporting; certainly some mistakes were found and corrected in 1986. The rates of increase in institutional deliveries in the four regions differed very considerably over this period of six years: 31 per cent in Momase, 46 per cent in the Islands, 57 per cent in the Southern region and 131 per cent in the Highlands. In 1983, the Islands and Southern regions already had quite high rates of institutional deliveries (61 per cent and 45 per cent, respectively), while the Highlands and Momase only had 30 per cent of their births taking place in institutions. The fact that the Highlands had a rate of increase four times greater than that of Momase indicates that health service performance was affected by other factors not evident from the data, and quite apart from any possible effect of decentralization.

The result from the paired t-test provided encouragement for thinking that there might be a causal link between improved MCH services delivery and the advent of decentralization. As mentioned above, however, the t-test is not a powerful statistical tool. At best, one could indicate that the statistical test was suggestive, rather than conclusive. While a statistically significant improvement in coverage was noted, it may have been accounted for by many other factors besides decentralization. Within the health system, there may have been an improvement in reporting, without an actual increase in coverage. It could also mean that some trend preceding decentralization continued during the period under study. Factors outside the health system, which could account for this increase include road or transport improvements.

Regression analysis, a more powerful statistical tool, was used to take account of other factors occurring simultaneously with decentralization. As indicated, the independent variable, DECN, was not statistically associated with improvements in MCH performance. None of the other variables with the exception of AUTO, the variable for provinces with full financial responsibility, attained a statistical significance. The low coefficient of determination (R-square) reflected the small percentage of the total variation in the dependent variable, explained by the independent variables. Examination of the correlation matrix indicated some violations of the assumption of there being no linear relationship between the independent variables.

Though the variable of interest, DECN, was not statistically significant, it is interesting that its coefficient was positive as hypothesized, agreeing with the result of the paired t-test. The one coefficient of a variable which was significant, AUTO, was negative. This seems to indicate that immunization coverage is not as high in provinces with full financial responsibility. This could be an indication that health is not as great a priority in those provinces as one would have hoped.

The fact that the coefficients for the Highlands and Momase regions were much higher than that for the Islands was a surprise. The lack of statistical significance in any of the regional dummy variables stops one from exploring this further. Thus, these variables did not control for regional factors which affected the dependent variable.
The conclusion that can be garnered from these various levels of analysis is that, though some interesting favourable trends emerged, the relationships noted were not strong. There was no solid statistical evidence from the regression model to support the belief that decentralization resulted in increased use of MCH services.

A drawback to this analysis was the lack of comprehensive data covering a longer pre-decentralization and post-decentralization period. In addition, the data available for the independent variables were very limited, as shown by the inability of the controlling factors to account for very much of the variability. The low $R^2$ indicated that only 8 per cent of the variability could be accounted for by the regression model. This would tend to confirm observations in the literature about the complexity of determinants affecting health service performance.

**Comments on the results of decentralization**

It is clear from the foregoing examination of trends in selected MCH service performance indicators that decentralization alone seems to have made little or no significant difference. Increases in the utilization of maternal health services were part of a longer-term trend, but one with great variation in different parts of the country. Immunization rates, which are in fact more sensitive indicators of the effects of the many different factors influencing health service performance, were not increasing in the same way. It would, therefore, be useful to review the main factors which do influence performance to see what was happening to them before, during and after the process of decentralization.

**Policy**

Decentralization has not resulted in any significant change in the structure and activities of the health services in Papua New Guinea. The three-tier system of care has not altered. Maternal and child health services are carried out through the same combination of static and mobile clinics. All health services are still substantially free. The differences in performance between different parts of the country are greater than any changes that have occurred within provinces or regions in association with decentralization, suggesting that other factors are probably of greater significance. Where changes in policy have occurred, as in the drastic reduction in residual spraying against malaria and the change to short-course chemotherapy for tuberculosis and leprosy, the decisions were made at the national level. This lack of change is in marked contrast to the experience of Mexico, for example, where the act of decentralization was made deliberately to allow and provoke changes in the ways in which the health services were organized and financed (Gonzales-Block *et al.* 1989).

Various local experiments and innovations have taken place in the last few years. Aid post orderlies have been successfully used to extend the coverage of immunizations; village women have been trained as birth attendants; village volunteers from small, remote or isolated communities have been trained as village health workers. However, all these activities had their antecedents in other parts of the country in the 1970s before decentralization. Primary health care in the sense of real community initiatives and participation also preceded decentralization in certain areas.
Resources

It is interesting to note that, in the regression model described above, the financially autonomous provinces were associated with declines in immunization coverage, although this did not explain much of the variance. Axline (1988a) has pointed out that the different ways in which central government allocates funds to provinces with full financial responsibility and to those without it is to the disadvantage of the former. The payroll portion of the grants increases with the cost of living and any other salary awards. Those increases inevitably encroach upon the non-payroll portion of the grants to the FFR provinces, but do not necessarily do so to the same extent for those provinces whose budgets are controlled by the national Department of Finance and Planning. Health financing seems to have been particularly badly affected in this way. The function that always suffers more than others is that of transport. This seriously curtails supervisory activities and any outreach activities such as the disease control and maternal and child health programs which rely upon being mobile to reach rural families. In fact, the effect was not uniform among the financially autonomous provinces. Some had sufficient additional revenue, raised from other sources, to be able to maintain services.

Overall, per capita expenditures on health remained very stable from the mid-1970s to 1987 (Newbrander 1987). After that, however, declining government revenues led to a series of major budget cuts (Newbrander and Thomason 1989). This has had detrimental effects on rural health service funding in two particular ways. First, some of the financially non-autonomous provinces were left with hardly any transport funds because of what seemed like capricious cuts made by the Department of Finance and Planning (DFP) with little or no consultation with health authorities. There certainly appeared to be no consistent approach to the cuts by the DFP. In other provinces, the cuts resulted in the provincial governments selectively reducing their financial support to church health services in order to maintain government health services. In both situations, there were very considerable declines in maternal and child health service outputs.

Management

The weaknesses in provincial management skills at and after decentralization are described by Campos-Outcalt and Newbrander in Chapter 10. Several activities were undertaken to ameliorate that situation. For example, WHO and UNICEF technical support for the immunization and diarrhoeal control programs, the Management Support for Provinces program (Newbrander et al. 1988), and the University of Papua New Guinea's training program in community health administration all contributed in different ways. However, managerial performance in the different provinces was very uneven, and became particularly evident after the effects of the budget cuts began to be felt.

The one clearly detrimental effect of decentralization was seen in those provinces that decentralized their administration to the district level (see Chapter 10). This was introduced at different times in different provinces, but in the province where it was first undertaken, the loss of health division control over transport and other resources led, over a period of three or four years, to a very marked drop in immunization coverage and other outreach indicators. Eventually, when immunization coverage had declined to half of its previous level, and
measles outbreaks had begun to take their toll, the provincial government agreed to return control to the provincial Assistant Secretary for Health.

**General socioeconomic changes**

The proliferation of smallholdings of coffee in the Highlands region and of cocoa and copra in the Islands region in the past twenty years has resulted in many economic and social changes. Roads and vehicles have led to much greater exposure to urban centres and consumer goods. Rural life has become more complex and busy: commercial, social, political and church activities have all multiplied and all make their claims upon people's time. Improved communications have also made it much easier for people to reach hospitals and health centres when they become sick and for women to give birth in a health facility. People are, therefore, much less dependent upon the mobile MCH clinics and aid posts. As a consequence, it is only in remote and less sophisticated villages that health workers and other government officers can expect everyone to turn up at an MCH clinic or other event, and preventive health activities such as immunizations have suffered.

The other social factor that has seriously curtailed health and a lot of other activities, especially in the Highlands region, has been the breakdown of law and order in the 1980s. Economic progress and health services have been so successful that there is now a serious population problem in the Highlands region, and land is becoming short in many areas. Migration has eased the pressure to some extent, but tribal fighting over land has become increasingly prevalent. Hostilities, while not continuous, can often extend over many months. During that time, people cannot move easily, and extension services such as MCH clinics virtually come to a halt.

The people of the Southern and Momase regions have not generally participated in economic growth in the same way as in the Highlands and Islands. In these two regions, economic development has been much more localized. Growth in the use of services such as maternity clinics/hospitals has only occurred in the urban areas and the suburban communities close to large cities such as Port Moresby and Lae. Mobile services in Southern and Momase regions are always difficult and expensive because of the nature of the terrain; they, in particular, have suffered as a consequence of constrained transport budgets.

**Conclusion**

Decentralization appears to have made little difference to trends in maternal and child health service performance indicators. Such changes as can be attributed to decentralization have, in fact, indicated a negative effect. These are seen in the deterioration of immunization coverage in a number of provinces. The immediate reason in these situations has been the lack of resources, particularly of transport. Deterioration of immunization coverage has happened in the less wealthy provinces with full financial responsibility where the non-payroll portion of central government grants has steadily got smaller because of the formula used; it has happened in provinces which have further decentralized to the district level because the health divisions have lost control over their resources; and it has happened in other provinces because of the lack of input into the budget process at the Department of Finance and Planning by either the provincial Division of Health or the national Department of Health.
As has been pointed out, the large differences in MCH performance indicators between provinces indicate that many other factors besides decentralization are important in determining the effectiveness of health services. Many of these factors involve the ways in which human and financial resources are used. Positive changes in health service performance require not only an organizational change, such as decentralization, but also improvements in management, planning and financing of services. Decentralization in Papua New Guinea was supposed to enhance the opportunity for local health administrators to manage their resources in a way that is more responsive to local needs. Unfortunately, this goal has not been realized in many situations because, in fact, the health administrators have lost control over their resources. The lack of substantive improvements in MCH performance is the result.
CHAPTER 7

A provincial perspective

P. Lausie and J.A. Thomason

Introduction

Much of the pressure that was brought to bear on the national Department of Health to relinquish the delegated functions between 1977 and 1982 emanated from the provinces themselves. Provincial health staff held great expectations of the gains to be made from decentralization of health functions and they fought hard to wrest power from the national Department of Health. This chapter presents an overview of the decentralization process from the perspective of those working in the health system at the provincial level.

Background

Prior to the creation of provincial governments, provinces were known as districts. Each district was overseen by a District Commissioner who was responsible for ensuring that directives from the central administration were properly implemented. Within each district there were staff from each of the eighteen government departments, all of whom were members of a single public service. These district staff, however, were directly responsible to their own parent department, rather than the District Commissioner. Financial control for most activities was also retained by the central departments.

Between 1970 and the establishment of provincial governments, provincial political organization took the form of district ‘area authorities’, which were established with representatives from Local Government Councils, members of the National Government House of Assembly (prior to independence) and the District Commissioner (Clarke 1985). These area authorities were replaced by elected provincial governments after decentralization.

Provincial health services before decentralization

Provincial dissatisfaction with centralized control of provincial health services was focused on three main areas of provincial health services management. These were financing, staffing, and planning and management. This section summarizes the problems caused by centralized control in these areas.

Financing

During the period of centralized control, all major financial decisions were made by the Department of Health. Provinces were required to prepare annual budgets, but these were submitted to the Department of Health where they were modified
and reviewed. The Department of Health then discussed these with the Department of Finance (later the Department of Finance and Planning). Final decisions were made on annual budgets without further consultation with the provincial staff.

All health investment projects were subject to the approval of the Department of Health. This centralization of financial control commonly resulted in lengthy delays in the implementation of planned projects. Projects planned in the capital works program usually took several years from submission to implementation. The only financial decision-making under provincial control was for the Minor New Works Fund and the Rural Improvement Program. Both of these were multisectoral funds, and provincial health authorities had to compete with other sectors for them. The Minor New Works Fund was controlled by the District Commissioner and was used to finance small projects. The Rural Improvement Program funds were under the control of the Area Authorities and were used to finance small projects in their areas.

**Staffing issues**

**Staff disciplinary matters.** Staff disciplinary procedures were cumbersome under the centralized system. The public service guidelines set down detailed procedures for the discipline of staff. Where more serious offences were involved, documentation had to be prepared at provincial level and then submitted to the Department of Health for action. Delays in obtaining any response were common, and this made control of staff difficult. The time and the complexity of the procedures involved also made dismissal of staff almost impossible.

**Appointment and movement of staff.** The Department of Health was the primary decision-maker on the appointment and movement of staff. Appointment of all staff occurred at the central level, and the Department of Health had the authority to transfer staff from province to province and within provinces without consultation with provincial authorities. The lack of consultation on staff appointments and movement commonly resulted in provincial frustration with the national Department of Health.

**Planning and management**

**Information system.** All routinely collected health data were sent to the Department of Health for central processing, and no analysis was done at provincial level. Furthermore, program managers at the central level had no expectation that provincial staff could have a relevant role in the analysis and use of information to guide their activities. As a result, skills in the analysis and interpretation of health information were poorly developed at the provincial level.

**Planning.** Annual activity programs were prepared by provinces prior to decentralization. However, no short-term or medium-term planning was undertaken at the provincial level. As national health planning took place at the central level and provincial consultation was lacking, the planning skills of provincial staff remained minimal.

**Management.** While the provincial health officer, who was in charge of the health services in each province, had some managerial responsibilities, the most important decisions were made by the program managers at the national Department of Health. Determination of policy, strategy and plans for implementation were
all made at the central level. As a result, experience and skills in management remained undeveloped.

Provincial expectations of decentralization

These provincial frustrations with centralized control led to great expectations of what the decentralization of health services would bring. More than anything, provincial staff in all sectors desired to obtain power over their own operations and, concomitantly, gain freedom from central control. There was a belief that wresting this power from central bureaucrats would improve the operation of services in the province and make them more responsive to provincial needs. Provincial health authorities wanted the opportunity to be able to determine their own budget priorities, to appoint, transfer and discipline their own staff and to plan for and manage their own programs.

Provincial health authorities had difficulty in ensuring that their desires were reflected in the mechanisms of transfer, as they were only marginally involved in the processes of planning for decentralization of health functions. Much of this can be attributed to the intransigence of the Department of Health staff, who resisted directives to prepare for the decentralization of health functions. Despite active debate on decentralization at the 1979 annual Conference of Provincial Health Officers, the details and mechanisms for the transfer of power still remained unclear. Little written information was circulated to provinces except for a paper on provincial government law and the Provincial Health News. This was a monthly newsletter which was sent to provincial health officers from November 1977 until June 1978. While the newsletter was designed to keep provinces informed on plans and developments in decentralization, it provided only a one-way dialogue. Provincial staff thus had limited opportunities for clarification of issues or expression of their own views. Most importantly, the provincial staff themselves perceived that they were not being adequately involved in the decision-making process. This had negative consequences for the development of a supportive, trusting relationship with the national Department of Health after powers had been devolved.

Early provincial experience of decentralization

The transfer of administrative control over public service functions to provincial governments was a slow and uncoordinated process. In 1983, when financial powers for delegated functions were finally decentralized, many provincial staff were still unclear as to the nature and extent of their new responsibilities. Clarke (1985) outlined three particular impediments to the smooth transfer of health powers to provincial departments. These were the division of powers between transferred and delegated functions, the absence of an appropriate provincial public service structure and the absence of restructuring at the national Department of Health. As a result, during 1983 and 1984, there were many areas of confusion, especially pertaining to the division between the Department of Health and the provinces of the power to exercise health functions. These will be discussed in relation to the areas that had been problematic prior to decentralization—financing, staffing, and planning and management.
Financing

As described in Chapter 5, the events leading up to the restructuring of the national Department of Health and the final devolution of power over delegated functions were the result of political intervention, rather than a slow, planned process. Many provinces were unprepared for the financial delegation which accompanied this handover. The provinces were supposed to prepare their budgets for all functions (including delegated functions) for the 1983 financial year. However, many did not understand this and still expected the Department of Health to do it on their behalf. Furthermore, in the first quarter of the year, when provinces were required to present cash flow statements to the Department of Finance in order to facilitate release of their funds, most expected that this also would be completed by the Department of Health. This led to confusion and extended funding delays in the first year of decentralization of health functions.

Staffing

Initially, there was an acute shortage of nursing staff in some provinces, because the Department of Health had stopped the placement of staff. Many staff transferred to more desirable provinces, fearing that they would not have any such opportunity in the future. The regional public service units to handle provincial appointments were not established at the time of transfer of functions, and staffing decisions continued to be made at the Department of Health until the units were established.

At this time in most provinces, the public service staff establishment for the provincial Department or Division of Health had not yet been created. Neither had there been clarification with the national Department of Health as to which national positions were to be transferred to provincial departments. Initially, health staff were employed on a mixture of national and provincial positions, which made it difficult to determine how many people were employed by national and how many by provincial departments. Confusion prevailed regarding staff employed on delegated functions. In particular, problems were experienced in arrangements for salaries and recreation leave for staff on delegated functions. These were still being handled centrally by the Department of Health. Some staff received no pay for up to six months as a result of the inadequacy of the administrative arrangements.

Misunderstanding of the roles of the provincial health staff and the Department of Health in relation to reporting relationships with the heads of technical sections were common. Previously, provincial section heads reported directly to their technical supervisor in Port Moresby. Provincial health staff continued to communicate directly with the Department of Health without notifying the provincial authorities. After decentralization, however, all communication from a provincial head of a technical section to the national Department of Health, was to go through the Assistant Secretary for health and the Secretary of the Department of the province. This channel of communication was frequently by-passed, with technical officers communicating directly with Department of Health technical sections, without consulting provincial authorities.

In addition to the communication issue, health staff working on delegated functions were confused as to their accountability and reporting responsibilities. They appeared to be subject to a dual chain of command and accountability. Health workers were often given an instruction by one authority, only to have it
countermanded by another authority. Most staff working on delegated functions continued to refer to the Department of Health for instruction as to their functioning.

As intended, the disciplinary powers, previously held by the Secretary of Health, were delegated to the Secretary of each provincial department. It was not clear which staff employed in the province were subject to disciplinary action by provincial, and which by national authorities. Nor was it clear who was responsible for the laying and processing of charges. As a consequence, disciplinary matters were handled inadequately and discipline deteriorated in the initial post-decentralization period.

Planning and management

Although the First National Health Plan 1974–78 (Papua New Guinea, Department of Public Health 1974) envisaged that provinces would prepare their own five-year plans, in most cases this did not eventuate. As a result, most provinces entered the new period of autonomy without rational, articulated plans. As provincial health staff had only been required to prepare annual activity plans in the past, the requisite planning skills were in short supply. This limited the provincial authorities' ability to innovate internally and to attract national government resources for investment projects.

In the early stages of decentralization, the planning of health projects under the investment program, known as the National Public Expenditure Plan, was retained under central control. Proposals for health investment projects continued to be prepared by the national Department of Health without adequate provincial consultation. In 1978, a system for the equitable distribution of investment funds among provinces, which was based on indicators of need, was developed. However, the indicators were not applied annually, and the system disintegrated. The ability of provincial staff to prepare persuasive submissions became the basis upon which investment funds were allocated.

The distinction between transferred and delegated powers also caused some practical problems for the management of health services. For example, the provincial hospital had been an integral part of provincial health services, and medical staff were actively involved in supervision and in-service training for primary health services. It was also common to transfer nurses between the hospital and rural health facilities, as required. The distinction introduced between the rural and hospital services at decentralization, impeded the continuation of these activities. Nurses could no longer be transferred between rural and hospital services, and many medical staff considered that supervision and in-service training had become the responsibility of the provincial health office staff.

Provinces experienced acute shortages of personnel with relevant qualifications and experience to undertake the new range of managerial tasks required. This was compounded by the fact that the necessary restructuring and reorientation of the national Department of Health did not take place in tandem with the transfer of functions to provinces. As a result, the provision of technical advice from the Department of Health to the provinces broke down, and very little support was provided over this period. There was thus a desperate need for training of staff to undertake the new managerial responsibilities.
Decentralization: ten years on

Decentralization has brought to the administration of provincial health services both positive and negative changes. In some areas where change was expected, there has been none. For example, it was expected that decentralization of powers would open the doors for improved intersectoral cooperation at the provincial level. In most provinces, this has not eventuated. In West New Britain, Reilly (1985) reported that although the name of the executive management committee of the province had changed, its constituent members and its ability to achieve effective coordination between sectors remained basically unchanged. Both Reilly (1985) and Clarke (1985) note that within the health sector, the cooperation between the hospital and the primary health services deteriorated after decentralization. These experiences are common to most provinces.

Many provincial health managers appreciate being able to prepare their own health budgets in the post-decentralization era, although they are frequently frustrated with the final outcome. As discussed in Chapter 8, those Divisions of Health in provinces with full financial responsibility are subject to the whims of provincial politicians to a much greater extent than other provinces, who have only to deal with the vagaries of the Department of Finance and Planning. The recent introduction of the Public Investment Program for investment programming has withdrawn the opportunity for provinces to bid for small projects. Sectoral investment planning has once again become the responsibility of the national Department of Health.

The transfer of staff disciplinary matters to the provincial government has had both desirable and undesirable effects. When disciplinary matters are handled according to established procedures, the system can operate in a timely and effective manner. Regrettably, the small scale of the provincial administrative structure and the consequently close social and familial networks, often lead to the miscarriage of disciplinary procedures.

Many provinces have benefited from the ability to appoint and move health staff. Some, however, have suffered. Those provinces which are considered to be too small or to be unattractive, have found recruitment of staff difficult. This has been particularly acute in the recruitment of medical officers, and smaller hospitals such as Kimbe and Vanimo have spent extended periods of time without any hospital doctors.

Decentralization forced the development of new planning and management skills at the provincial level. Through a combination of a postgraduate course designed for provincial health administrators in Community Health, and an ongoing management development effort of the Department of Health, the abilities of provincial health managers have improved significantly. These developments are discussed in more detail in Chapter 10.

Some of the problems experienced during the transition period were clearly teething problems, and have been resolved. Some persist, and after seven years of decentralization at the provincial level, it is possible to summarize the advantages and disadvantages that the change has brought with it.
Advantages

• Provinces have direct input into both the design and negotiation of their annual budgets with the provincial government.
• Provinces can recruit and place their own staff according to public service regulations.
• Provinces have the power to discipline officers.
• Politicians and provincial governments have taken a greater interest in and more responsible attitude towards health.
• Coordination of transportation has improved.
• The ability to plan and interpret data at provincial level has begun to develop.
• Smaller delays are experienced in the implementation of projects.

Disadvantages

• There has been a substantial increase in political interference in provincial health programs and in the decisions and work of provincial public servants.
• With the removal of close monitoring and control from the central authorities, provincial powers can be open to abuse.
• Insufficient development of skills, particularly in planning, management and information use, continues to hamper effective operation and development of health services.
• Continual budgeting problems persist, and skills in developing and supporting budgets are weak.
• In some provinces, the health sector has suffered as a result of changing provincial political priorities.

Conclusion

Many of the initial difficulties experienced were a result of the resistance to change, demonstrated by the national Department of Health staff, which led to insufficient preparation for the handover of responsibilities. The conflicts between the national and provincial departments might have been reduced if the roles of the national Department of Health and the provincial departments had been more clearly defined and the linkages between the two levels formalized.

The experience of the provinces clearly emphasizes that decentralization is not a static experience, but a continually evolving process. All parties are learning and adapting to changing circumstances. It is only now, almost ten years after the functional and financial transfers were made, that provincial Divisions of Health are beginning to find their feet and function effectively. The great expectations which provincial staff had for the decentralization of functions certainly did not materialize immediately. Some have not materialized at all. Instead, a new set of problems has been transposed onto the old problems of centralization.

It has taken almost ten years to begin to develop a cadre of skilled managers at the provincial level. Ultimately, it will be only with the development of an adequate pool of skilled managers that the expectations of the provinces can begin to be realized. Finally, the greatest potential strength and weakness of the system is the vulnerability of the health sector to political interference. This continues to work both for and against the furtherance of good health.
PART 3

Issues in decentralization
CHAPTER 8

Health financing and budgeting

J.A. Thomason and W.C. Newbrander

Introduction

The financing arrangements for any sector determine the priorities, activities and the resource mix of capital and labour used by that sector to achieve its objectives. They also affect the ability of those in authority to implement policy decisions, for without sufficient financing, policies cannot be translated into action.

Decentralization in Papua New Guinea represented a commitment to the redistribution of power and resources to a level closer to the people. The financial mechanisms, in particular, were intended to give a larger share of national revenue to the provinces, together with the authority to use those resources for addressing priorities determined by the province. In practice, however, the resource allocation mechanisms which evolved have not reflected the original intent of the Organic Law on Provincial Government. It has been argued that the financial mechanisms, in fact, achieve the opposite and are part of a more general movement of power back to the national government (Regan 1988b).

This chapter describes the financing mechanisms adopted to provide provincial governments with the means to use their newly-gained powers after decentralization. The problems inherent in these mechanisms are analysed, including fragmentation of health sector financial planning, perpetuation of inequity, and poor monitoring and control of resources. This is followed by a discussion of some alternatives for redressing these issues.

The prevailing economic situation

A brief introduction to the general economic circumstances in Papua New Guinea is essential to this discussion of the financing mechanisms of decentralization. It also highlights problems which are due, in part, to the economic constraints faced by the country.

Papua New Guinea, with a per capita GNP of US$720 (mid-1980s estimate), is a low income country (Griffin 1990). Although it has substantial natural resources, its economic performance in the early 1980s when decentralization of health functions was occurring was poor. Between 1975 and 1985, Papua New Guinea lagged well behind other Asian low- and middle-income countries in economic growth: it experienced growth in its GNP of 128 per cent compared with an average 302 per cent for all other countries in the region (median: 278 per cent; range: 128–624 per cent) (Griffin 1990). The short-term prospects for an improvement appear bleak as economic growth and investment continue to be hampered by structural constraints, such as cumbersome government procedures, lack of
skilled labour, high wage costs, minimal productivity gains, weak infrastructure and high transport costs (World Bank 1988). In addition, the closure of the Bougainville Copper Mine in 1990 has resulted in a substantial reduction in government revenue and foreign exchange reserves. An economic recovery is expected but will be slow.

For its size, Papua New Guinea has a large public sector. Government spending accounted for between 36 and 38 per cent of GDP between 1980 and 1986 (Blyth 1988). In 1987, government spending accounted for 34 per cent of GNP (Griffin 1990). The growth in government sector spending during the period of decentralization has not been exceptional; it accounted for 30.6 per cent of GNP at the time of independence in 1975. This slower growth in government spending has meant an actual decrease in per capita spending because the population grew at a rate of 2.3 per cent per year from 1976 to 1983, thereby exceeding the 1.4 per cent growth in government expenditure (Goodman et al. 1985).

Some of this slow growth has been due to changes in government priorities. A change of government in late 1985 resulted in a redirection of government priorities from social sectors to the strengthening of economic sectors (Papua New Guinea 1986). This resulted in reduced funding for the health sector: real per capita health expenditure declined by 25 per cent between 1985 and 1988 (Newbrander and Thomason 1989). A further change of government in 1988 resulted in another realignment of government priorities which provided increases totalling 14.4 per cent for the health sector in real terms between 1988 and 1990. Despite this large increase, per capita health expenditure declined by 1.8 per cent (World Bank 1990).

In general, the health sector has fared well, despite occasional swings in priorities, by maintaining a share of total government expenditure of over 8 per cent since independence (Newbrander 1987). As a proportion of GNP, government health expenditure increased from 2.6 per cent in 1975 to 3.4 per cent in 1987 (Newbrander 1987; Griffin 1990). This compares favourably with the regional mean of 3.1 per cent in Asia, which includes countries such as Thailand and Malaysia. Comparatively, then, Papua New Guinea appears to have had an adequate and relatively constant level of resources devoted to the health sector both before and after decentralization.

The financial basis of decentralization

Prior to decentralization, financial planning and monitoring and control of health services were the responsibility of the national Department of Health. The responsibility for the recurrent budget for all transferred and delegated health functions was handed over to provincial governments in 1983. Effective financial planning and monitoring of health services has, however, been constrained by several factors including the multiplicity of funding sources, competition with other sectors within provinces, and the de facto retention of financial control by central government agencies. This section describes the financial mechanisms which have evolved under decentralization.

Full financial responsibility

Provinces can be divided into two groups according to the manner by which they receive central government revenues: those which have full financial responsibility (FFR) and those which have not. It is important to understand the
distinction between these two groups, since decentralization in practice has resulted in significant differences in the way in which they each receive central government revenues.

In 1977, a National Executive Council decision (NEC Decision NG10 of 1977) directed that functions identified for transfer to provincial responsibility should be passed from line departments to the Office of Implementation in the Department of Provincial Affairs. These functions and the finances for carrying them out would then be transferred to provincial governments whenever they were fully established. By mid-1978, several transferred activities had been shifted from national departments to the Office of Implementation. These functions, however, were not handed on to the provinces, with the exception of the North Solomons Provincial Government, which was fully established in 1977. The lack of fully established provincial governments was due, in part, to resistance to implementation of this directive by officials of the Department of Finance. They were concerned that neither adequate administrative procedures nor sufficient numbers of trained personnel were in place to enable provinces to manage properly the unconditional grant funds which accompanied the transferred activities.

The Department of Finance made a counterproposal that transfers should only be made from the Office of Implementation to a provincial government when the provincial government was able to meet a number of criteria. These would provide evidence of adequate financial management capabilities and safeguards to manage the transferred activities and the commensurate finance (Manning 1979). The 1978 Premiers' Council Conference accepted the proposal and established the following criteria:

- A provincial finance bill must be accepted by the provincial assembly.
- The national government must be satisfied that a budgeting capacity exists in the province.
- The province must have an accounting system compatible with the financial legislation, regulations and budget format.
- A Bureau of Management Services (BMS) must be established in the province with the capacity to provide services to aid both national and provincial functions.
- The provincial government must make a written request for the taking over of financial responsibility.
- Provincial elections must be held.
- The Ministers of Finance and Decentralization must be satisfied with the general ability of the provincial government to plan and manage its affairs.

From mid-1978, provinces which met these criteria were given full financial responsibility for the funds, staff and operation of transferred activities. Funds for transferred activities were then paid through the Minimum Unconditional Grant (MUG). Provinces were permitted to expend and account for these funds under provincial budgets. In 1978, East New Britain and New Ireland joined the North Solomons in being granted full financial responsibility. A year later, five more provinces, Eastern Highlands, East Sepik, Morobe, West New Britain and Madang, also reached this status (Axline 1986b). Since then, however, no further provincial governments have attained full financial responsibility.

For those provinces which have been deemed not to be ready for full financial responsibility, transferred activities continue to be funded through separate national budget allocations. These funds are paid under the procedures established in the national Public Finances (Control and Audit) Act. As a consequence, these
funds have to be accounted separately from provincial funds. Thus, ironically, the provinces with the weakest capabilities for budgeting and accounting have had to maintain two accounting systems: one for the national government and another for managing provincial budgets. This dual accounting system continues to inhibit the development of effective financial monitoring in the provinces.

**Provincial government funding**

Provincial governments have three main sources of funding: national government grants, transferred taxes and internally raised revenues (Axline 1986b). These are described only briefly here, as they have been dealt with earlier (Chapter 2).

**National government grants.** The primary source of funding for provincial governments is grants from the national government in the form of the Minimum Unconditional Grant (MUG). It is termed unconditional, because no formal conditions limit its use. The Organic Law on Provincial Government established a formula to determine the baseline funding for the MUG, which was intended to provide the funding to maintain the costs of the activities transferred to provincial governments in 1976–77. In addition to the MUG, there are other unconditional grants, designed to allow provincial governments to undertake new activities. These, however, have largely been used to make up for shortcomings in provincial financing (Axline 1986b).

Provincial governments also receive funding through derivation grants and conditional grants. The funding for the former is based on the value of exports originating in a province. Conditional grants provide finances for specific purposes, such as projects. The most significant of the conditional grants for health services have been those received for projects under the National Public Expenditure Plan (NPEP). The NPEP operated from 1978 to 1985 when it was modified and renamed the Medium Term Development Plan (MTDP). The name, MTDP, was dropped with a change of government, although many of its components were adopted in the new government's strategy. Three years later, it was further modified and the name was changed again to the Public Investment Programme (PIP) (Papua New Guinea 1987). Details of these conditional grants follow in the sections on investment funding below.

**Transferred taxes.** The Organic Law on Provincial Government contains a provision for the transfer to provincial governments of net proceeds of certain national taxes. As these taxes are all based on the level of economic activity in the province, they vary from province to province. They do not constitute a significant source of provincial revenue.

**Internally raised revenues.** Provincial governments are empowered under the Organic Law on Provincial Government to raise their own revenue from taxes and fees. The taxes and rates vary between different provinces. In 1988 only 10.3 per cent of total provincial government finances came from these sources. The range of revenues generated in this manner varies from 1.6 per cent in the Southern Highlands to 22.9 per cent in the North Solomons (Axline 1988b).

In the health sector, provincial governments can generate revenues from user charges only after the passage of a Provincial Health Administration Act which entitles provinces to levy charges at rural health facilities. As noted in Chapter 4, only half the provinces have passed such an act to allow them to raise revenue from this source (Table 8.1).
Table 8.1  Status of user fee collections for rural health facilities by province, 1990

<table>
<thead>
<tr>
<th>Province</th>
<th>Provincial Health Act passed</th>
<th>Church fees</th>
<th>Government fees</th>
<th>Fee kept by facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Gulf</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Central</td>
<td>No</td>
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<td>No</td>
<td>No</td>
</tr>
<tr>
<td>National Capital District</td>
<td>No</td>
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<td>No</td>
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</tr>
<tr>
<td>Milne Bay</td>
<td>Yes</td>
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</tr>
<tr>
<td>Oro</td>
<td>Yes</td>
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</tr>
<tr>
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<td>Enga</td>
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</tr>
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<td>Simbu</td>
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<tr>
<td>Eastern Highlands Province</td>
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<tr>
<td>Madang</td>
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<tr>
<td>Morobe</td>
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<td>No</td>
</tr>
<tr>
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<td>West Sepik Province</td>
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</tr>
<tr>
<td>Manus</td>
<td>No</td>
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</tr>
<tr>
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<td>North Solomons</td>
<td>Yes</td>
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</tr>
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</table>

Source: Survey of Assistant Secretaries for Health, September 1990.

National government funding in the provinces

The distinction between national and provincial funding is particularly important to provincial policy formulation and autonomy, given the magnitude of national government spending for health in the provinces. National government expenditure in the provinces includes both recurrent and capital costs. In addition to the funds which form the provincial budgets, the national government spends significant amounts from other funds in the provinces. Notably, all public service salaries are paid directly by the Department of Finance and Planning.

Recurrent funding. Provinces which do not have full financial responsibility receive the MUG for capital works, maintenance and the rural improvement program. Other provincial activities, including health, continue to be funded through the national budget. Each province has a budget division in the national budget. This budget division encompasses funding for all functions, including health. There are seven activities in the budget division for health: rural health services, hospital services, malaria control, rural water supplies, church health services, extension services and the rural health sectoral program.

Investment funding. Before decentralization, provincial authorities had to compete with national agencies for project funding by completing detailed project proposals and submitting them to the national government. The better developed provinces were more adept at preparing and submitting proposals and thus were more successful in securing funding (Regan 1988b). To overcome this disparity, the government introduced the National Public Expenditure Plan (NPEP) in 1978 to provide development funds to provinces.
The NPEP funds were directed to health activities in each province through the rural health sectoral program; later, the rural water and sanitation program was introduced. A complex funding formula was developed, designed to provide preferential funding to provinces with the greatest health needs (Lynch 1979). This formula, however, was not consistently applied in subsequent years. Consequently, the distribution of investment funding for provinces remained at base year levels under the NPEP. Later, under the PIP, planning for investments was largely withdrawn to national sectoral departments.

The flows of public sector expenditure to the health sector

Under the current budgetary structure, the national government, rather than the provincial government, makes the key resource allocation decisions for all activities including those which are the responsibility of the province. As a result, 43.7 per cent of total provincial government expenditures are controlled by provinces (Axline 1986b).

Direct provincial control of health expenditure is low. Despite the fact that 58 per cent of the public sector expenditure for health is received through allocations to provinces, fully 88.5 per cent of this is provided as conditional grants or funding of salaries by the national government (Figure 8.1).

Figure 8.1  Flow of public sector recurrent expenditure on health, 1986

This retention of central control restricts the power of the provinces to implement local health policies, and effectively negates one of the key objectives of decentralization, namely, local control.

Budgeting arrangements

Budgeting for health services under decentralization has become a complicated process which requires provincial divisions of health to compete with other sectors for both national and provincial sources of funding. Provincial health authorities are responsible for developing and proposing annual, recurrent and developmental budgets for the health services. These budget requests are then submitted to the provincial government, and compete with the requests from other sectors for provincial budget allocation. The health budget submission is revised by the provincial government before incorporation into the provincial budget submission to the Department of Finance and Planning (DFP). These provincial budget submissions are reviewed by DFP and the national government, along with all national budget submissions. They are revised according to the availability of funds and the priorities of the government in power. Provincial health budget submissions are not routinely reviewed by the national Department of Health, which has no formal role in their development or approval.

In preparing provincial health budgets, the pressure to maintain existing services dictates an incremental budgeting process. There is little opportunity for launching new programs or activities through the recurrent budget. Procedures for obtaining investment financing at the provincial level have been unclear since the introduction of the Public Investment Programme. In provinces with FFR, the health sector is more exposed to competing provincial government priorities. For example, provinces with FFR have the freedom to reduce provincial funding substantially to operate health services. Such a situation occurred in the East Sepik Province in 1990.

For those provinces without FFR, and for conditional grants to provinces with FFR, separate budgets are submitted to the national Department of Finance and Planning. The requests are reviewed within the framework of priorities provided by the ruling parliamentary coalition.

The recommendations of the DFP on provincial budgets are passed through a series of committees to the National Executive Council (NEC), and eventually form the budget which is presented to the Parliament. The final allocations resulting from this process often bear little resemblance to the original submission by the provincial divisions of health. This has led to considerable frustration among provincial health staff over their lack of input to the budgetary process.

Although the national Department of Health has the responsibility for maintaining standards of health services, it has no input into the provincial budgetary process for health activities. The Department of Health does formulate and comment on the national health budget, but it is not involved in developing the provincial health budgets which comprise over half of total government health expenditure. Thus it does not have a strong role in the national budgeting and financing process. It can be concluded that, despite the policy of decentralization, the departments of Finance and Planning and Personnel Management effectively retain the balance of power through control of the financial system.
The financing of health services

An overview of health sector financing

A study of health sector financing and expenditure in 1986 (Thomason and Newbrander 1991) found that Papua New Guinea’s total health sector expenditure was 110.8 million kina (K) in 1986 (K1.00 = US$1.04). Of this, 4.4 per cent was used for capital expenditure and 95.6 per cent for recurrent expenditure. Of total recurrent health expenditure of K106 million, the public sector accounted for 88 per cent, the private sector 9 per cent and overseas sources 3 per cent.

The public sector recurrent health expenditure was spent as follows: national Department of Health, 33 per cent; provincial departments, 58 per cent; and other ministries and statutory bodies, 9 per cent. Of the provincial departments’ expenditure, 88.5 per cent was from their nationally appropriated health budget and only 11.5 per cent from untied grants and internally generated revenues.

The government’s emphasis on primary health care is shown by the type of services provided with the recurrent expenditure. In aggregate, 47 per cent of public expenditure was for primary health services, 38 per cent for secondary health services, 9 per cent for training, and the remaining 6 per cent for national administration and research activities. The provinces showed a similar emphasis with their health budget expenditure: 55 per cent for primary health services, 32 per cent for hospitals, over 8 per cent for extension services (nutrition, oral health, disease control, environmental health), 3 per cent for malaria control and the remaining 2 per cent for health development projects.

Personnel costs consume over two-thirds (71 per cent) of the recurrent expenditure on provincial health services. Supplies and operating costs account for 9 per cent, pharmaceuticals 7 per cent, travel and transportation 7 per cent, utilities 3 per cent, and equipment 3 per cent.

Trends in health sector financing


Regional variations in recurrent health expenditure have persisted since decentralization (Table 8.2). The two least populous regions had the highest per capita health expenditure. This was in part because these two regions have a stronger economic base and can thus contribute a greater proportion of local provincial resources to health.
Table 8.2  Regional health expenditure and regional population, 1986a

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage of health expenditure from provincial government sources</th>
<th>Percentage of total public expenditure on health</th>
<th>Percentage of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papua</td>
<td>1.3</td>
<td>26.8</td>
<td>23.3</td>
</tr>
<tr>
<td>Highlands</td>
<td>10.8</td>
<td>23.3</td>
<td>28.4</td>
</tr>
<tr>
<td>Momase</td>
<td>15.0</td>
<td>29.4</td>
<td>28.8</td>
</tr>
<tr>
<td>Islands</td>
<td>20.6</td>
<td>20.5</td>
<td>15.3</td>
</tr>
<tr>
<td>Average/Total</td>
<td>11.5</td>
<td>100.0</td>
<td>95.8</td>
</tr>
</tbody>
</table>

a The National Capital District is excluded.


The regional figures do not reveal the wide variations in the balance of expenditure between provinces (Table 8.3 and Figure 8.2). Some progress has been made in reducing disparities in per capita health allocations between provinces which existed before decentralization. In 1973, the ratio of the highest funded province to the lowest on a per capita basis was over four to one; by 1986, this disparity had been reduced to three to one (Newbrander 1987). It is difficult, however, to be able to attribute any element of the decentralization process to this slight reduction in allocation disparities. The disparities noted do not account for the level of funding that would be appropriate based on the health needs of the province’s population. As might be expected, the populations of the provinces with the highest per capita expenditure tend to have better health levels as measured by basic indicators.

Figure 8.2 Provincial per capita expenditure on health, 1983 and 1988 (1983 prices)

Source: 1983 figures from national and provincial accounts; 1988 figures from World Bank 1990.
### Table 8.3 Provincial per capita health expenditure from national and provincial governments, 1983–88 (K'OO00)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>19.7</td>
<td>18.6</td>
</tr>
<tr>
<td>Gulf</td>
<td>24.7</td>
<td>22.5</td>
</tr>
<tr>
<td>Central</td>
<td>13.5</td>
<td>10.6</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>16.3</td>
<td>15.1</td>
</tr>
<tr>
<td>Oro</td>
<td>19.8</td>
<td>19.2</td>
</tr>
<tr>
<td>Southern Highlands Province</td>
<td>11.4</td>
<td>10.3</td>
</tr>
<tr>
<td>Enga</td>
<td>10.0</td>
<td>10.3</td>
</tr>
<tr>
<td>Western Highlands Province</td>
<td>9.7</td>
<td>8.3</td>
</tr>
<tr>
<td>Simbu</td>
<td>11.8</td>
<td>11.2</td>
</tr>
<tr>
<td>Eastern Highlands Province</td>
<td>10.2</td>
<td>11.4</td>
</tr>
<tr>
<td>Morobe&lt;sup&gt;a&lt;/sup&gt;</td>
<td>9.1</td>
<td>16.5</td>
</tr>
<tr>
<td>Madang&lt;sup&gt;a&lt;/sup&gt;</td>
<td>11.2</td>
<td>12.1</td>
</tr>
<tr>
<td>East Sepik Province&lt;sup&gt;a&lt;/sup&gt;</td>
<td>14.1</td>
<td>14.5</td>
</tr>
<tr>
<td>West Sepik Province</td>
<td>19.8</td>
<td>17.3</td>
</tr>
<tr>
<td>Manus</td>
<td>29.7</td>
<td>27.9</td>
</tr>
<tr>
<td>New Ireland Province</td>
<td>15.8</td>
<td>16.9</td>
</tr>
<tr>
<td>East New Britain Province</td>
<td>21.3</td>
<td>20.1</td>
</tr>
<tr>
<td>West New Britain Province</td>
<td>15.0</td>
<td>15.4</td>
</tr>
<tr>
<td>North Solomons</td>
<td>12.9</td>
<td>19.8</td>
</tr>
<tr>
<td>Average</td>
<td>15.6</td>
<td>15.7</td>
</tr>
<tr>
<td>Minimum</td>
<td>9.1</td>
<td>8.3</td>
</tr>
<tr>
<td>Maximum</td>
<td>29.7</td>
<td>27.9</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>5.5</td>
<td>4.9</td>
</tr>
</tbody>
</table>

<sup>a</sup>Financially autonomous province.


Between 1986 and 1990, the recurrent budgetary support for hospitals increased in real terms by 14.1 per cent. There was however, significant variation in the distribution of this increase among the nation's hospitals. For example, the recurrent budget for Goroka hospital increased by 107.0 per cent over the five year period, while the recurrent budget for Boram hospital in East Sepik Province, declined by 13.5 per cent. Similar variation was found in the distribution of an 11 per cent increase in budgets for rural health over the same period. For example, support for rural health services increased by 179.6 per cent in the Southern Highlands, but declined by 49.8 per cent in the Western Highlands (World Bank 1990).

A critical problem in recurrent funding, which has emerged since decentralization, has been the development of a serious shortfall in operation and maintenance expenditure. Health personnel are government employees whose salaries are adjusted annually to allow for changes in the consumer price index. The civil service system makes it difficult to reduce overall staff numbers. The result has been that an increasing proportion of static provincial health budgets
are consumed by personnel costs. In 1977, 67.7 per cent of all public expenditure for health was accounted for by personnel (Baker 1978). This had increased to nearly 71 per cent by 1986 (Thomason and Newbrander 1991). This has taken its toll on both the operation of extension services and the maintenance of facilities.

The responsibility for funding maintenance of rural health facilities was transferred to provinces along with the operational responsibility to carry this out. By and large, provincial authorities have neglected this area since the decentralization of health services. It was estimated that as little as 6.4 per cent of required expenditure for maintenance of rural health facilities was spent in 1987 (Mitchell et al. forthcoming). The cumulative effect of this trend was an estimated shortfall in required expenditure to operate and maintain the existing health services of K8.8 million (Newbrander and Thomason 1989).

Another problem which has emerged since decentralization is the decline in funding for church health services in several provinces. Church-run health services are subsidized by the provincial government according to a formula based on the size and level of activity of the facility. In Southern Highlands, for example, the decline in real funding for church health services between 1986 and 1990 was 75.9 per cent; in Morobe it was 12.5 per cent (World Bank 1990). Several churches have been forced to withdraw from operating health facilities, and others are currently threatening to do so, if funding is not reinstated. As churches operate approximately 50 per cent of rural health services, the consequences of such action could be disastrous.

While in an aggregate sense, many of the problems discussed are a consequence of overriding economic constraints, the distribution of the burden has not been equal among provinces. As the financial allocation to the health sector is made within provincial budgets and is not routinely reviewed separately, the financial disparities between provinces have been able to go unchecked.

Investment funding. The most striking trend in health expenditure since decentralization has been the decline in capital spending for health. In the hospital sector, in 1978, capital outlays accounted for 14.4 per cent, 11.4 per cent and 15.7 per cent of total hospital expenditure at central, regional and provincial hospitals respectively (Mills 1990). By 1986, this had decreased to 4.5 per cent of total government hospital expenditure (Newbrander 1987). The total proportion of capital expenditure for the health sector was only 5.6 per cent. This reduction in investment funding, coupled with poor funding for maintenance of health facilities, has very serious implications for the future, unless capital and maintenance funding levels are increased. Investment funding for the health sector has been inadequate since decentralization.

While the NPEP was designed to fund investment projects submitted by provinces and to give preferential treatment to the poorer provinces, subsequent changes to investment programming have made it difficult for provinces to secure projects. The Public Investment Programme changed the orientation of investment programming away from small projects emanating from various departments to large projects which are attractive to major donors. Only 6 per cent of the total Public Investment Programme was allocated for direct provincial investments, all other projects were allocated to the central sectoral departments (Papua New Guinea 1988). This decision has recentralized investment programming and provincial Divisions of Health have again become the secondary partners in planning new health initiatives in their provinces.
Problems with existing financial mechanisms

Decentralization has complicated the issues of health sector financing by fragmenting not only the decision making but also the allocation and management of financial resources. There are a number of key problems which complicate the allocative planning of public sector resources for health.

- The health sector is not dealt with separately in the governmental financing process and is instead subsumed in provincial budgets.
- The inequities in resource distribution among provinces have not been reduced.
- Key resource allocation decisions for health are largely made by the national government without technical advice from the Department of Health.
- The financial monitoring and control mechanisms required to support the dual national and provincial accounting systems are inadequate.

The health sector in provincial budgets

At the national financial planning level, each province is dealt with separately. As a result, health sector financial planning is only dealt with in the context of a provincial budget and never as a whole. The budgeting process of the Department of Finance and Planning contains no formal mechanism to allow the examination of the entire health sector. In the absence of such a mechanism, the Department of Health has minimal input to the financing of the health sector and the priorities that are implicitly established through the budget. This short-term planning horizon makes it difficult to plan effectively to achieve long-term national health goals.

Inequitable resource distribution

One of the key findings of the 1986 health finance study, was the continuing geographic maldistribution of resources. Several factors are responsible for this. The limitations of the formula for calculating the MUG have effectively frozen the inequalities which existed prior to 1976/77 in the allocation of resources for health. Thus, the pre-existing regional inequalities in health expenditure have been maintained since the implementation of decentralization (Newbrander 1987).

The imbalances in provincial health funding shown in Table 8.4 are caused by differing provincial priorities, differing levels of locally generated revenue and degrees of financial responsibility, as well as by a nationally appropriated budget. The provinces vary widely with respect to the contribution of provincial funding to health services. Provinces with significant sources of local revenue have the ability to make higher contributions to the provincial health system than those without. For example, in 1986, the amount of total health expenditure contributed by the provinces varied from the Papuan region, which relied on national health budget allocations for 99 per cent of total expenditure, to the Islands region where 21 per cent of health expenditure was provided by provincial governments (Table 8.3). Decentralization has thus made it possible for provincial resource availability and priorities to influence the expenditure level for health, thus maintaining or increasing inequalities between provinces.

The different distribution of services and resources among provinces was recognized at the time of independence when the country’s commitment to reducing inequality was embodied in ‘Eight National Aims for Development’.
One of these spoke of a more equal distribution not only of economic benefits but also of services across the country. Attempts have been made, both before and after decentralization of health services, to achieve a more equitable distribution of health resources (Lynch 1979; Chae et al. 1989). However, all these attempts met with failure, due largely to a lack of political commitment. As a result, the inequities persist both within and between provinces. Decentralization has made it difficult to redress inequity, as there is an inherent conflict between national goals and provincial autonomy.

Funding mechanisms do not allow for differing population growth rates among the provinces, further exacerbating existing interprovincial disparities in health expenditure. Those provinces with higher population growth rates obtain smaller benefits from the predetermined increases in provincial allocations than other provinces with a slower growth rate receiving the same percentage increase in their health budget. This is of particular significance in Papua New Guinea where large-scale development projects have resulted in considerable population shifts between provinces.

Resource allocation decisions

Despite decentralization, the national government retains firm control of the resource allocation process. The redistribution of financial authority has, as was intended, weakened the role of the national Department of Health in resource allocation decisions, but contrary to the intentions, it has concomitantly strengthened the power of the departments of Finance and Planning and Personnel Management. The intended beneficiaries, the provinces, have not in general been given the level of financial autonomy which was intended under the Organic Law on Provincial Government.

The problem of allocation of resources is two-fold. First, there is the issue of the overall allocation of resources to the health sector. Second is the problem of distributing these resources between provinces. Health must compete for resources with other sectors at the provincial and national levels. At the provincial level, the potential negative or positive consequences of this competition for resources are greater for financially autonomous provinces because provincial governments have more control over internal resource allocation decisions. The eleven provinces without full financial responsibility have less flexibility to allocate their resources according to local priorities.

Allocation problems for the health sector are usually only thought of in terms of underallocation. Overallocation of resources has also presented problems. For example, prior to the closure of the Bougainville Copper Mine, the North Solomons Provincial Government, which had a high level of internally generated revenues and transferred taxes, aimed to place a doctor in each rural health centre where a health extension officer is normally located, by offering financial incentives to doctors to take up rural postings. Papua New Guinean doctors are a scarce resource. If a single province were to attract doctors to rural health services, it would be at a cost to the hospitals of other provinces, thus creating an imbalance in workforce distribution. While such an action by a province is quite consistent with the intent of the Organic Law on Provincial Government to redistribute significant powers to provinces, it conflicts with both the national aim of equity and the aims of primary health care which emphasize the use of the lowest trained health worker able to perform the required tasks.
Monitoring and control

As was described earlier, the financing system which has evolved under decentralization requires the establishment of two separate budgetary systems for the control of national and provincial funding. This has resulted in a lack of proper monitoring and control of financial resources by the Bureau of Management Services (BMS) in each province. Usually, the Assistant Secretary for Health is the only person in the health office with the authority to commit funds. The effectiveness of the Assistant Secretary as a financial controller depends on the staff, who are expected to keep internal records of expenditure and commitments. It also depends on the capability of the provincial BMS staff and the regularity with which they provide financial information and feedback to the Division of Health. There is frequent confusion between provincial and national funding, with incorrect commitments being made. Often projects or activities are disrupted due to a lack of funds caused by earlier overcommitments of funds. A good example of this occurred in Central Province, where a large portion of the 1987 budget was utilized to cover the mismanagement and overcommitment of funds in 1986. Due to lack of funds, all health vehicles had to be withdrawn from rural health services in 1987. Consequently, few rural outreach patrols for maternal and child health and other rural health services were performed.

One pre-existing factor (that is, not caused by decentralization) is the heavy reliance on government funding for health services. As discussed earlier, the proportion of Papua New Guinea's GNP devoted to health and the government's proportion of total health expenditure is comparable to the middle income countries of the region. In the long term this may not be sustainable for a low income country attempting to boost its economic development. Several recent investigations to examine the feasibility and means of finding alternative financing sources for any future increases in health funding have been encouraging (Newbrander and Thomason 1989; Rosenthal et al. 1990). Studies and experiments have recently begun to examine the impact of user fees in rural facilities and hospitals. The results will be helpful in formulating national and provincial guidelines and policies on service provision. These efforts will need to continue if further resource growth is to be available to the health sector in the future.

Redressing the problems

Separate consideration of the health sector

If the health sector could be dealt with separately in the allocation of government funds there would be greater opportunities for targeting the resources to areas in need, whether these be geographic areas, population groups, or health issues. Such a change would require the national Department of Health, which is currently responsible for establishing national health policy and monitoring the nation's health situation, to be given a more important role as an advocate and planner for the health sector.

Baseline financial projections for planning

Following from the above, if the health sector were treated as a whole for budgetary purposes, a baseline budget could be constructed for long-term planning. This baseline would establish the minimum level of resources that the health sector would be assured of receiving over the medium-term of five years. This
would allow better recurrent and investment cost planning. The longer time scale would allow for commitment to the development of effective policies and strategies for addressing longer-term health problems.

**Improved financial management**

Improved financial management in the health sector would ensure that the minimal resources available are used efficiently and to greatest effect in dealing with health problems. This would require the development of financial control systems and the proper training of staff. Proper mechanisms for monitoring health costs must be developed. This requires that the dual accounting systems currently in use be rationalized and a single provincial accounting system developed and implemented. This would eliminate the existing confusion and duplication.

**Control of recurrent costs**

The recurrent cost problem is two-fold: first, the salary proportion of recurrent costs is high and increasing; and second, the dual accounting mechanisms, which have developed as a result of decentralization, make financial control difficult. The proportion of recurrent expenditure consumed by salaries has left few resources available for developing and funding new initiatives which address pressing health problems. Development of a single financial management and control system would help to reduce wastage and ensure current resources are used properly. These savings could be redirected to new health development projects or to fund existing programs which are underfunded.

**Conclusion**

The current financial arrangements for the health sector present multiple problems to health managers. The most significant is the degree of central government control over provincial health financing. Regan has pointed out that the funding arrangements under the provincial budget divisions in the national budget have led to maintenance of centralized national control in several ways:

- they bring a high proportion of funding of provincial activities under direct national control;
- they give greater power to provincial bureaucrats at the expense of provincial politicians;
- they help to bring provincial bureaucracies under greater national bureaucratic control; and
- they cause major planning and administrative problems for provincial governments (Regan 1988b:37).

A second major problem is the inadequacy of the existing financial management and control systems. The financing of provincial activities in the post-decentralization period has resulted in an overall decrease in administrative effectiveness because of the requirement to establish and operate separate budgetary systems for national and provincial funds. For the health services, this has not resulted in improved responsiveness to local needs because of the retention of strong central financial control. The severely limited scope for provinces to implement their own policy decisions is a consequence of the lack of sufficient resources placed under the control of provincial governments.

Another major issue has been the lack of financial planning for the health sector. The treatment of each province in isolation in the budgeting process and
the virtual exclusion of the national Department of Health severely constrain any efforts toward improving financial planning. Without such coordination, there is little opportunity for success in achieving national and local health goals including the attainment of equity.

The Organic Law on Provincial Government intended to provide sufficient revenues to provincial governments for them to exercise a high degree of independence. The problems experienced in the financing of the health system under decentralization should not be seen as direct evidence against the devolution of power. Instead, the problems should be viewed both within the context of the pre-existing constraints and the evolution of administrative mechanisms which do not reflect the intent of the Organic Law. The problems of insufficient health resources and shortage of skilled personnel to implement development plans would exist even if central control or some alternate administrative system were developed. Efforts should now be concentrated on addressing some of the inherent weaknesses in the system and trying to rekindle the true spirit of the Organic Law.
CHAPTER 9

Decentralization and health workforce development

R.-L. Kolehmainen-Aitken

Introduction

In every country, appropriately trained and deployed health workers are prerequisites for delivering the quantity and quality of health services to meet the nation's needs within its ability to pay. Health staff are almost always the most costly budget item. In 1986, staff wages and training costs accounted for about two-thirds of recurrent health expenditure in Papua New Guinea (Thomason and Newbrander 1991). Maximizing the benefits from such a large expenditure on health has obvious implications for the development of the country's services as a whole.

Decentralization has had several unintended and unexpected consequences for the development of Papua New Guinea's health sector. Some of the difficulties encountered were inherent in the manner in which decentralization regulations structured power relationships between the national level and the provinces on one hand and between the national Department of Health and other central government departments on the other. Others arose as a result of the administrative confusion and inflamed relationships that accompanied the forceful transfer of power from a very reluctant national health department to the provinces.

This chapter analyses in detail the impact that decentralization has had on the Papua New Guinea government's ability to coordinate workforce development with the changing requirements of the health system.

Staffing of health facilities

The Papua New Guinea government health policy (Papua New Guinea, Department of Public Health 1974; Papua New Guinea, Department of Health 1986) states that:

(i) health institutions should be staffed as appropriately and efficiently as possible in a manner consistent with providing basic health care;

(ii) no person should be engaged to perform a task if a lesser-trained, lesser-paid worker can be employed to carry out that task adequately; and

(iii) doctors' clinical activities should be confined to hospitals, but all skilled staff should provide a supervisory, training and supportive role to institutions and staff outside the hospital.
The staffing of Papua New Guinea’s health facilities is structured in accordance with these principles. Medical doctors mostly work in hospitals, which are located in the main provincial towns. A health extension officer, who works out of a rural health centre, is responsible for the comprehensive health service of a district. Each also directs the work of other health staff covering the whole range of promotive, preventive and curative activities. The most peripheral health facility, the village aid post, is staffed by an aid post orderly, the vast majority of whom are men. Health inspectors are concentrated in provincial headquarters, with only a few provinces placing them at the health centre level. Pathology, x-ray and pharmacy staff are found in hospitals and in only a few major health centres which have a doctor.

The decade 1974–84 (between the government’s First and Second National Health Plans) saw several changes in the composition and numbers of health staff. First, workforce resources, in aggregate, expanded faster than population growth (Table 9.1). Second, a substantial localization of health staff took place. This was particularly evident with regard to nurses and doctors. In 1973, almost half (47.7 per cent) of all registered nurses were expatriates; by 1984, nurses in both government and church health services were all nationals. Only 19 per cent of the doctors were Papua New Guineans in 1973; this proportion had risen to 51.2 per cent by 1984 (Table 9.2). (By 1990, it had risen to 63.5 per cent.) Third, government health services expanded at a faster rate than church health services. This was true for all categories of staff with the sole exception of nurse aides (Table 9.3). The increase in government health staff was particularly dramatic in general nursing, where the proportion of government nurses rose from 59 per cent in 1973 to 74 per cent in 1984.

### Table 9.1  Health workforce resources, 1973 and 1984

<table>
<thead>
<tr>
<th></th>
<th>1973</th>
<th></th>
<th>1984</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number of people per health worker</td>
<td>Number</td>
<td>Number of people per health worker</td>
</tr>
<tr>
<td>Doctors</td>
<td>226</td>
<td>11,700</td>
<td>283</td>
<td>11,500</td>
</tr>
<tr>
<td>Health extension officers</td>
<td>180</td>
<td>14,700</td>
<td>376</td>
<td>8,700</td>
</tr>
<tr>
<td>Nursing officers</td>
<td>1,554</td>
<td>1,700</td>
<td>2,514</td>
<td>1,300</td>
</tr>
<tr>
<td>Nurse aides</td>
<td>1,020</td>
<td>2,600</td>
<td>1,978</td>
<td>1,650</td>
</tr>
<tr>
<td>Aid post orderlies</td>
<td>1,547</td>
<td>1,700</td>
<td>2,150</td>
<td>1,500</td>
</tr>
</tbody>
</table>
Table 9.2  Registered doctors working in Papua New Guinea's health services, 1973 and 1984

<table>
<thead>
<tr>
<th></th>
<th>1973</th>
<th>1984</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nationals</td>
<td>Non-nationals</td>
</tr>
<tr>
<td>Government health</td>
<td>41</td>
<td>124</td>
</tr>
<tr>
<td>services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Papua New Guinea</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Church health services</td>
<td>—</td>
<td>27</td>
</tr>
<tr>
<td>Private practice</td>
<td>—</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>183</td>
</tr>
</tbody>
</table>

Table 9.3  Church health workers in Papua New Guinea, 1973 and 1984

<table>
<thead>
<tr>
<th></th>
<th>1973</th>
<th>1984</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage of all workers of that category</td>
</tr>
<tr>
<td>Doctors</td>
<td>27</td>
<td>11.9</td>
</tr>
<tr>
<td>Health extension officers</td>
<td>8</td>
<td>4.3</td>
</tr>
<tr>
<td>Nursing officers</td>
<td>640</td>
<td>41.2</td>
</tr>
<tr>
<td>Nurse aides</td>
<td>324</td>
<td>13.4</td>
</tr>
</tbody>
</table>

Health worker training

The vast majority of Papua New Guinea’s health workers are trained in-country. On-the-job training for health workers by religious missions has taken place since the early 1900s. Formal training programs started in the 1950s and early 1960s: for maternal and child health nurses in 1951; for general nurses and aid post orderlies in 1958; and for health extension officers in 1962. Table 9.4 shows the number of students enrolling and graduating from training programs in 1987.
Table 9.4 Health training: intakes and graduates in 1987

<table>
<thead>
<tr>
<th>Category of trainees</th>
<th>Number of schools</th>
<th>Intake</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Govt</td>
<td>CHS^a</td>
</tr>
<tr>
<td>Community health worker/ nurse aide/ APO^b</td>
<td>21</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>General nurse</td>
<td>12</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Health extension officer</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Medical doctor</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Health inspector</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Medical laboratory assistant</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Medical laboratory technician</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Medical technologist</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Radiographer</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Dispenser</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Dental therapist</td>
<td>1</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Pharmacist^c</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dentist^c</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiotherapist^c</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^a Church Health Service.
^b Aid post orderly.
^c All trained overseas.

Nursing and community health worker schools

Nursing education in Papua New Guinea has undergone several changes. Until the 1970s, various types of nurse training programs produced graduates with varying levels of nursing skills. In 1978, the three types of nursing courses then operating (registered nurse, enrolled hospital and enrolled community health nurse) were combined to provide one general nurse training program. This lasts three years and demands an educational entrance standard of Grade 10. Between 1980 and 1983, enrolled nurses were eligible to become registered nurses by undertaking a bridging course; since 1983, they have been required to pass an examination.

Four categories of base-level health workers exist in Papua New Guinea. They work in all levels of service, from rural aid posts to hospitals. These are nurse aides, aid post orderlies, hospital orderlies and community health workers. In practice, the four categories have been used interchangeably, though they range from community health workers, recently qualified from a two year training program (some with Grade 10 entry level), to orderlies who received their training on-the-job and had minimal formal education. In formulating the Second National Health Plan, the Department of Health decided to amalgamate the nurse aide and aid post orderly training programs. The new training program combines the maternal and child health skills of a nurse aide with the diagnostic skills of an aid post orderly, and produces a new category of 'community health worker'. The government's intention is to replace aid post orderlies and nurse aides over time with community health workers.

In 1989, the Department of Health ran five nursing schools and two community health worker training programs. The churches ran seven nursing schools...
and thirteen community health worker training programs. Church training schools receive government subsidies for running costs, student allowances and tutors' salaries. In the mid-1980s, they trained 60–70 per cent of the nurses and 80–90 per cent of the base-level workers.

**Colleges of Allied Health Sciences**

Two colleges of Allied Health Sciences, in Madang and Port Moresby, are run by the Department of Health. The Madang College trains health extension officers and health inspectors. The health extension officers are the backbone of Papua New Guinea's health service. Initially, in 1961, training courses for male nurses were designed as one year post-basic courses to produce 'medical assistants'. This was essentially an interim measure to make up for the shortage of doctors, but soon these workers were seen as important staff members in their own right. When their training was formalized in 1967, the title changed to 'health extension officer'. The current training program is of three years duration with a further year of supervised residency required to gain registration. Almost all of the enrolling students have completed Grade 12. Health inspectors are involved in improving the environmental health conditions in the country. The health inspector training program has a similar entry level and also lasts three years.

The College of Allied Health Sciences in Port Moresby trains laboratory staff, dispensers and dental therapists, and provides various post-basic and postgraduate training programs, mostly for nurses. Previously, it also trained radiographers, but this training program has been transferred to the University of Technology in Lae, with the first intake scheduled to take place in 1991.

**Faculty of Medicine**

The first Papua New Guinean doctors were trained in Fiji. Training in-country commenced in 1960, when the Papuan Medical College was opened. The first diploma level doctors graduated from there in 1964. In 1971, the University of Papua New Guinea, through its Faculty of Medicine, assumed control of the training of doctors and upgraded the training to degree level. The first of these degree-level doctors graduated in 1973. In addition to basic medical training, the Faculty of Medicine also runs specialist training programs for medical doctors at the Masters level.

Medical students are recruited from those who have successfully passed the Science Foundation year at the University of Papua New Guinea. The course lasts four years (in addition to the Foundation year). A further two years of supervised residency are required before full registration is granted.

The University continues to experience difficulty in attracting sufficient numbers of suitable national applicants to the medical course. This is partly due to the low numbers of secondary school leavers who have an adequate science background. The attrition rate during training remains high, with estimates of cumulative attrition ranging from 30 per cent to 50 per cent. The Faculty functions as a regional training resource for the Pacific and one-third to one-half of the graduates, depending on the year, come from outside Papua New Guinea (Table 9.5).
Table 9.5  Number of medical graduates at the University of Papua New Guinea by nationality, 1984–88

<table>
<thead>
<tr>
<th>Year</th>
<th>Papua New Guinea</th>
<th>Other Pacific</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>10</td>
<td>8</td>
<td>4</td>
<td>22</td>
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<tr>
<td>1985</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>1986</td>
<td>17</td>
<td>8</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>1987</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>1988</td>
<td>19</td>
<td>1</td>
<td>1</td>
<td>21</td>
</tr>
</tbody>
</table>

In 1973, the Faculty of Medicine assumed responsibility for training dentists and dental therapists, who previously had been trained by the Department of Health. Implementing this decision took several years, and the first degree-level dentists did not graduate until 1981. Six years later, in 1987, severe cuts in the University’s budget forced the closure of the dental training program. This was done against the wishes of the Department of Health, which then had to seek overseas replacements for students wishing to become dentists. The Department was also forced to resume responsibility for the training of dental therapists by transferring it to the College of Allied Health Sciences in Port Moresby.

Workforce planning preceding and during decentralization

National workforce planning commenced only in the early 1970s as part of the production of the First National Health Plan (Papua New Guinea, Department of Public Health 1974). This plan identified the roles of the different health workers and estimated the numbers of health workers required and their availability over the entire plan period. Some of the projections, particularly those for doctors, later proved to be overly optimistic.

The second major effort in health workforce planning took place in 1979, during the process of decentralization. The objective of this exercise was to obtain estimates of the number of health workers required by all provinces over the next ten years and to compare these requirements with estimates of projected supply. The data (assembled by each provincial health officer) were used to make conservative projections of the numbers of health staff required to provide services and to make recommendations for improving the effectiveness of some categories of workers (Davies 1980, 1981).

The provincial health officers were asked to scale their idealistic plans downward within the framework of local technical and administrative feasibility. Experience had taught them that the national government always reduced their requests: in practice, most, if not all, of them treated the study as a budgetary exercise, overestimating their requirements. While the proposals were reviewed by national divisional heads and officers in charge of service sections, it is unclear what criteria this review was based on. No attempt was made to cost the estimated increases in staff.

When the plan was sent to the then Department of Finance and the Public Services Commission it was considered totally unrealistic and received no support from these central agencies. The draft of a national health plan for 1981–85 (Papua New Guinea, Department of Health n.d.), which was never adopted but
was given a limited circulation within a year of the publication of the workforce plan, did not include its results. Its impact on national training policies was minimal. As a result, the planners became demoralized, and no further national workforce planning took place for several years. It was in this climate of confusion and loss of direction that decentralization was finally implemented in 1983.

**Impact of decentralization on policy formulation**

When the decision to decentralize was finally executed, policy formulation, planning and evaluation were designated to be national functions. Each province, however, was given the responsibility to develop its own provincial health policies. The demarcation line between what would constitute a 'national' policy and what a 'provincial' one was never defined. Since policies are often stated in fairly general terms, they can be subject to varying interpretations. Even when the interpretation of a national policy is clear, the national Department's authority to ensure that it is implemented can be and has been questioned in the decentralized situation.

A case in point is the national government's policy, expressed clearly in both the First and Second National Health Plans (Papua New Guinea, Department of Public Health 1974; Papua New Guinea, Department of Health 1986), to confine doctors' clinical activities to hospitals and restrict each province to having only one provincial hospital. After decentralization, however, certain provinces formulated their own policy of staffing selected health centres with doctors and calling them 'district hospitals'. They achieved this either by supplementing the doctors' salaries out of provincial funds or by recruiting expatriate volunteers where national doctors were unavailable for these postings. Since such staff were working in rural health services, they were administratively under the province's control, thus rendering the national government powerless to ensure the implementation of its policy of an equitable and cost-effective distribution of doctors.

**Impact of decentralization on workforce planning**

The national medium-term development planning exercise of 1984-85 (Papua New Guinea, Department of Finance and Planning 1986) included drawing up a five-year plan for the development of health services. During this exercise and the subsequent formulation of the 1986-90 National Health Plan, it was found that decentralization had particularly affected three areas of workforce planning:

- the availability of data for workforce planning;
- the responsibility for planning;
- the Department's ability to implement planning decisions.

**Data for workforce planning**

The health workforce data base was weak prior to decentralization; afterwards it became quite inadequate and unreliable. From 1980 to 1984, no attempt was made, either at the national or at the provincial level, to monitor the total number of health staff posts, the future requirements, or the numbers enrolling in and graduating from the training schools. This marked inactivity was due to several factors. Planning skills were clearly inadequate and staff turnover had been
considerable. Perhaps the most important factor however, was the lack of a clear perception at the national level of what was required of the Department of Health to effectively take ‘ultimate responsibility for national standards of health services’ and to act as a ‘technical adviser to the provinces’.

Since the Department of Health had no decision-making responsibility for provincial levels of staff, it kept little record of posts and vacancies. The same was true of personnel data. For example, the fairly accurate records kept of nurses prior to decentralization, rapidly deteriorated when control was transferred to the provinces. Personnel records at the Department of Personnel Management were notoriously out of date and linked neither with establishment files in the same department nor with the payroll file in the Department of Finance and Planning. Even existing data bases of staff for whom the Department of Health was still responsible, such as training staff and students, were eroded as a result of the staff turnover that accompanied decentralization.

**Responsibility for planning**

Decentralization also resulted in confusion regarding the responsibility of various government departments for health workforce planning. Many of the provincial health staff assumed that when the Department of Personnel Management reviewed provincial establishments, it did so according to a health workforce plan that it had undertaken on the basis of some clearly defined criteria. The Department of Personnel Management itself did not see health workforce planning as its responsibility, but instead as something belonging to the Department of Health. However, it failed to communicate this to the Department of Health for several years, and even afterwards, the formal basis for this responsibility, its scope and detail remained unclear. (The exception was its acceptance of national responsibility for medical specialists, staff working at the national Department of Health itself, and all basic and post-basic health training staff in the Department’s training institutions.)

Even if the departmental roles had been clearly understood, the ability of the national Department of Health to accept an active role in workforce planning would still have been seriously affected by the uncertainty about the division of powers and responsibilities, aggravated by the emotionally charged atmosphere that accompanied decentralization. It was further damaged by the rejection of the previous major national workforce planning effort (Davies 1980, 1981). Staffing standards were not formulated at the national level until five years after decentralization (Kolehmainen-Aitken and Shipp 1990). In the provinces, the level of planning expertise remained totally inadequate (Newbrander et al. 1988), and no effort was made at that level to develop provincial staffing standards.

Even when planning expertise at the national level improved, major problems remained. The full implications of transferring funding and the executive authority over provincial staff to the provinces without safeguarding a continuing role for the Department of Health in the resource allocation process, were first exposed during the central government’s national planning process, a year after health decentralization had been completed. The Department of Health no longer had any authority to plan for provincial staff undertaking transferred functions. Its authority over staff on delegated functions was disputed, with the Department of Finance and Planning expressing the view that such staff were a national responsibility, since they were funded in the national budget, and the Department of Personnel Management holding them to be provincial because they appeared
on the provincial staff establishment. Time did not allow for extensive consultation with the nineteen provincial governments. The National Planning Office (later amalgamated with the Department of Finance) instructed the health department that, in order to produce a sectoral strategy and plan, the Department of Health should plan for increases in the required cadres of health staff on behalf of the provinces. The National Planning Office undertook to conduct negotiations on the distribution of health staff with individual provinces, at a later date. However, when posts were approved, they were included within the establishment ceiling of the national Department of Health. It took several years before this situation was finally resolved and the posts were included and funded within provincial staff establishments.

Because the Department of Health was isolated from provincial staffing decisions (except in exceptional cases such as the development plan formulation), it had little opportunity to be kept informed of perceived staffing needs in the provinces. Given its weak planning capacity and the lack of any staffing or cost standards on which to base its arguments, the Department of Health failed to lobby for an active role in resource allocation processes in the early days of decentralization, when organizational structures and practices were still being moulded. The departments of Finance and Personnel Management rapidly became accustomed to making their own planning decisions without consulting the Department of Health.

The exclusion of the Department of Health from provincial budget discussions, which take place between the individual provinces and the Department of Finance and Planning, left it unable to influence the overall funding levels either between provinces or between individual budget sectors within a province. In reality, health workforce planning was thus carried out by the Department of Finance and Planning and the Department of Personnel Management through the annual budgetary process of provincial financial limits and staff ceilings. Nowhere in this process was there any attempt to assess the health service needs of the country as a whole or one province in relation to another. This did not change until 1989, when the Department of Health, after intense lobbying, was finally allowed for the first time to express its views in provincial budget hearings, though purely in an advisory capacity.

**Ability to implement planning decisions**

The 1986–90 National Health Plan documented deep inequalities in staffing between provinces. The provincial population per nurse was found to range from 500 to 2,300 in 1985. The equivalent ratios of population per health extension officer ranged from 3,500 to 22,500 (excluding National Capital District figures).

Prior to decentralization, the Department of Health had been able to decide what new posts were required in under-served provinces and to obtain Department of Personnel Management approval and funding for them. This was done taking account of existing vacancies and the estimated number of annual graduates. In fact, graduates of health training institutions came to expect a guaranteed job after finishing their training. With no formal linkages in place between the departments of Health, Finance and Planning and Personnel Management after decentralization, the necessary mechanisms for regular assessment and adjustment of any identified imbalances in provincial staffing were non-existent. The Department of Health could no longer guarantee the creation of posts, and this led to considerable concern among the students, culminating in a
strike in 1982 by students training to be health extension officers and health inspectors.

Problems remained even after the Resource Management Committee (a high-level committee directly below the national Cabinet), finally approved the Department of Health's 'indicators of staffing needs' as the basis for health staffing in 1989 (Kolehmainen-Aitken and Shipp 1990). The Department of Health forwarded an assessment of rural nurse staffing to the Department of Finance and Planning as part of the annual budgetary process, but the financial arrangements accompanying decentralization did not allow the Department of Finance and Planning to make any changes in the eight financially autonomous provinces. When the wealthiest province, North Solomons, decided to double the expenditure on rural health staffing in one year, the Department of Finance and Planning had to agree to the expenditure, because the funding came from the provincial Minimum Unconditional Grant (MUG), and the positions had been created under a Department of Personnel Management restructuring of the province.

Impact of decentralization on training the health workforce

The lack of planning

Lacking a long-term plan for the development of the health workforce, the Department of Health was unable to advise the training schools what types and levels of intake it required. This lack of overall planning had a very demoralizing effect on both students and teachers. Training programs were started and stopped and intakes fluctuated greatly.

Increasingly frustrated with the lack of workforce planning by the health department, the Public Services Commission (which later became part of the Department of Personnel Management) froze the health establishment for a year in 1982. This action was intended to encourage the Department of Health to undertake workforce planning. Instead, it had exactly the opposite effect. The department, which had been pressured by health extension and health inspector students to guarantee employment after training, responded not by planning but by curtailing all training programs, both basic and post-basic. Government nursing schools closed enrolments for a year and the intake of students to health extension and health inspector training programs was cut drastically. (Until 1982, the enrolments in health extension training programs were between 50 and 60; in 1983 the enrolment was cut to 17.)

The government nurse training programs had averaged intakes of 30 to 35 per school in the 1970s. With no intakes for a year, potential students lost confidence in the courses being run regularly and applications for subsequent years dropped. In 1983, only 94 students were recruited to the five government nursing schools. By February 1984, the number had dropped to 18 students and a special recruitment drive had to be conducted mid-year.

Prior to decentralization, approximately one-half of the nursing graduates came from church nursing schools, which primarily trained staff to their own requirements. With falling intakes to government nursing schools, the church schools were training two-thirds of the country's nurses by 1985. Thus, without intending to do so, the government health sector became increasingly dependent on the churches for maintaining a supply of trained nursing staff.
Lack of workforce planning during decentralization also seriously affected the ability of the Department of Health to influence those training programs for which it was no longer responsible. Dental training, as noted previously, provides a good example of this. The transfer of dental therapist training from the Department of Health dental colleges to the University of Papua New Guinea took place during the period of decentralization. All dental college staff employed by the Department of Health were retrenched and the Department of Dentistry in the Faculty of Medicine began to teach both dentists and dental therapists. The University entry requirement of Grade 12, which was higher than that previously required, created serious problems for student recruitment into dental therapy training. While intakes had been about ten a year under the Department of Health, only one Papua New Guinean student was recruited in 1985, and the intake for 1986 was cancelled to allow a reorganization of the program. As a result of strong pressure from the Department of Health, the University decided to revert to a Grade 10 entry standard from 1987. The following year, however, the University budget was severely cut and the Department of Dentistry closed. Dental therapist training reverted once again to the Department of Health, which now had to undertake the program with only one expatriate tutor, having lost both the University staff and the previous tutors that it had employed.

When workforce planning resumed in 1984, the analyses showed an impending critical shortage of most categories of health workers. The outputs from most training programs were insufficient to offset natural wastage from the workforce, and attrition during training was substantial.

The transfer of training functions

Decisions on the transfer of responsibilities at decentralization had a particularly severe impact on the training of certain categories of health staff. Nurse aides were most seriously affected. While training in general was declared a national responsibility at decentralization, nurse aide training was assigned to the provinces. However, the assignment of this responsibility was not accompanied by the necessary funds to undertake it. Most of the provinces found it impossible to fund nurse aide training programs out of their own budgets. As a direct result, government nurse aide training collapsed. In 1980, there had been thirteen government nurse aide training programs with 135 graduates annually; by 1984, there were only three schools with a total of thirteen graduates. Since there was also a steady decrease in the number of people training as aid post orderlies, the base of the workforce pyramid began to crumble.

The need for new management skills

After decentralization, provincial health administrators were, for the first time, forced to argue for adequate funding of health services in competition with other provincial sectoral priorities. Competent, experienced health managers were few and management training opportunities equally limited. For decentralization to succeed, provincial staff had to be equipped with sufficient management skills.

The matter was further complicated at the national level by the almost total turnover of senior staff while, in the provinces, decentralization accelerated the localization of senior provincial health positions. Previously, a considerable proportion of the provincial health officers had been expatriate medical officers, often with an additional qualification in public health. Within five years, these
positions were fully localized, with half of them filled by health extension officers, very few of whom had any prior management training (Newbrander and Campos-Outcalt 1988).

The strained administrative relationships over trainees and training institutions

While training remained a national responsibility at decentralization, the training schools were physically located in the provinces. Following decentralization, some of the provinces with a training institution insisted on a bigger voice in the selection of students and deployment of graduates to ensure that sufficient numbers of the province’s own students were trained and graduates retained in the province. This not only conflicted with overall training policy but also caused resentment in the other provinces.

Agreements had been drawn up between the national Department of Health and the provincial departments to allow the use of provincial health institutions and their staff in the training of health workers. In spite of such agreements, a conflict arose between a provincial government and a training school, with the provincial government refusing to allow any of its health facilities to be used for training purposes. This conflict was resolved only after threats by the national Minister of Health to take the matter to the Cabinet with a view to transferring the provincial health functions back to the national Department of Health.

Decentralization made it much more difficult for the Department of Health to rotate young doctors undertaking postgraduate training programs. When all establishment positions had been with the Department of Health, the Department had had the authority to transfer staff and positions. By 1986, all provinces had created their own provincial establishments and filled their medical officer positions with doctors who were expected to remain on active service there, rather than undertake postgraduate training. This became an important constraint because the small numbers of specialist doctors who could supervise training no longer had a regular rotation of postgraduate trainees and therefore were unable to pass on their specialist skills.

Impact of decentralization on workforce management

The most important effects of decentralization on workforce management occurred in the areas of salaries and working conditions, staff selection and discipline, and the deployment of staff. Motivation and staff development were also affected by the decentralization process.

Salaries and working conditions

Changes to health worker salaries and conditions of service proved difficult to implement in the decentralized health care system. Previously, the Department of Health budgeted for any increases that had been agreed between health worker unions and the departments of Finance and Planning and Personnel Management. After decentralization, budgeting became a provincial responsibility, and sometimes provincial managers misinterpreted an agreement and either misdirected the entitlements or did not budget for them at all.

Following decentralization, the provinces were allowed to create additional positions on the provincial establishment, provided they were funded out of provincial funds. Some even created provincial positions for specialist doctors,
even though medical specialists had been designated national staff. Although the terms and conditions of employment were to be set centrally, at least one province also managed to institute a bonus for rural doctors paid out of provincial funds.

An increasing disparity in the levels of equivalent provincial positions became evident after decentralization. Because the planning and lobbying skills of top provincial health managers varied widely, they were not all equally able to defend their budget and staff submissions in front of their own provincial governments or the departments of Finance and Planning and Personnel Management. As these latter departments lacked any technical health advice, the levels of staffing came to depend less on the amount and nature of the work required and more on the skills of the provincial health managers in pushing the proposed organizational structures through the central government bureaucracy.

Staff selection and discipline

Decentralization removed from the Department of Health any authority to influence the selection and discipline of provincial staff, including the provincial Assistant Secretaries for Health. Over time, the appointment process became increasingly politicized. Some provinces showed a tendency to favour health workers from their own province, staffing top positions with persons with political connections. This sometimes occurred to the exclusion of more qualified staff.

Standish (1983) has pointed out that most Papua New Guineans perform worst in their home province, a fact generally agreed upon by national supervisors. Some provinces have been slow to take action against their own staff, even when serious public service charges have been laid. Where top managers have performed poorly and have not been seen to be held accountable for their behaviour and performance, staff morale has been seriously and rapidly eroded.

While decentralization had placed the provincial Assistant Secretary for Health administratively above the hospital medical superintendent, this relationship was not clear-cut and in fact is still evolving. In the latter 1980s, half the Assistant Secretaries of Health were health extension officers, whereas all the medical superintendents were doctors (Newbrander and Campos-Outcalt 1988). Some medical superintendents resented reporting to and being disciplined by an Assistant Secretary for Health because the latter was considered technically less competent to decide hospital matters. Occasionally, the converse was true, and the Assistant Secretary was reluctant to discipline hospital staff, preferring to see this as the responsibility of the Department of Health.

Deployment of staff

Optimum deployment of health staff was hampered by the requirement that any inter-provincial transfer had to receive the approval of both the Department of Personnel Management and the departmental secretaries of the releasing and receiving provinces. This resulted in considerable delays, though it also acted as a break when the more advanced provinces attempted to improve the level and quality of their own staff at the expense of the other provinces. Occasionally, a province refused to receive a transferred staff member of a national department, such as a specialist medical officer, even though the posting of such staff was clearly a national function.
Motivation of staff

In provinces with a capable Assistant Secretary for Health, decentralization improved staff morale and motivation by fostering the development of a health team and giving health workers more responsibility for their own work. In provinces where managerial skills were lacking, the effect was the opposite. Health workers became confused and demoralized and services suffered as a consequence.

At decentralization, the position of the chief nursing officer was abolished and replaced with that of a nurse adviser. This new role, however, was neither understood nor accepted by the nurses. Some of them viewed the changing role as an indication that their contribution to health service development was not fully appreciated by top health managers. As a result, morale of the nursing workforce was affected, and complaints have since been voiced about the quality of nursing and lack of nursing leadership.

Staff development and in-service training

Staff development and in-service training became provincial responsibilities at decentralization. Some provinces had already organized in-service programs for their health staff, but most provinces were totally unprepared for this responsibility.

No system for performance assessment existed at the provincial level. While each provincial department had a staff development unit, these units were still in their infancy and had no experience in assessing the specific needs of health staff. Applications for further training outside the province had to gain the approval of the provincial staff development unit. If such training required financial sponsorship, the applications then had to be submitted to the national Department of Health for its approval. Since the latter no longer had a role in provincial staffing, it found it very difficult to evaluate how well the proposed course of training would meet the needs of the candidates.

A discussion of key issues

Health services in Papua New Guinea function under financial and human resource constraints which are likely to persist during the 1990s. Health funding stagnated and even decreased in the 1980s despite rapid population growth and an increasing community appreciation of the benefits of scientifically-based services (Thomason and Newbrander 1991).

Four key issues emerge from the preceding analysis of the impact that decentralization has had on workforce development in Papua New Guinea. These issues are:

- the potential for conflict between national goals and the aspirations of individual provinces;
- the importance of standard-setting as the basis for planning and conflict resolution;
- the need to develop effective linkages with central government departments, and between the national Department of Health and provincial health authorities; and
- the need for new skills and relationships.
National versus provincial goals and aspirations

Achieving a more equal distribution of economic benefits within the country has been one of the cornerstones of the Papua New Guinea Constitution. The threat to equity in a devolved government structure has several roots. First, the goals and aspirations held by those at the national level and those in the provinces are often very different and may be in conflict with each other. Second, available provincial resources and managerial skills differ substantially from area to area. Such differences between aspirations and resources need not be insurmountable problems if a government, in devolving power, retains a capacity to monitor long-term trends in financing and staffing of its health services and builds in the requisite mechanism for correcting imbalances. The fundamental problem in the way power has been devolved in Papua New Guinea is that the government lost both its capacity to monitor trends and its ability to effect any real changes in staffing, particularly in the financially autonomous provinces.

The conflict between national aims and provincial aspirations is perhaps inevitable. National authorities aim to formulate policies and devise plans that ensure an equitable development of health services for the country as a whole. At a local level, each individual province strives for the highest possible development for that province. The discrepancy between national and provincial aims is likely to be most pronounced in provinces whose health services are more advanced than in the country as a whole. Such provinces are usually wealthier with ample provincial resources with which to supplement national funds and staff for priority program areas. They also commonly have managers who are articulate in expressing provincial needs and effective in lobbying for national and international financial and human resources to meet them. The population of the more advanced provinces is also more aware of the value of health services and able to lobby both national and provincial decision makers for improved services.

Importance of standard setting

Mechanisms for resolving conflicts between national and provincial development goals must be coupled with rational ways of assessing provincial needs and allocating the resources available to meet them. Where national standards have been set for the staffing and cost of health services, they provide criteria against which provincial development can be evaluated and comparisons made.

At the time of decentralization, very few national standards existed in Papua New Guinea, and attempts to get the national managers to formulate them failed for various reasons. This was a major deficiency, which later affected the ability of the national Department of Health to exert a role in national resource allocation decisions and to ensure an equitable development of health services in the country. In the latter part of the 1980s, much effort was put into developing staffing standards for rural and hospital staff which would allow a rational comparison of workloads and staffing between provinces and between individual health institutions (Kolehmainen-Aitken and Shipp 1990). Cost standards for rural health services (Mitchell et al. 1988) and facility standards were also developed. All these can provide the basis for further national and provincial planning and for resolution of conflicts between national and provincial aspirations.
Linkages between government departments

Where power has been devolved to the provinces and national health authorities have been isolated from budgetary and staffing decisions, no ready mechanism exists to resolve conflicts between the greater national good and the provinces' individual wishes for development. The virtual exclusion of the Department of Health from the budgetary process left it with insufficient means to fulfil its responsibility of ensuring that health services were equitable, appropriate and of satisfactory quality and quantity. However, even if the Department of Health would have been invited to advise the departments of Personnel Management and Finance and Planning on resource allocation in the early 1980s, it could not have exerted any real influence without first developing the national standards referred to above.

The annual meetings of the provincial Assistant Secretaries for Health with national Department of Health senior staff failed to serve as an adequate forum for cooperative human resource planning in the early years of decentralization. Many factors accounted for this. First, both national and provincial health authorities were new in their roles, and many details of their responsibilities and authority were still to be worked out. Second, without national standards, debates over imbalances of staffing had no objective basis. Third, the sense of nationhood in Papua New Guinea, independent for only 15 years, is still fragile. The provincial Assistant Secretaries serve under their provincial Secretary, take policy guidance from their provincial political masters and have had only very limited access to national level data on staffing and health financing. It is hardly surprising then that they have been reluctant to promote the national view, particularly where it has actually or potentially conflicted with the province's own good.

If equity is to be pursued as a national goal, the implication of any decisions on health funding and staffing must be understood as fully as possible. Avenues must be provided to allow national and provincial health authorities a regular means of assessing and debating health service development in the country. Without such mechanisms to ensure that national implications for equity have been considered, there is a real danger that the less developed areas will not get their share of the quality and quantity of health staff that the nation produces.

Throughout the late 1980s, the national Department of Health lobbied for consultation when provincial budgets and staff increases were considered by the Department of Finance and Planning and the Department of Personnel Management. It was not alone in pressing for greater technical input into resource-allocating decisions. The Second Provincial Health Ministers' Conference in February 1989 also expressed its concern about the lack of consultation and passed a resolution demanding that the Department of Health be consulted before any decisions on provincial budgets and establishments were made by the other central government departments. In 1988, for the first time, the Department of Finance invited the views of the Department of Health when provincial budgets were considered. In 1989 and 1990, the Department of Health was also consulted on provincial budgets. This arrangement, however, continues to be informal and at the solicitation of the Department of Health.

New skills and relationships

Since decentralization, health worker training has become the main avenue for the Department of Health to influence the standards of health services in the provinces. Training an adequate number of competent provincial health managers was
the obvious first priority. Two separate but complementary approaches to managerial development were adopted.

First, the Faculty of Medicine in the University of Papua New Guinea set up a postgraduate program in community health within its Department of Community Medicine. This was aimed at doctors, health extension officers and health inspectors who were filling senior provincial level health management positions. (A nursing administration course was already in existence at the College of Allied Health Services in Port Moresby.)

Second, the development of a mutually supportive provincial health management team was fostered by linking senior national staff with provincial staff in an on-going Management Support for Provinces Program. This included on-site consultation and training activities, and concentrated on improving provincial health planning, information support to management and health centre supervision (Newbrander et al. 1988).

Conclusion

The Papua New Guinea experience has demonstrated that if the devolution of power to the provinces is implemented without sufficient mechanisms for addressing equity concerns, national level health authorities will be left with the responsibility for ensuring national standards of health care without any real capacity to effect changes in two of the most crucial resources required: finance and staff.

While decentralization, as anticipated, resulted in more effective and efficient management of health services in some provinces, its consequences for human resources development were largely unforeseen. The forcible transfer of executive powers to the provinces from a very reluctant national Department of Health was followed by a period when the national Department seemed very unclear and hesitant about both its roles and its powers. As a result of the lack of national level leadership, attitudes and administrative procedures between the provinces and other central government departments developed, which have been detrimental to the achievement of an equitable, appropriate and effective staffing of health services. Subsequent national health planning exercises have highlighted the issues and the problems, and the late 1980s were spent in seeking ways of dealing with them.

The first priority in Papua New Guinea was the development of human resources policies, plans and standards in consultation with the various parties involved. These should provide a more rational basis for the production and deployment of staff resources. The second priority was to develop cooperative relationships with government planners and budget staff in the national Department of Finance and Planning and with those responsible for staffing decisions in the Department of Personnel Management. They also involved provincial health managers and the provincial Secretary and planning staff. Third, through its Management Support for Provinces Program and its support for the University’s postgraduate community health training, the national Department sought to improve the quality and management and technical skills of both provincial and national health administrators.
Management of a decentralized health system

D. Campos-Outcalt and W.C. Newbrander

Introduction

Management is the guidance of systems, organizations, people, activities, projects and decision-making processes. It consists of four major activities: planning, organizing, implementing and monitoring. The basics of management remain constant regardless of the type of governmental structure. Centralized and decentralized health systems both require these basic management capabilities if the health needs of the population are to be adequately met.

Papua New Guinea is no exception. Prior to decentralization, the 1974-78 National Health Plan identified the need for significant improvement in management skills. One of the national objectives of that health plan was the creation of a management development system. Over a decade later, after decentralization, the Second National Health Plan 1986–90 was formulated. It too singled out the lack of management skills as one of the major constraints on the continued development of health services at all levels:

A particular manpower constraint involves inadequate management at all levels in the health services... Insufficient attention has been paid to the training of middle and upper level management. (Papua New Guinea, Department of Health 1986)

While the basic skills of management remain the same, the particular skills required by managers at the various levels must be adapted to suit the requirements of decentralization.

Decentralization was promoted as a means of moving the centres of power closer to the people and of facilitating their involvement in the organization and management of various government sectors, including health, which affected their daily lives. Eight years after the initiation of decentralization of the health system, many question the wisdom and the practicality of having a decentralized management structure for the health sector. This chapter therefore attempts to analyse the impact of decentralization on the management of the health system.
Some essentials for decentralized management

Basic management skills are needed by health system managers under any administrative structure. The organizational prerequisites for successful management of a health system include:

(i) personnel with technical knowledge and skills as well as management skills in the areas of evaluation, budgeting, supervising and planning;
(ii) clearly delineated responsibilities and lines of authority;
(iii) an information system which allows the monitoring of expenditures, personnel and program performance;
(iv) logistical support for delivering supplies and making supervisory visits;
(v) an adequate budget.

With a move to a decentralized system, the need for management skills is magnified. The downward shift of responsibilities requires middle and lower level managers to have, and exercise, a greater range of management skills than under a centralized system. There is also a need for a greater number of managers under a decentralized system. Management capabilities and health planning skills are usually in scarce supply at the lower levels because, prior to decentralization, all policy decisions, planning and implementation had taken place at the national level. There had been no need for other levels of the system to undertake these tasks.

The process of decentralization also demands a three-phase reorganization of management structures and responsibilities. First, there must be a definition and clarification of the roles of managers at various levels of the decentralized system. This requires a review of organizational structures and management functions in order to identify the issues and resolve questions of finances and responsibilities. Such reviews can present difficulties as they highlight the shortcomings of the existing system. This can be threatening to those currently in power.

A second major task is the preparation and strengthening of the provincial or district level staff for their new responsibilities. This requires extensive training in management skills for middle and lower level managers during the preparatory period of decentralization. The central staff are also required to shift the focus of their activities from directing staff at lower levels to facilitating those staff to take over their new responsibilities. This will enable the development of a critical mass of qualified managers. However, central staff are frequently reluctant to relinquish power and lack the technical capability to facilitate the transfer of powers.

Finally, once roles have been clearly delineated, the proper preparatory training undertaken and the responsibilities and resources duly transferred, there is a need for provision of ongoing technical and managerial support. Even with the development of a capable cadre of managers at the lower level, there will remain an ongoing need for assistance from the central level. The role of the central level will thereby change from directing and implementing to monitoring and advising.

The process of decentralization should involve all the positive components described: a clear delineation of roles and functions of each level; a preparatory period and transition phase in which the staff in the decentralized units undergo management training; and on-going provision of support, technical expertise and training to lower levels. As described in this chapter, none of these occurred in the transition period in Papua New Guinea.
The national Department of Health during decentralization

Decentralization was strongly resisted by national health officials. This resistance meant that the components necessary for a smooth transition to a decentralized system were not present.

Time which should have been devoted to a preparatory period and gradual transition was instead spent on departmental power broking. What started out as an attempt to define national and provincial responsibilities became muddled by bureaucratic decisions. For instance, personnel performing duties related to delegated responsibilities were to be supervised by the provinces yet paid by the national government. A planned restructuring of the national Department of Health to facilitate the new roles of technical advising and monitoring did not occur. Since there was resistance in the national Department of Health to decentralization no direction was provided to the provinces. No standards were set and goodwill and trust between the two levels was not established. No training was provided for provincial staff to enable them to carry out their responsibilities. Both levels were therefore unprepared for their new roles and the effects of this situation will be evident for years.

The provincial divisions of health after decentralization

In 1987, after four years of decentralized health services, the provincial divisions of health had developed organizational structures which reflected a past history of vertical programs established by a centralized national department. Thus, malaria control, disease control, maternal-child health services, and other programs retained separate sections and staff, although they were now answerable to the provincial Assistant Secretary of Health rather than to a specialized section within the national Department of Health. There was, however, still some dependence on the specialized national sections for technical matters.

The provincial Assistant Secretaries of Health were responsible to the Secretary of the province who in turn was answerable to the provincial minister for health and the provincial assemblies. The provincial Secretaries were usually generalist public servants with little knowledge of health matters. This placed Assistant Secretaries of Health in strategically powerful positions, because they were responsible not only for the daily management of health services but also for development and implementation of health policies and long-term planning.

Over time, the positions of Assistant Secretaries of Health came to be filled increasingly by Papua New Guinea nationals rather than expatriates and by health extension officers rather than medical officers (Newbrander and Campos-Outcalt 1988). By 1987, due to a localization program throughout the Papua New Guinea public service, 90 per cent of Assistant Secretary of Health positions were filled by nationals compared with 40 per cent in 1978, and only 50 per cent of Assistant Secretaries of Health were medical officers (the remainder were health extension officers and a health inspector) compared with 90 per cent in 1978.

In 1987, the provincial medical officer Assistant Secretaries had been in their positions for an average of 4.6 years while the health extension officers had been in theirs for an average of 3.2 years. Only six of the provincial Assistant Secretaries of Health were substantive in their positions leaving twelve who held the post in an acting capacity. The health extension officers who were acting Assistant Secretaries averaged three years in their position, in contrast to five
years for the medical officers. Most of those who were not substantive felt their position to be very tenuous, leaving them open to political pressure and unable to act for the good of the entire province.

Health extension officers receive three years of training after completion of secondary school followed by one year of supervised practice. Medical officers receive one year of university and four years of medical school followed by registrar training. Neither group received much public health nor management training until recently. Now the Assistant Secretaries of Health are receiving training in public health, community health and management through a postgraduate course designed for health administrators, at the University of Papua New Guinea.

Management deficiencies in the decentralization process

Lack of management training

Section managers below the Assistant Secretary of Health level were health workers who had advanced up the public service hierarchy over time. They had usually received some form of short-course management training by way of in-service courses sponsored by the national Department of Health or the World Health Organization or by way of courses held at the Administrative College of Port Moresby.

Too many tiers of staff

After decentralization, there was a marked tendency for mid-level management positions to proliferate, thus shifting staff and budgetary resources from field operations to the provincial health officers. As an example, one province was experiencing conflicts between the directors of nursing at the provincial hospital and directors of the maternal and child health section. They solved this by creating a provincial nursing supervisor position to coordinate the activities of the two nursing directors, making three mid-level nursing supervisor positions where before there had been two.

Information systems

The information management practices of the provincial health divisions also reflected the vertically managed, specialized programs of the pre-decentralization era. Each technical section collected its own data from the health centres: this resulted in health centres filling out multiple forms each month, many of which contained duplicate questions from other forms. Each provincial program manager then collated these data each month, and passed them on to the national Department of Health. Rarely were the data used for management purposes in the provinces. The minimal analysis and feedback received by the provinces from the Department of Health was usually much too slow in coming to be of any use. The result was that while program managers might know their service output, they did not know the relevance or impact of their activities in addressing priority health problems. Thus, no further analysis took place, such as examining population coverages, district differences, achievement of targets, or costs of services. The health centre staff rarely received feedback on their performance. As a result, managers did not use data to manage their programs and the health services.
Supervision

Poor supervision is a serious problem in provincial health services. Although health service staff should visit health facilities in order to monitor activities and assess problems, little supervisory activity is taking place. Surveys on the actual extent of supervision have revealed that most provincial health managers of technical sections visit only a small proportion of their health facilities annually. The likelihood of a supervisory visit appeared to be inversely related to the distance of the facility to the provincial health office. Health centres within easy access were found to receive a far greater number of supervisory visits than those which were distant or hard to reach.

At provincial health offices there is also a problem of coordination of supervisory activities between different technical sections. Each technical manager considers that it is his duty to make field visits to supervise his own technical area. As a result, multiple visits to accessible health facilities by provincial staff are common. This lack of integration and coordination of supervision remains a problem.

Weaknesses in supervision are prevalent throughout the provincial health system. It has been reported that 31 per cent of rural health centres and subcentres received no supervisory visits during 1987 (Garner, Thomason and Donaldson 1990). Rural health facilities are themselves responsible for the regular supervision of their aid posts. However, it was found that, in 1987, only 37 per cent of health centres and 21 per cent of subcentres had performed even a single supervisory visit to each of the facilities under their supervision (Mitchell, Donaldson and Thomason 1988).

Budgeting

Provincial health budgeting is done in an incremental fashion on a sectional basis. There are limited funds available to be used in a discretionary fashion and most programs are underfunded. Rather than choose priority areas which can be funded adequately and eliminate funding for non-priority areas, all programs are funded at inadequate levels. Personnel costs are beginning to consume larger proportions of the health budget due to increasing numbers of supervisory staff, and to a government decision to decrease funding for social programs. Provinces are beginning to find themselves in the situation of having staff and facilities with little money to provide services or maintenance. A study conducted in 1988 demonstrated a marked deterioration in the nation's health facilities due to a lack of expenditure on maintenance (Mitchell, Donaldson and Thomason 1988).

Planning

Most provinces have not undertaken any short-, medium-, or long-term planning. A few provinces have developed five-year health plans but these documents are usually summaries of health statistics, without analysis, combined with stated desires for new facilities and staff. Short-term planning is also deficient and most section managers have not even established yearly targets for program performance.

In summary, the provincial divisions of health were poorly prepared to assume the increased levels of responsibility which the decentralization process pressed upon them. Few of the essential organizational elements were present. Provincial health divisions had organizational structures and information
systems which were legacies from a centralized, vertical system. Personnel were not trained to assume management positions, and budgets were unresponsive to program innovations and stretched by a proliferation of management positions. Furthermore, there was a lack of planning capability and a scarcity of technical expertise; maintenance of health facilities was being neglected, and responsibilities and authority at the national-provincial levels were not clear. Most provincial health divisions are therefore now operating at a level of dealing with daily crisis situations and of struggling to keep programs functioning at all.

Decentralization of the health system at sub-provincial level

In an attempt to involve local communities and organizations further in decentralization, some provinces in Papua New Guinea have attempted to decentralize government functions to the sub-provincial (district) level. Promotion of community involvement in local decision-making and resource allocations are the main impetus for this. As Mills et al. (1990) have pointed out, however, this is one of the most difficult aspects of decentralization to achieve. The need for strong management skills at this level further burdens the health system with the necessity of training personnel to meet such demands.

In Papua New Guinea, this further decentralization has entailed the establishment of a district office managed by a district administrator responsible for coordination of the local activities of all provincial divisions (including education, health, primary industry). Some provincial divisions of health have created positions for district health officers to assume responsibility for health programs in the district and to work with the district administration.

The creation of district offices and administrators has caused potential conflict and overlap of responsibilities with the specialized provincial divisions. It has raised a whole gamut of questions: for example, who is ultimately responsible for planning and implementing programs of specialized divisions; who controls the budget and personnel from each division at the district level; how much integration of planning and administration of specialized programs is actually possible or desirable; to whom are district administrators answerable; and does this administrative set-up really constitute a decentralization from the province?

A study in 1987 sought answers to these questions (Campos-Outcalt and Newbrander 1989). There were wide variations in the district organizational structures between and within provinces. Roles of district staff were ill-defined and different levels expressed a range of views on their relation and responsibilities to others. In several provinces, this second tier decentralization took place before adequate structures had been established at the provincial level.

Several factors have been proposed as indicators of the extent of decentralization occurring with different administrative structures (Smith 1979). Some of these include the division of responsibility, the manner in which responsibility is distributed (devolution versus deconcentration), the ability to raise revenue, the organization of field administration, the degree of central influence on local decisions (control versus influence), the legal validity of local governments, the proportion of total public spending incurred by each level and the size of the government authority (geographic and number of personnel). By these criteria, the shift of responsibility in Papua New Guinea for each program from the national to provincial level has been a significant devolution of authority. Within the provinces, however, it was found that the current district structures have not
significantly furthered decentralization. District administrators answer to the provincial department, their budgets are determined and provided by the province and there is no corresponding elected district body with authority to control district administrative activity. Local input into district decisions is often advisory only and many health committees, when functioning, are comprised of appointed rather than elected members. This provincial–district arrangement is a deconcentration of administrative responsibilities, not a decentralization.

The 1987 study found that, in all but two provinces, district administrators had little control over health programs. They were responsible for some fiscal and personnel issues, but major decisions concerning budgets, planning and staffing were made at the provincial level. Two provinces were exceptions: here the district administrators were designated as Assistant Secretaries and the heads of specialized programs at the provincial office were all relegated to advisory positions with no control over budgets or personnel.

There were some basic reasons why most provinces had not succeeded in achieving integrated management of specialized programs using the district offices. First, the district offices posed a threat to the long-established, specialized departments which do not give up power and authority willingly (the heads of the health divisions in the two provinces mentioned above complained bitterly of their losses). Rather, the provincial departments seek to centralize their powers and management structures. Second, the establishment of mid-level managerial positions, such as district administrators, creates a need for trained personnel which is often unavailable in developing countries (Conyers 1981; Smith 1982; Vengroff and Johnston 1987). These two problems can be additive. Take for example the Assistant Secretaries of Health in the provinces, all of whom had health provider training and had, or were in the process of obtaining, further training in public health. They were very reluctant to give up authority over what they saw as technical matters to general administrators with less training.

While integrated management at the local level is often advocated as a more effective way to achieve local development, there is little evidence of its effectiveness, and attempts to achieve it often fail (Conyers 1981; Mills 1983; Oberst 1986). Conyers has pointed out that the quality of programs at the local level can actually deteriorate if ‘vertical links within ministries or departments are reduced to the extent that field staff receive inadequate supervision or support...’ Scarcity of provincial vehicles needed for essential health outreach services was a complaint voiced by the health directors in the two provinces where the district offices did have more authority. There was no evidence that health services were managed any better in these two provinces.

**Conclusion**

The management of health services described in this chapter reflects the realities involved with decentralizing authority for programs from one level of government to another. It is not surprising that within a strong, centralized Department of Health, with a record of delivery of improved health services and improved health status to the country, there would be individuals who would disagree with and resist transferring powers to provinces. The resistance to the decentralization process resulted in a lack of a transition period, inadequate training for provincial managerial personnel and a lack of clearly delineated levels of authority and responsibility. The results were provincial divisions of health which were
unprepared to assume the responsibilities they were given, and a national depart­
ment unprepared for a shift in its role of controlling all services to a less powerful
one of monitoring, technically supporting and advising.

Four years after the transfer of responsibility for health programs, the provin­
cial divisions of health still lacked basic managerial skills and capabilities. An
on-going program has therefore been established to help these provincial
divisions to develop their managerial skills and to build up a core of capable
managers to make decentralization work effectively (Newbrander et al. 1988). The
provincial planning and management problems are addressed through this pro­
gram by developing appropriate management training materials and the
 provision of regular on-site technical support to provincial staff. Provincial sec­
tion heads are visited several times each year for training in management skills
and are individually assisted in applying management concepts to particular
program areas.

In addition, over a two year period, a computerized provincial information
system has been developed and installed in most provinces (Campos-Outcalt and
Vickers 1988). There are currently plans to install this system in the remaining
provinces. The information system has improved the capacity of provincial
managers to analyse data and use the results in the management of their provin­
cial health services.

While these attempts to improve provincial managerial capabilities were
occurring, some provinces attempted to decentralize further by creating district
administrative functions. District-level management was advocated on the basis
that it combines the control, support and supervision of a central office with a
greater degree of local flexibility. These attempts have generally not been success­
ful as a mechanism for furthering decentralization nor have they been
particularly effective at facilitating integrated management of development
programs.

The general assessment of the management of the health system after
decentralization indicates that many of the difficulties experienced were the
result of inadequate preparation. Decentralization has also resulted in the disper­
sion of already scarce management skills.

The further decentralization of management to the sub-provincial level has
not been administratively successful, nor has it provided improved opportunities
for communities to participate in the decision making of their local health ser­
vices. By 1990, the two provinces which had decentralized to the district level had
reversed this process and recentralized functions at the provincial level. This
leads to the conclusion that the administration of health programs is probably
best left at the provincial level in Papua New Guinea at this time.

Local (district) governments lack resources and finances and the national
government is too distant. The provincial government is, however, well placed to
provide the necessary services. The provinces are the lowest level of government
in Papua New Guinea where administrative and elected legislative government
coincide with adequate financial resources. In addition, all developing countries
must weigh-up the flexibility offered by decentralization against the potential
inequities and political instability which can result (Conyers 1981; Smith 1982;
Vaughan et al. 1984a). Provincial level administration might provide some
balance to these tendencies.

The continued administration of health programs from the provincial capital
however, does leave the people with limited options for influencing the content
and delivery of their health services. The electoral process can be used to change
the composition of the provincial assemblies, and/or the people may decide not
to use the services and instead seek assistance from alternative health sources.
Until better mechanisms for community participation can be developed and
greater local control achieved, an acceptable level of services must continue to be
provided by the provincial governments. The provincial division of health must
be kept advised of the local conditions, needs and desires of the people by local
health workers and district administrators must faithfully serve as advocates for
local communities.

It is interesting that the same process that occurred between the national and
provincial levels in the 1980s can now be seen repeating itself at the provincial–
district levels where the Assistant Secretaries of Health are resisting a loss of
authority to district administrators. It is possible that the location of authority for
health programs could change in the future, going either inwards to the centre or
outwards to the periphery. If the provinces prove incapable of maintaining an
acceptable level of service, recentralization of certain programs could occur. If, on
the other hand, decentralization proves successful and an adequately financed,
sub-provincial level of government is developed, then decentralization of health
services could proceed down another level. Clearly, if the latter scenario
develops, the difficult lessons learned from the national–provincial decentraliza-
tion described in this chapter must be used to help smooth future transitions.
Chapter 11

Planning for health in a decentralized context

R.-L. Kolehmainen-Aitken and J.A. Thomason

Introduction

Improving the health status of the population depends on many factors external to the health sector itself. Because of this, health planning must be seen as an integral part of overall national planning in social and economic welfare. Health planning is a rational process of matching finite resources to unlimited health needs so that the greatest health benefits are achieved for as many people as possible. Such planning requires the identification of priorities, the choice of which then shapes the future direction of health services.

Systematic health planning has been in operation for almost twenty years in Papua New Guinea. It began in 1973 with the preparation of the country's First National Health Plan, which preceded both independence and the decentralization of health services. A government-wide medium-term development planning exercise in the early 1980s and the formulation of the Second National Health Plan in 1985–86 both occurred after the complete decentralization of health services. These national planning efforts in the newly decentralized context presented both challenges and particular problems to health managers. This chapter expounds the lessons learned from the Papua New Guinean experience.¹

National health planning in Papua New Guinea

Prior to decentralization

Before the First National Health Plan, no objectively based statement existed to define the short- or medium-term plans for the health services of Papua New Guinea. Planning, when it did take place, tended to concentrate on 'nuts and bolts', such as construction, planning for annual budgets or training courses (Bell 1973b:4). During the early 1970s, Papua New Guinea was experiencing considerable political and social change and it was considered timely that the Department of Health should prepare a planning document which would lead health services into the post-independence period.

¹ This chapter focuses primarily on the development of the Second National Health Plan. Recently, a Third National Health Plan has been developed, building on the experience of the earlier plans. A summary of this process is included in the conclusion.
The First National Health Plan, prepared by the Department of Public Health immediately prior to independence, covered the period from 1974 to 1978. This health planning process incorporated an extensive data collection exercise and included the compilation of a National Inventory of Health Resources, which was prepared in 1974. Information on diseases and available health services was collected from diverse sources and was published as a reference volume for Papua New Guinea health. It also became a starting point in the health planning process (Bell 1973b).

The First National Health Plan was primarily the work of the Health Planning Unit, under the direction of the Health Planning Committee. Assistance in technical areas was provided by committees on health care, health improvement, health resources, health organization and training. Consultant advice was provided by the World Health Organization. The World Council of Churches made a staff member available to assist the churches and the Department in assessing their future roles in the provision of health services. In 1973, a district health planning course was held for district health officers. A workshop was also held to give district health managers and hospital managers an opportunity to consider and comment upon the recommendations of the Health Planning Committee.

The Plan was designed to guide the transition from centralized control to limited decentralization. Thus it included proposals which would increase the financial and administrative control of the districts. However, it was clear that the successful implementation of these proposals might be constrained by poor planning and management skills at the district level. As a first step in the implementation of the plan at a district level, a National Health Plan Action Conference for district and senior departmental officers was held in July 1974.

The First National Health Plan, 1974–78, provided a useful guide to the development of health services over the period leading into independence. However, it was most definitely a centralized and prescriptive plan. There must also be doubt about the intended level of community participation; Bell (1973b:8) makes reference to resistance among Papua New Guinean staff to the preparation of the plan prior to independence, rather than after it, when citizens would be able to determine their own direction. While participation from the districts was clearly limited, the Plan does represent a creditable effort by those in central control to develop directions for health services.

When the period of the First National Health Plan was over, the Department of Health attempted to develop a second national health plan which was prepared in 1981, but never published. At the time, the national Department of Health was involved in an intense internal struggle regarding decentralization. External resources from the World Health Organization had been made available for the formulation of the draft plan. However, this assistance was only short-term, and the planning resources available at the national Department of Health were insufficient to complete the plan in the atmosphere of conflict that prevailed at the time.

Post-decentralization

No national health plan was in effect in 1983 when health functions were finally transferred and delegated to the provincial governments. The need for decisions to be made about the future of health services was clear. However, some of the senior staff at the national level found it difficult to adapt to their new roles in the decentralized health system and in effect abrogated their responsibilities for
transferred and delegated functions. Because of the Department's inability to rise to its new responsibilities, the eventual publication of the Second National Health Plan in 1986 was, initially at least, motivated by external forces.

In 1982, shortly before the decentralization of financial responsibility for all health functions, Cabinet requested a Health Policy Review (Papua New Guinea, Department of Health, National Planning Office 1983). This later formed a valuable contribution to the Second National Health Plan. The terms of reference for the review were set by the National Executive Council and included a review of:

- health services and disease control programs;
- the role of the national Department of Health in the light of the Organic Law on Provincial Government and the decision to decentralize many major health functions; and
- the structure of the Department and an examination of the future of health services, in particular personnel and training requirements.

The Health Policy Review served an information gathering and internal review function, but had only limited participation from many senior members of the national Department of Health. The real impetus for the development of the Second National Health Plan came from the government's medium-term planning exercise—a national effort covering all government departments.

In May 1984, a planning committee was established within the national Department of Health. The committee included representation from the Departments of Primary Industry and Education, the Public Services Commission, the National Planning Office, the Medical Faculty, Churches Medical Council, and provincial Divisions of Health. By the end of 1984, the Department of Health had prepared a health strategy document (Papua New Guinea, Department of Health, National Planning Office 1984) which was based on a series of position papers covering the major health care issues.

This document provided the basis for the development of a full National Health Plan in the following year. The Second National Health Plan was intended to provide policy direction and to show concrete evidence of the Department's new role in national planning and policy formulation. The committee, which had been convened for the medium-term planning exercise, was expanded and continued as the National Health Planning Committee. Several technical committees in areas such as environmental health, family health, training, and primary health care were established to examine critically those specific areas and to determine objectives and strategies. Draft chapters were discussed by provincial health managers, and the final draft plan widely circulated for comment.

Key components of the national health planning process

Central government agencies

The preparation of the national medium-term development plan was in response to a Cabinet decision. In view of Papua New Guinea's economic growth since independence, the National Planning Office (NPO) was instructed to carry out a major review of all government activity in order to target scarce resources towards improving economic growth. A secondary aim was to encourage government departments to plan their strategies and resource allocation decisions over several years, rather than solely in the context of the annual budgetary process (Papua New Guinea, Department of Finance and Planning 1986). The process of involving
provincial authorities was considered to be a key element in the planning process, and the NPO encouraged departments to elicit maximum provincial participation. At the same time, only limited resources were made available for the development of the plan.

While the NPO was supportive of the Department of Health’s efforts to follow up the medium-term planning exercise with the preparation of a complete National Health Plan, this was of less immediate interest to it and to the other government departments. In spite of attempts by the Department of Health to fully involve the NPO and other central government departments in the preparation of the health plan, heavy work schedules and lack of staff limited their effective participation.

National Department of Health

When it became clear that the decentralization of health services was inevitable, several senior departmental staff resigned. Of the remaining staff, many had difficulty in adjusting to the new requirements of their roles. As technical advisers, some lacked the confidence and expertise to carry out the new responsibilities.

The Department of Health attempted to remedy transitional problems by carrying out organizational restructuring. This was aimed at making the structure reflect the new requirements as well as attracting new staff to the Department. This organizational change was a positive move, which made it very clear that new operating principles applied. However, it also meant that a considerable number of staff in senior positions were new to the national department and consequently had only limited experience in national planning. Thus, a vacuum still remained in terms of the provision of policy direction and planning skills.

The development of the national health plan marked a transition for departmental staff. Those officers who had been accustomed to the wide ranging powers of the centralized system were required to review their new roles as policy makers and technical advisers to the newly appointed health managers in the provinces. This transition was difficult to make, particularly in view of the extensive and acrimonious debate within the department prior to decentralization. While decentralization was no longer an issue, there was resistance to developing a collaborative plan, rather than a prescriptive one.

Provincial Divisions of Health

Each provincial Division of Health is headed by an Assistant Secretary for Health. During the planning period in question, many of them were relatively new to their management roles, had little exposure to health planning, and needed assistance in data analysis. This inexperience limited their ability to participate meaningfully in the planning process. There was also residual confusion among provincial health managers and staff, particularly regarding their relationship to the national Department of Health and the extent of their authority. This was especially true in relation to the delegated functions.

Politicians

Most provincial politicians have only a very limited understanding of health issues. To enable politicians and other representatives to comment on the various medium-term sectoral strategy papers, the NPO held a series of regional meetings. However, these meetings were not sufficiently long or numerous to permit more than a cursory treatment of issues. Provincial health ministers do not hold regular
meetings and no other ready forum could be found to involve them in the subsequent formulation of the national health plan.

An attempt was made to seek the approval of the provincial premiers for the final draft plan in their annual meeting. However, because of the crowded agenda, the national health plan was never discussed. This decision created problems as some of the provincial politicians who were unaware of the plan’s final approval, disagreed with parts of it.

**Provincial health planning**

**Before decentralization**

After the preparation of the First National Health Plan in 1973, the Department of Health envisaged that districts (later called provinces) would develop their own plans to translate the National Health Plan into district action plans. Appendix 50.1 of the Plan provided an outline for such district health plans. It was proposed that district health plans would be submitted to the district government for approval, and then sent to the national Department of Health to ensure conformity with the National Health Plan. The completion of all district (provincial) health plans was targeted for March 1975.

The concerns expressed by the national planners about limited planning skills at the district (provincial) level proved entirely justified. Only one district, East Sepik, managed to produce a district health plan by the target date. Other districts slowly followed and by the end of the decade, four other districts had five-year health plans of their own—Eastern Highlands, Morobe, Madang and West Sepik.

With very few exceptions, the orientation of the district health plans was toward construction and staff. The objectives were either very vague (for example, to reduce the incidence of tuberculosis and leprosy) or expressed in terms of capital inputs that were required for improving service delivery (for example, to employ more health educators). Thus it was very difficult, if not impossible, to evaluate the ability of any of these plans to improve either the health of the people or service coverage.

**Post-decentralization**

When the decentralization process was completed in 1983, eight provinces had a current health plan—Western, Central, Simbu, Madang, East Sepik, West Sepik, Manus and New Ireland. Most of these plans suffered from the same deficiencies as the earlier ones. The objectives were generally neither measurable nor time-limited. There were very few indicators that would allow progress monitoring or evaluation of the plan, except in terms of staff employed or vehicles purchased. Most of the plans were either not costed at all or were costed only for the new capital components and not the recurrent costs.

Five provinces (Oro and Southern Highlands for 1985-90, and Eastern Highlands, Madang and East New Britain for 1986-90) formulated their provincial health plans between 1983 and 1986. The quality of planning exhibited in these plans was generally higher than that shown previously. They included many more measurable and time-limited objectives, clear indicators and costings.

Many of these provinces had expatriate provincial Assistant Secretaries for Health as their focal points. These provincial positions are now fully localized, and recent efforts have concentrated on improving the planning skills of provincial staff. There is clear evidence that those provincial health plans which have
been formulated by Papua New Guinean health staff since 1986, such as the Morobe Provincial Health Plan, have benefited from this increased exposure.

**Issues for health planning in a decentralized context**

**Responsibility for setting policies and programs**

The primary responsibilities of the national Department of Health are for national policy formulation and the monitoring of health care standards throughout Papua New Guinea. The application of these national health policies in the provinces depends on the willingness and the capacity of the provincial authorities to apply them. The national Department of Health saw the preparation of the Second National Health Plan as an important tool to clarify the issue of decentralization and provide direction for national and provincial health services. The relationship between the Second National Health Plan and provincial health plans is, however, not readily apparent.

Some of the provinces, which had their own health plans prior to the development of the National Health Plan, expressed resistance to the national plan. They were concerned that a national health plan might not reflect provincial objectives and policies. For those provinces which had not developed plans, the question of how to relate national and provincial priorities was paramount. This remains a perennial problem in the evolution of decentralization.

**Effective participation in the planning process**

When the decentralization policy was formulated, it was expected that provincial planning would be carried out by provincial planning offices. Each province was to have a planner, who was to produce an expenditure plan, similar to the model used for the National Public Expenditure Plan. However, this expectation was not immediately realized, as the skills required to develop such plans were limited at the provincial level.

Planning skills at the sectoral level in the provinces were also limited. As has already been mentioned, planning was carried out on an ad hoc basis, if at all. The unfortunate result of this was that, in the absence of proper provincial plans, the central government agencies made budgetary decisions based on the previous year's budget and thereby perpetuated existing inequities.

Even where planning skills were adequate at the provincial level, there was a natural tendency to pull away from decisions made at the national level. For any national health plan to be accepted and understood, it is crucial to have the full participation of the national and provincial authorities who will be implementing it. However, this proved difficult to achieve in practice. With nineteen provinces and a National Capital District, widely dispersed in a rugged country with a limited road network, the difficulties of securing real participation by provincial authorities in the planning process were considerable.

The health planning committee included only one provincial Assistant Secretary for Health because budgetary constraints limited any wider participation. Later, as the development of the National Health Plan progressed, the Department of Health made further efforts to include provincial health staff in the planning process, with draft sections of the plan being widely circulated for comment. This provided an avenue for dialogue, but did not fulfill the fundamental requirement for extensive inter-provincial discussion of issues and strategies.
The annual Assistant Secretaries for Health Conference in 1985 was used to promote such collaboration. Again, time constraints left many issues untouched.

A significant omission in the planning process was that of the Provincial Secretaries—the bureaucratic leaders of the provinces. The National Planning Office had included two Provincial Secretaries in each sectoral committee undertaking the medium-term planning exercise. In practice, at least in the health sector, these representatives never found the time to attend the meetings.

A presentation of the final draft of the Plan had been prepared for the annual Provincial Secretaries Conference, which precedes the Premiers' Conference. However, this agenda item was also dropped in favour of more pressing issues by the conference organizers. This omission adversely affected the implementation of the Plan in some provinces.

**Control of resources to implement a national plan**

The financing of the health sector has been described in detail in Chapter 8. The essential points to mention here are that: (i) a large proportion of the expenditure for health services is beyond the immediate control of the national Department of Health and goes directly from the central to the provincial governments; (ii) the national Department of Health currently has no role in either formulating or evaluating provincial health budgets, and has difficulty in ensuring that adequate resources are made available to under-served provinces; and (iii) most provincial funding is centrally controlled by the Department of Finance and Planning, with central government agencies able to exert strong pressure on the health sector to conform to their views, particularly in the area of investment projects and workforce distribution.

Reference has already been made to the difficulties experienced in securing effective participation by other central government departments, which is vital to the success of the plan. The main drawback of their limited involvement in the health planning process was their inability to defend the health sector against severe cuts in the recurrent budgets in subsequent years. While not peculiar to a decentralized situation, the recurrent budget cuts presented particular problems under decentralization. Since decentralization, the health budget is no longer a separate budget item in the national budget. Instead, it is appropriated to the budget of individual provinces. This has made it difficult to assess the effects of budgetary cuts to the health sector as a whole. Furthermore, because the national Department of Health is excluded from the process of reviewing provincial budgets, the budget cuts are made by the Department of Finance and Planning without any technical advice on their impact on health service delivery.

**Political versus health development priorities**

The priority given to health by national and provincial politicians and their awareness of health issues frequently contrasts with views held by health planners. Politicians naturally tend to give higher priority to promoting developments in their own province or constituency, sometimes even to the detriment of national or provincial considerations.

At the national level, the possibility of detrimental political interference is likely to be less than at the provincial level. With the exception of the Minister for Health, national politicians are removed from day-to-day contact with those planning the nation's health service. In Papua New Guinea, national politicians
are also likely to be more highly educated than provincial politicians, and thus more able to enter into reasoned debate on health issues.

In 1988, only six of the nineteen provincial health ministers had any background in health. (Two had been health extension officers, one a health inspector, one a nurse aide and two aid post orderlies.) The other Ministers ranged from a high school teacher to a villager with minimal basic education. The backgrounds of other provincial politicians are likely to be similar, but with even less exposure to health issues. Furthermore, provincial politicians and public servants operate in close proximity in small provincial towns. Thus, provincial politicians have a much greater opportunity to exert political influence on local decisions.

Provincial political influence has been particularly noticeable over health functions which have been transferred or delegated. Undue political influence has at times resulted in decisions which conflict with national health policy and strategy. This has led to conflicts between bureaucrats and politicians, who have failed to work in harmony to promote local, provincial and national interests.

Monitoring and evaluating a national plan

In a decentralized situation, both monitoring and evaluation should be undertaken in a collaborative fashion between the national and provincial levels. For this to happen, objectives and indicators must be clearly defined and accepted by both parties; appropriate information must be available and opportunities must exist for national and provincial staff to meet for this purpose.

In the Second National Health Plan, clear, measurable national objectives were defined. The national department is, however, dependent on the provincial Divisions of Health for most of the information required to monitor and evaluate health service performance. Some regular reporting systems, such as those covering maternal and child health and disease control activities were maintained through decentralization and yield some of the data required for monitoring and evaluation. Information on health funding and staff, however, no longer flows through the national Department of Health.

Equity in resource distribution is one of the guiding principles of the National Health Plan. Since the national Department of Health no longer has any role in the budget and staffing decisions regarding transferred functions, it lacks the information or authority to ensure equity. As Wolfers (1978:11) noted,

People from less well off areas sometimes have good reason to be cautious about devolution, in particular, and even deconcentration, lest existing inequalities are perpetuated and even increased.

The lack of effective mechanisms of accountability between the national and provincial levels is an increasingly important issue. Where such mechanisms were not implemented as part of the decentralization process, attempts by the national level to institute them later have been seen by some provinces as interference with their authority, implying a lack of trust at the national level.

The difficulties of collaborative monitoring and evaluation are compounded by the general lack of planning skills at provincial level. The high cost of travel in Papua New Guinea limits the possibility of frequent interaction between national and provincial staff. This further hampers collaborative monitoring and evaluation and the provision of on-going technical advice from the national to the provincial level.
Conclusions

In a study of the problems encountered in formulating and implementing a major development project for rural health services in Papua New Guinea, Thomason (1988) highlighted the need for early involvement of provincial authorities in planning, the value of using the planning process as an exercise in institutional strengthening, and the importance of clarifying the responsibilities of involved parties. Parallels can be drawn between the development of a major project affecting provincial health services and the development of a health plan. The implementors need to be involved in the formulation, be agreeable to the objectives, be prepared to implement the activities, be clear on their responsibilities, and be accountable for their performance.

Participation is the key to the development of a national health plan in a decentralized situation. The difficulties of achieving this can be reduced by lengthening the planning process. The production of the Second National Health Plan was constrained by a tight time-frame, and shortcuts were needed to produce the plan on time. Commencering the process for the development of the Third Plan after a thorough medium-term review of the Second Plan will facilitate meaningful participation.

Effective participation of Provincial Secretaries and politicians in the planning process should be encouraged. Naturally, there will be greater limitations to their involvement than that of the health staff. However, the presentation of key strategy proposals to provincial premiers, health ministers and secretaries would help to gain their support for the plan, when it is implemented.

In order for a national health plan to be effective in a decentralized system, some assurance is necessary that the national Department of Health is able to influence the implementation of policy and strategy. Extensive debate has taken place in regard to the roles of the national and provincial departments in policy formulation. Two avenues are open for the national department to ensure adherence to policy, without interfering with provincial level programs. The first is the right to be consulted on provincial budgets by the Department of Finance and Planning. The second is the ability to influence provincial staffing establishments and appointments to senior positions, through the Department of Personnel Management.

The interpretation of the goals and objectives of the Second National Health Plan was aided by an iterative management development process aimed at strengthening health service planning and management at the provincial level (Newbrander et al. 1988). If continuity is to be maintained between national and provincial policies, this type of on-going technical assistance to develop appropriate planning mechanisms at the provincial level is vital.

Technical assistance should be provided as part of the planning process. It should not be assumed that provincial managers are familiar with planning principles. National department staff need sufficient resources to be able to provide technical assistance to provincial staff which will enable them to work collaboratively on the development of national strategies.

The national Secretary for Health should be given the power to request the provinces to produce a provincial health plan and to approve such plans within one year of their completion. A progress review of all provincial health plans should be conducted annually or bi-annually by the national Department of
Health, and all provinces should be required to submit to the Secretary for Health an annual report on their health service performance.

In order to maintain an equitable level of health services in the whole country, clear sets of minimum standards for health services should be produced. A start has been made at the national level by developing minimum staffing standards in relation to workload of health staff (Kolehmainen-Aitken and Shipp 1990). There is still plenty of scope to extend this to developing minimum standards for various program areas.

Access by the national Department of Health to relevant management information, particularly financial and staffing data, was seriously affected by decentralization. New on-going management reporting systems must be set up in a collaborative fashion with the provinces. This requires great care to safeguard the provinces from being overburdened with data collection while providing sufficient management information to the national level.

An epilogue: the Third National Health Plan

Since this chapter was first drafted, a Third National Health Plan (1991–95) has been prepared and is currently being printed. In developing this Third Plan, many of the lessons learned from the earlier planning experiences were duly incorporated.

The mid-term review of the Second Plan was used as the initial preparation for the new plan. National and regional strategic planning workshops were held to set the directions for the plan. Assistant Secretaries for Health then conferred four times with their national counterparts. Agreements were reached concerning the time-frame for development of provincial health plans, which are to reflect the national policies and strategies. Guidelines for the development of provincial health plans have been prepared, and plans made to provide technical support to provinces to develop their provincial health plans.

The new national plan provides a clear articulation of policies and standards in key areas. It outlines strategies and objectives to guide provinces in the development of their own plans. Formal linkages between the national Department of Health and provincial Divisions of Health, however, remain absent. It will be interesting to see if a plan that has been developed with the full collaboration of provincial authorities will obviate the need for such formal linkages.
PART 4

The lessons of experience
Decentralization of health services in Papua New Guinea: a critical review

J.A. Thomason, R.-L. Kolehmainen-Aitken and W.C. Newbrander

Introduction

This final chapter aims to evaluate the extent to which decentralization in Papua New Guinea actually achieved the benefits that were anticipated. Particular attention is given to the impact of several key issues, raised by the contributors to this book, on the achievements and failures of health sector decentralization.

Assessing the benefits of decentralization

The decision to decentralize in Papua New Guinea was a political one involving many sectors and, as a consequence, no specific health objectives were established. However, implicit in the political expectation was that by bringing the decision-making and administration closer to the people, the service would be more responsive to their needs and wishes, and ultimately would improve their health status.

The provinces, frustrated by years of cumbersome central government, were eagerly anticipating the benefits that the devolution of power would yield. However, as Lausie and Thomason conclude (Chapter 7), decentralization has brought both benefits and costs to the provinces. On the positive side, provinces have greater autonomy in making decisions about their own services. The implementation of local health projects has shown some improvement, as has the ability of provinces to plan for and coordinate their own human and material resources. On the negative side, political interference in health programs and in the work of public servants has increased considerably. Limited management skills have, in some provinces, led to poor management of services, while inadequate budgetary control has contributed to the continual shortfalls in the recurrent financial allocations for services in recent years.

Perhaps the primary question to ask, however, is whether the decentralization of administrative and political authority for health services has improved the health of the people. This question is impossible to answer with any degree of certainty. First, no baseline against which to measure any changes was ever established. Second, even if baseline data were available, it would be hard to
demonstrate that the changes witnessed were the result of decentralization alone. Many other influences have acted to change the health situation of the people over the thirteen years that decentralization has been in place.

An examination of health information adds little to the debate. The most recent available census data are from 1980, too early to reflect any changes from decentralization. The routinely collected health service statistics are estimated to measure only about 10 per cent of all morbidity and mortality. Even if these figures do, in some way, reflect patterns of health and disease, they remain inconclusive where decentralization is concerned.

The same leading causes of morbidity and mortality continue to dominate the statistics (Papua New Guinea, Department of Health 1991). The few changes, such as the growing importance of typhoid and the increasing proportions of pneumonia and malaria deaths are more likely to reflect other factors, such as the greater mobility of people, drug-resistance, and the declining effectiveness and cessation of malaria spraying, than the impact of decentralization. Data on preventive health services, for the most part, are equally inconclusive. The improvements in the incidence of diarrhoea and some immunizable diseases can be attributed to the Expanded Program on Immunization (EPI) and Control of Diarrhoeal Diseases (CDD) program—both in existence for more than a decade—rather than to any overall improvement in the health services.

While no specific health objectives were identified against which decentralization could be assessed, the government’s broad policy objectives were aimed at overcoming the high degree of centralization of political and administrative power and the great inequalities of wealth and services between different geographic areas of the country. These policy objectives—and much of the public debate at the time of decentralization—echo the benefits of decentralization that were outlined by Vaughan on the basis of his review of ten countries with some form of decentralization of health services (Vaughan 1990).

Vaughan’s list of the benefits from health sector decentralization includes:

- organization of a more rational and unified health service;
- greater involvement of local communities;
- cost containment and reduction in duplication of services;
- reduction in inequalities;
- integration of activities of different agencies;
- strengthened health policy and planning functions of ministries of health;
- improved implementation of health programs;
- greater community financing and control; and
- improved intersectoral coordination.

Each of these points will be reviewed in the context of Papua New Guinea’s experience of decentralization.

**Organization of a more rational and unified health service**

Well before decentralization, Papua New Guinea had a well-articulated and unified three-tiered health care system in place. The main health care providers, the government and Christian churches, had coordinated their health service efforts in the early 1970s, as part of the formulation of the First National Health Plan. As Aitken points out in Chapter 3, provincial health authorities had already played a role in the implementation of health programs and in the preparation of annual budget and development plans for submission to the national Department of Health.
Rather than promoting a more rational and unified health service, decentralization has brought opposing pressures. No longer are the health development efforts of the provincial divisions of health clearly linked with the national Department of Health. The placement of new facilities has become increasingly politicized and, in some provinces, relations between government and church health services have been allowed to deteriorate. Some provinces have labelled similar facilities by different names, which complicates inter-provincial comparisons, and has implications for resource distribution.

In spite of the retention of one national public service, the creation of provincial departments as separate entities has worked to fracture the unity of the public service. In developing their post-decentralization staff establishments, many provinces have created a large high-level administrative structure at the provincial health office. This has occurred without consultation with the Department of Health, and has been accomplished at a considerable cost to the rural health services. The benefits accorded to positions of equal responsibility and authority are no longer comparable between provinces, and in several cases, the level of senior health managers in provinces is even higher than comparable national posts, further complicating national-provincial relationships.

In addition to growing inter-provincial inequities in salaries and conditions, career development and transfer opportunities for health staff have been inhibited, and staff morale in poorly managed provinces has deteriorated. The Department of Health no longer has a role in decisions regarding the selection and disciplining of staff, even for the most senior provincial posts, and consequently has been unable to influence the situation.

The role of the private health sector continues to be very small. The pressures driving the private sector have not, for the most part, been affected by decentralization. There is, however, some anecdotal evidence that decentralization has contributed to the rise in the number of Papua New Guinean medical doctors who have abandoned government service for private practice in recent years. Several of them have cited as their main reason for leaving government service the growing frustration with inefficient provincial management, which has at times caused substantial delays in processing of salaries and leave entitlements (Kolehmainen-Aitken et al. 1990).

Greater involvement of local communities

There can be no doubt that provincial authorities have increased their involvement in decision-making since decentralization. There is, however, less evidence to support the view that decentralization has resulted in greater involvement in local communities in decision making about their health services. Local input into decisions about health services is often only advisory and fails to influence decisions. There are some exceptions: in East New Britain, a prosperous province with an educated population, effective community-based health boards are involved with both the financing and the operation of health centres and aid posts.

In several provinces, village health workers and birth attendants have been trained, and village health committees set up in a few areas. Many of these efforts started before decentralization, and others more recently have been the result of centrally-promoted primary health care efforts. In most provinces, however, there has been little change in the level of community involvement. In fact, some critics have argued that, instead of promoting greater community involvement, decentralization has resulted in an upward shift of power from local government councils to provincial politicians (Regan forthcoming b).
Cost containment and reduction in duplication of services

Rather than containing health care costs, decentralization in Papua New Guinea has substantially increased them. The cost of supporting the top-heavy provincial health administrations is considerable. Much of the duplication of services had already been reduced with the formulation of the First National Health Plan in the early 1970s. Decentralization has not acted to reduce any residual duplication and there are several examples where facilities providing similar services continue to operate within 20 minutes drive from one another, such as Nonga, a large government hospital, and Vunapope, a major church health facility in East New Britain; and Bereina, a government health centre, and Vei'fa'a, a church health centre, in Central Province. Occasionally, the rising political pressures have actually worked to increase duplication. One example is the pressure to build a separate provincial hospital for Central Province, instead of continuing to rely on the services provided by the Port Moresby General Hospital, which is located geographically in the middle of Central Province, but administered separately.

Reduction in inequalities

Many of the inequalities in the distribution of resources which preceded decentralization have been perpetuated. Table 8.3 shows real per capita expenditure by province between 1983 and 1988. While the overall range of per capita expenditure remains of the same magnitude, the internal distribution has changed. The changes, however, have not been in a direction which would reduce the disparities in resource distribution between provinces, nor have they been in accordance with health needs. Several provinces which had very poor demographic indicators in the 1980 census, for example Western, Western Highlands, Simbu, East Sepik and West Sepik, experienced real reductions in their per capita funding for health. One of these, East Sepik is a financially autonomous province. Other provinces, which had relatively more favourable demographic indicators, for example Eastern Highlands, Morobe, and North Solomons, all financially autonomous provinces, experienced growth of more than 10 per cent in per capita expenditure for health between 1983 and 1988. Of the provinces which had poor demographic indices, only the Southern Highlands experienced any real growth in per capita health expenditure.

It is worth highlighting here the trends in per capita expenditure in the eight financially autonomous provinces. One, the East Sepik, experienced a decline of more than 10 per cent in real per capita expenditure, three experienced similar levels of increase, while the remaining four provinces maintained per capita expenditure at pre-decentralization levels. These figures indicate the potential positive and negative resource consequences of health sector decentralization.

A review of the ratio of health personnel to population among provinces suggests that the distribution of staff has become more inequitable in recent years. An examination of workforce-population ratios from the two most recent health plans (Papua New Guinea, Department of Health 1986 and 1991) shows that inequalities in the distribution of health personnel increased between 1985 and 1990. As Table 12.1 shows, the standard deviation of the distribution for medical officers rose from 28,673 to 29,931; for health extension officers from 4,108 to 6,966; and for nurses from 575 to 593, indicating that the range of variation in staff-population ratios among provinces increased between 1985 and 1990.
Table 12.1  **The population per medical officer/health extension officer/nurse in the provinces**, 1985 and 1990

<table>
<thead>
<tr>
<th>Province</th>
<th>Population/medical officer</th>
<th>Population/health extension officer</th>
<th>Population/nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>17,880</td>
<td>11,278</td>
<td>8,642</td>
</tr>
<tr>
<td>Gulf</td>
<td>14,060</td>
<td>15,400</td>
<td>4,077</td>
</tr>
<tr>
<td>Central</td>
<td>129,900</td>
<td>144,600</td>
<td>8,693</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>29,300</td>
<td>27,767</td>
<td>9,804</td>
</tr>
<tr>
<td>Oro</td>
<td>14,667</td>
<td>20,000</td>
<td>7,656</td>
</tr>
<tr>
<td>Southern Highlands Province</td>
<td>31,913</td>
<td>39,714</td>
<td>11,690</td>
</tr>
<tr>
<td>Enga</td>
<td>58,767</td>
<td>47,400</td>
<td>9,022</td>
</tr>
<tr>
<td>Western Highlands Province</td>
<td>12,427</td>
<td>19,112</td>
<td>12,474</td>
</tr>
<tr>
<td>Simbu</td>
<td>75,050</td>
<td>27,443</td>
<td>21,765</td>
</tr>
<tr>
<td>Eastern Highlands Province</td>
<td>18,018</td>
<td>12,623</td>
<td>11,103</td>
</tr>
<tr>
<td>Morobe</td>
<td>13,226</td>
<td>13,586</td>
<td>9,138</td>
</tr>
<tr>
<td>Madang</td>
<td>22,336</td>
<td>22,958</td>
<td>11,876</td>
</tr>
<tr>
<td>East Sepik Province</td>
<td>23,173</td>
<td>46,967</td>
<td>14,784</td>
</tr>
<tr>
<td>West Sepik Province</td>
<td>32,073</td>
<td>34,650</td>
<td>6,566</td>
</tr>
<tr>
<td>Manus</td>
<td>9,967</td>
<td>16,550</td>
<td>3,252</td>
</tr>
<tr>
<td>New Ireland Province</td>
<td>15,440</td>
<td>17,160</td>
<td>4,478</td>
</tr>
<tr>
<td>East New Britain Province</td>
<td>8,116</td>
<td>8,610</td>
<td>11,180</td>
</tr>
<tr>
<td>West New Britain Province</td>
<td>17,950</td>
<td>20,317</td>
<td>6,693</td>
</tr>
<tr>
<td>North Solomons</td>
<td>22,071</td>
<td>11,201</td>
<td>2,540</td>
</tr>
<tr>
<td>Mean</td>
<td>29,807</td>
<td>28,744</td>
<td>9,689</td>
</tr>
<tr>
<td>Minimum</td>
<td>8,116</td>
<td>8,610</td>
<td>3,252</td>
</tr>
<tr>
<td>Maximum</td>
<td>129,900</td>
<td>144,600</td>
<td>21,765</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>28,673</td>
<td>29,931</td>
<td>4,108</td>
</tr>
</tbody>
</table>

*Excludes National Capital District.


The richer, more advanced provinces are generally advancing at a greater pace than the disadvantaged provinces. Efforts at the central level to effect real redistribution of resources, such as through the National Public Expenditure Plan and the Lesser Developed Areas Scheme, have had little real redistributive effect.

**Integration of activities of different agencies**

There is no evidence that there has been improved integration of the activities of different agencies since decentralization. Indeed in some provinces, relations with the churches, the biggest non-government partner in health care delivery, have worsened. The private health sector has grown since decentralization, but remains relatively small. There has been little integration of private sector efforts into the public health system.
Strengthened health policy and planning functions of departments of health

The development of an improved policy and planning function within the Department of Health has been an evolutionary process. While this function has certainly improved since decentralization, it is not possible to attribute this change to decentralization alone. Moves towards decentralization commenced shortly after independence in 1975 and much of the improvement in health policy and planning could equally be a consequence of growing national confidence and independent decision-making.

The Department of Health has been able to produce, since decentralization, two five-year national health plans, the most recent containing clearly articulated statements of policy and direction. The availability of increasing amounts of money to support each successive planning effort has also made it possible to fund greater participation of provincial health authorities in the development of national policy and plans. Experience has shown that the ability of senior health staff to participate effectively in planning endeavours has improved since independence. The role that decentralization has played in these improvements is unclear.

Improved implementation of health programs

While the implementation of capital projects has improved since decentralization, the implementation of other programs has depended on the managerial capacity of the health staff. In recent years, various analytic and anecdotal reports have warned of serious implementation problems and deteriorating standards at many different points in the health system, involving transferred, concurrent and nationally retained powers.

Some perceived negative effects of decentralization on the rural health services were first openly discussed at the annual medical symposium of the Medical Society of Papua New Guinea in 1987. Decentralization was linked to the growing disparities in the distribution of staff between provinces, recurrent financing problems, and inability of the Department of Health to take action over the deteriorating standards (Sialis et al. 1987). Since then, evidence of growing problems in the rural health services has continued to mount. In particular, where provinces have further decentralized to the district level by placing health services under a non-health district manager (with the provincial health managers acting in an advisory role), the implementation of preventive health programs, such as the Expanded Program of Immunization, has deteriorated.

In all provinces, the steady decline in the proportion of non-salary recurrent costs since 1985 (Thomason and Newbrander 1991) has affected the resources for facility maintenance, travel and transport. A countrywide study, undertaken in 1988, found that overall only 2 to 3 per cent of recurrent expenditure was used for travel. This is clearly having a detrimental impact on the supervision of peripheral health facilities. While the target for supervisory visits of peripheral health workers is four visits per year, the study found that staff from no more than 21 per cent of health subcentres and 37 per cent of health centres had made even one visit to their aid posts during 1987. Forty-two per cent of staff had made no supervisory visits in the past month (Mitchell et al. 1988).

A complementary study (Garner et al. 1990) using the same sample of health centres and subcentres, found that 31 per cent of these facilities had not received
any clinical supervision in the preceding twelve months. Serious deficits were found in the quality of health services provided to communities, ranging from incorrect prescribing practices to the lack of essential equipment to perform common lifesaving procedures. The lack of regular supervision has also been cited as a major factor in the deterioration of the aid post system (Bouten 1987). A recent study of case management by aid post orderlies found that patient examination was inadequate and drug dosages often incorrect (Rogers et al. forthcoming).

Poor maintenance of rural health facilities is another major problem affecting the rural health service. The 1988 study by Mitchell et al., referred to above, found that only 33 per cent of the facilities had received any funds for building maintenance in the past year. Of the total expenditure on maintenance, it was estimated that only 6.4 per cent of the recommended level of maintenance expenditure had been spent in 1987. The lack of maintenance is at least partly due to the low priority that provincial governments have given to it since decentralization.

Critics of decentralization have been quick to target the problems in the rural health services—services which are a transferred function. Few have drawn attention to the deteriorating standards of health services which have been delegated or nationally retained such as hospital services, which were only delegated to provincial control, throughout the country. A two-stage hospital planning study (Alexander and Lloyd 1987) reported a range of serious qualitative problems in the nation's hospitals including low levels of management skills, inadequate maintenance and cleanliness, and poor standards of patient care.

The implementation of national functions, particularly health training, has also suffered. Other nationally retained functions, such as the pharmaceutical distribution system, are also facing increasing constraints. Serious drug shortages have been reported in both the rural health services (Garner et al. 1990) and hospitals (Rosenthal et al. 1990).

The issues alluded to above illustrate how difficult it is to attribute the decline in rural health standards to the decision to decentralize. Similar decline has also been reported in areas of the health services which were not decentralized. Decentralization has undoubtedly played a major part in some of the implementation problems and some part in many of them, but the evidence currently at hand does not allow the blame to be placed unequivocally on decentralization alone. Many of the difficulties are the result of the cuts in funds allocated to the health sector in the 1980s, the lack of skilled human resources, and inadequate planning.

Greater community financing and control

This benefit can only be realized in provinces which have passed provincial health Acts, enabling them to establish cost recovery schemes in rural areas. As hospitals were only delegated to provincial governments, their revenue remains the property of the national government. The provincial health Act in East New Britain has been of clear benefit, and community financing has been able to meet a significant proportion of the non-salary operating costs of the rural health services. Many of the provinces, however, still lack an enabling provincial health Act and make little use of this option (Table 8.1).
Improved intersectoral coordination

Although efforts to promote intersectoral coordination have continued, results have been disappointing. Prior to decentralization, the health sector was extremely vertical in its orientation. Provinces vary widely in the quality of managerial skills, not only in the health sector, but in the provincial government as a whole. Well-managed provinces have regular provincial management meetings, which allow for on-going integration of activities between sectors. They also undertake periodic major provincial planning efforts which pull together managers from the different sectors into a provincial planning team. In poorly managed provinces, individual section heads are much more likely to see the others as adversaries in competition for scarce resources, which thereby precludes any opportunities for joint provincial planning efforts.

Factors affecting the achievement of anticipated benefits

The foregoing attempt at teasing out the benefits of decentralization for the Papua New Guinea health sector leads to the inevitable conclusion that even the cautious list of benefits elicited from the experiences of ten countries does not seem to have been achieved in Papua New Guinea. This section analyses why this has happened.

Rondinelli (1981) emphasizes that decentralization involves much more than a simple declaration of 'bottom-up' decision making or the reorganization of the government's administrative structure. Successful decentralization depends on a variety of political, administrative, organizational and behavioural conditions, and on the availability of resources to implement the newly decentralized functions. In the preceding chapters, the contributors have raised several issues influencing the achievement of anticipated benefits. These can now be summarized.

Political and administrative conditions

There was strong political commitment to decentralization. Many politicians genuinely sought to achieve a real redistribution of power from the central to the provincial governments. As Axline points out in Chapter 2, prior to decentralization, political immaturity in Papua New Guinea had allowed the administrators to usurp a considerable role in formulating policy, thus frustrating the politicians. The politicians, therefore, saw decentralization as an avenue for achieving a greater role for themselves in this area.

Decentralization required the development of an administrative system which would provide a strong central government but give a significant role to provincial governments through the devolution of power. Axline describes the complex task of designing, under considerable pressure of time, administrative arrangements to respond to these political wishes. The piecemeal arrangements that resulted soon created a potential for conflict between national and provincial governments.

While the political commitment to decentralization was strong, there was little support for it among the bureaucrats. Reilly (Chapter 5) describes in some detail the complexities of the dispute in which senior staff at the Department of Health bitterly resisted decentralization. They were reluctant to give up power and feared the impact of decentralization might have on the government's ability to redress resource inequities. They therefore did not make the requisite preparations
for the smooth transfer of power. The reluctance of the central bureaucrats to relinquish many of their powers was eventually overcome by bold political action: the Secretary for Health was replaced, and the financial control for delegated activities appropriated to the provincial governments.

At decentralization, considerable weaknesses were evident in the technical and administrative capacities of the Department of Health. Reilly argues that these technical weaknesses were one of the reasons for the reluctance of the national bureaucrats to accept decentralization, under which they would be expected to act as technical advisers to the provinces, a role for which they were not well-prepared. The combination of this lack of technical skills and the resistance to decentralize resulted in inadequate preparation for the transfer of powers.

Organizational factors

The legal mechanisms of decentralization relied on constitutional law to wrest power from the national government. These mechanisms were designed to be flexible and to allow for sharing of powers. Despite the highest motives and careful preparation, their main practical consequences were unforeseen. Regan points out (Chapter 4) that the legal arrangements did not give guidance on how the transfers of power should be made and, as discussed above, the consequent administrative arrangements were made in great haste. In practice, the legal arrangements have functioned rather differently than their creators foreshadowed. The flexibility built into the Organic Law on Provincial Government has, in fact, resulted in a law of great complexity. Because the OLPG gives no indication as to which powers should be shared, confusion, uncertainty and complex administrative and legal problems have ensued.

Provincial legislation regarding the health sector was intended to be the main source of legal authority for the exercise of power by provincial governments. However, it has played a very limited role, with only eight provinces having passed provincial health Acts. The Premiers' Council was envisaged as the main body for consultation and policy making on the division of responsibility. In the health sector, it has not functioned as expected. The same is true of the National Fiscal Commission, which was to have played a major role in the equalization of levels of service.

The current distribution of powers over health functions between national and provincial governments was the focus of Chapter 5. The power struggle between politicians and bureaucrats over how the division of powers was to be implemented has created several problems. Only a few of the steps of an ambitious eight-step implementation plan were ever accomplished. The completion of organizational structures, for example, was delayed, and completed only a decade later in some provinces. The proposed planning to reduce inter-provincial disparities never took place.

Most resource allocation functions were removed from the national Department of Health. As pointed out in Chapters 8 and 9, negotiations for provincial budgets and staffing are now conducted between the individual provinces and the central government departments of Finance and Planning and Personnel Management. Since these two central government departments now make the resource allocation decisions, much of the national health planning responsibility has effectively been usurped by them. Since there is no requirement for formal
consultation with the Department of Health on provincial health budgets and staffing, such decisions are reached without any technical health input whatsoever.

The health sector is no longer dealt with separately in the government budgetary process at the central government level. Instead, provincial health budgets are only reviewed in the context of the overall provincial budgets. Thus, the aggregate effects of budgetary decisions on the health sector never become evident to national government decision makers. As emphasized in Chapter 8, this has created serious problems, particularly since budgetary reductions have targeted essential services. These include travel and transportation, which are essential for preventive and promotive health work, and church health services, which provide almost 50 per cent of rural health care.

The effect of decentralization on human resource development has been severely disruptive. As pointed out by Kolehmainen-Aitken (Chapter 9), the responsibility for human resource policy formulation and planning became unclear at decentralization. At the same time, the availability of data for planning was adversely affected. As a result, the human resource planning function at the central level collapsed for several years. This lack of planning affected several training programs, resulting in severe supply problems. For example, nurse aide training collapsed after decentralization when the function was transferred to the provinces. Some disruption of training has also been caused by controversies between provincial and central authorities, arising out of the complicated administrative arrangements between national training schools and the provinces in which they are located.

Even after the central government departments agreed that human resource policy formulation and planning did belong among the functions of the Department of Health, difficulties remained. For several years, the Department lacked any means to affect staffing decisions, which, for health workers undertaking transferred and delegated activities, are made between the provinces and the Department of Personnel Management. In the late 1980s, the 'indicators of staffing need' were developed and approved by the high level Resource Management Committee as a guide to health staffing in the country. Kolehmainen-Aitken shows, however, that the role of the national Department in influencing staffing decisions remains very tenuous, even after the availability of such means, thus eroding the Department's ability to implement national planning decisions.

Two key management issues emerged from the decentralization experience. First, as Campos-Outcault and Newbrander demonstrate (Chapter 10), the decentralization of health services has placed additional demands on the already very limited pool of competent health managers. Second, there is a conflict between the role of the Department of Health in overseeing health services on the one hand and the lack of mechanisms to facilitate that role on the other.

In a young developing country like Papua New Guinea, planning and management procedures are rarely clearly defined. This was certainly true at the time of decentralization when new and arduous managerial tasks were placed in the hands of provincial staff. The majority of provincial managers had no prior management training, and such training opportunities were, in fact, exceedingly scarce at the time. The preparation of the provincial health managers for the new managerial responsibilities thrust upon them was grossly inadequate. Furthermore, the provincial staff had few resources to turn to for guidance in management issues. As a consequence, many have struggled with the new tasks
assigned to them. Such inexperienced managers have been subject to increasing political pressures by provincial politicians, resulting in rational and informed decision making becoming even more elusive.

Policy formulation, planning, and monitoring of standards remain the nationally retained functions. As described by Kolehmainen-Aitken and Thomason (Chapter 11), during formulation of national plans and policies, a delicate balance has to be maintained between national requirements and provincial aspirations on one hand, and political and development priorities on the other. As with management skills, planning skills were also scarce at the time of decentralization. Health planning initiatives therefore had to be generated from the central level. Establishment of a mechanism for linking national and provincial plans is a necessary prerequisite for integration. The final question is the control of resources for implementation. These, as is true of most financial resources, remain firmly vested in the hands of the Department of Finance and Planning.

Monitoring the standards of health care in the country is one of the vital areas of responsibility that has remained with the national Department of Health. As Campos-Outcalt and Newbrander point out, the Department was given the mandate to ensure standards of health care without the mechanisms with which to achieve this. Even where gross mismanagement of provincial health services has taken place, the national Department has been powerless to take any action, beyond investigating the problem at the province’s request.

**Behavioural factors**

As already stressed, the decision to decentralize was ultimately political. While politicians supported decentralization, bureaucrats resisted it. Thus, the dilemma between redistribution of power and equity was further compounded by the intense power struggle between bureaucrats, reluctant to relinquish control of resources, and politicians, eager to achieve political reform. Central government officials were slow to accept any changes to their role—from controlling services to facilitating decentralized planning and management. In some cases, these changes are yet to take place.

The struggle between provincial politicians and public servants has, in many provinces, become a continuing one. The provincial health ministers generally have a lower educational level than the bureaucrats. Since most of them come to their positions with no background in health, their understanding of health issues is frequently limited. As a result, many health managers resent having to take policy direction from them.

Success in promoting effective community involvement is dependent on incorporating the traditional leaders in the decentralized planning process. Mechanisms for this in Papua New Guinea are, for the most part, non-existent. As mentioned before, it has been argued that decentralization has actually displaced traditional community leaders and replaced them with provincial politicians.

**Resource conditions**

As Axline points out in Chapter 2, provincial governments were given the authority to raise provincial revenue. In reality, the resource base in most of the provinces has made this of little significance. Only the richer provinces have been able to collect sufficient provincial revenue to supplement central government health funding, thus adding to the already unequal allocation of resources. Most provinces rely on central government funds to finance their health services. As
pointed out in Chapter 8, the general resource conditions in the country during the 1980s were poor and, as a result, the government lacked any supplementary resources which could have been used to reduce inequalities among provinces.

In some of the provinces with full financial responsibility, the maintenance of recurrent expenditure levels has been a particular problem. In these provinces, health services have not always been given priority attention. In any case, the provincial Division of Health has to compete with other sectors for the provincial resources when provincial budgets are formulated. In the eleven provinces without full financial responsibility, the financial arrangements were planned as transitional only. Their continuing maintenance complicates financial monitoring and control mechanisms, and is against the spirit of the Organic Law on Provincial Government.

Nevertheless, some of the pre-existing resource conditions in Papua New Guinea have enhanced the implementation of decentralization. These include a good health infrastructure and adequate communication linkages, already in place before decentralization.

The way forward

To what extent can the reported deterioration in standards of rural health and hospital services or the problems in national functions be attributed to the decision to decentralize? Could they not be explained simply as a result of the prevailing economic and social climate? Such questions are increasingly asked as the debate on the cost of decentralization heightens, and the opposition at the national level grows stronger.

In the current debate, any assessment of the costs and benefits of decentralization must be seen in the context of pre-existing conditions which continue to affect the system. These include a lack of political maturity in many provinces, poor capacity in central administrating agencies, operation of political and bureaucratic forces opposed to decentralization, and a stagnating level of central funding for health. Any alternative political and administrative structure would not have a great impact on these conditions. There is no reason to believe that recentralization of functions alone would improve the operation of the health system. Indeed, it must be questioned whether the national Department of Health would have the capacity to manage the system any better. Thirteen years since the decision to devolve powers was made, the administrative mechanisms to implement the political decision are still evolving. The challenge now is to support the continuing evolution of a system which has the potential to reap many of the espoused benefits of decentralization for the benefit of the people, not to dismantle the system altogether and replace it with a different administrative system.

The single most important factor impeding the rational and coordinated development of the health system is the lack of mechanisms linking the provincial Divisions of Health with the national Department of Health on the one hand, and the national Department of Health with the central agencies of Finance and Planning and Personnel Management on the other. The annual Assistant Secretaries' conferences provide the only regular forum in which provincial and national health authorities come together, and the Department of Health remains isolated from the departments of Finance and Planning and Personnel Management.
If appropriate linkages with the central agencies were in place, the national Department of Health could play a key role as an adviser and advocate of provincial needs.

There are in fact a number of ways in which the linkages between the central government agencies, the national Department of Health and the provinces could be improved, without compromising the integrity of decentralization. The Department of Health, through the Secretary, could have a formal role in the selection of provincial Assistant Secretaries for Health and in the approval of provincial health plans by the government. A formal consultative mechanism should be established between the Department of Finance and Planning and the Department of Health on all provincial health budgets. Similar consultative mechanisms should be established between the departments of Personnel Management and Health on the job descriptions and work conditions of health workers.

National health policies and plans which have been endorsed by the government should be accorded a status which would require provincial governments to adhere to them. In monitoring the national plan, provincial governments could be required to provide an annual report on selected key health indicators as part of the budgetary process. Currently, the only action that the Department of Health can take when there is evidence of serious mismanagement of health services is to withdraw all services from provincial control. This is a drastic move with serious political repercussions and has never taken place. An intermediate step is needed that would enable intervention by the Department of Health where the health of communities is compromised.

Many of the difficulties now experienced stem from inadequate planning, and the lack of skilled human resources to carry out the reforms. Strengthening the planning and management capabilities at the provincial level through training is another major continuing need. While considerable training has already taken place, this process will be required for many years to come. Institutional strengthening and human resource development is a long-term process in any organizational framework—it is in these areas that efforts should be concentrated.

Some lessons of broader interest

It has been stated that the most successful decentralization efforts are those that are thoroughly prepared and carefully implemented (Rondinelli et al. 1984). However, because the decision to decentralize is usually political and multi-sectoral, careful and extensive planning exclusively designed for the health sector is rarely a realistic expectation. While the potential benefits of decentralization may be significant, it must always be seen as unlikely that the health sector will be given an open slate to plan for and implement the decentralization of its services.

When power is divested from the central government to sub-national units, there is potential for both positive and negative consequences for the health sector. In Papua New Guinea, the health services have developed and strengthened in those provinces which possess strong economies, have a political inclination to support the health sector and possess a larger pool of qualified managers. In provinces which lack these advantages, serious declines in quality
and coverage of health services have been reported. These three factors—political support, resource availability and management capability—will inevitably influence the outcome of any effort to decentralize health services.

While the motivation for decentralization is usually political, it requires administrative reorganization in its implementation. Administrative reorganization of any nature does not and cannot address fundamental weaknesses inherent in the existing system. Prior to decentralization, Papua New Guinea suffered from a poor and cumbersome administration and serious shortages of technical and managerial skills. Decentralization could not change this fundamental reality and, in fact, by increasing the requirement for skilled people (a requirement which could rarely be properly met at provincial level), it created significantly poorer administrations in many provinces.

A final important caveat from the Papua New Guinea experience is that when the central government is divested of significant powers, matters of national interest may be superseded by the aspirations and desires of the peripheral units. In Papua New Guinea, this has given rise to continued debate over provincial desires and opposing centralist tendencies, especially in the management of financial and human resources. Proponents of decentralization must keep in mind that, in any country, significant devolution of power to provincial governments will work to remove the ability of the national government to pursue the aim of equity.

Conclusion

The chapters of this book present a picture of the complicated and often tortuous evolutionary process undertaken by Papua New Guinea in its bid to adapt its legal and administrative capacities to a political intention. The completion of this process is not yet in sight.

Decentralization was one of the ambitious goals set by a newly independent state. Clearly, the attempt to address many areas of reform resulted in some contradictions of policy. The most notable of these was the contradiction between the desire to achieve a real redistribution of power from the central to the provincial governments, and the desire to promote equity of resource and service distribution. This contradiction between autonomy and equity continues to affect all aspects of the way decentralization operates in Papua New Guinea.

Advocates of decentralization may criticize this discussion on the grounds that the administrative mechanisms resulting from the decision to decentralize, did not operate as planned and many functions were not passed effectively to provincial governments, and so only partial decentralization resulted. While there can be no argument with this point, the underlying truth behind it is of utmost importance. Political and administrative reform is never carried out under controlled conditions, and the results of such reforms rarely meet expectations.

In conclusion, after thirteen years experience of the decentralization of health services in Papua New Guinea, three important recommendations can be made for a more successful implementation of a program of decentralization. First, long and meticulous preparation is essential; second, all plans must address any underlying weaknesses in the existing system; and third, in anticipating any immediate or far-reaching benefits, caution should prevail.


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Decentralization in a developing country: the experience of Papua New Guinea and its health service is a critical analysis of 13 years experience of the devolution of control over health services to provincial (district) governments in Papua New Guinea. The book is not only of interest to students of Papua New Guinea, rather it is intended for all those interested in the practical issues of decentralization. It describes the social and political antecedents to the decentralization decision and its implementation, including an analysis of its impact on key areas including financing and budgeting, workforce development, management and planning. The book concludes with a review of the positive and negative features of the experience thus far and draws out some conclusions of broader international interest.

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