

**CENTRE FOR PUBLIC HEALTH
THE UNIVERSITY OF NEW SOUTH WALES**

**WPRO/RTC HEALTH WORKFORCE PLANNING
WORKBOOK**

**John Dewdney MD
Centre for Public Health
University of New South Wales
Sydney NSW 2052
Australia**

THE WPRO/RTC HEALTH WORKFORCE PLANNING WORKBOOK

How to use this workbook

This workbook has been designed to help you produce a workforce plan. To start preparing your plan you will need the workbook files, a computer loaded with the MSWORD and MSEXCEL packages, and a printer. You may have the files on a diskette, or unloaded from the Web on to your C drive, or on the HRH Tools CD. Print out the whole of the workbook, both text (.doc file) and tables (.xls files). All the text is in one .doc file. Some users find it best to split this file up to produce a separate file for each section of the workbook. The printout will give you a good idea of the way the workbook is set out and its contents.

The workbook is set out as the draft of workforce plan for Department of Health of a mythical small island country, Planania. Your task is to make changes in the content of this draft so as to produce a draft plan for your health authority. Although the workbook was designed for use at national level in small countries, it has been used in preparing workforce plans for health systems serving populations of several million people. It can be used for planning at district, regional or national level.

The next few pages include the title and table of contents of the plan. You can modify these when you have worked through the rest of the workbook.

To get started on your plan, go to the beginning of Section 1. Read the Important Note at the start of that section and keep what it says in mind as you work through the Section 1. Then read the ACTIVITY set out under the 1.1 heading. Under the ACTIVITY box is a typed statement headed "1.1.1 Overall purpose". You have to read this statement. If you wish to include it as it is in your plan, don't do anything. If you wish to make some changes, get the subsection on your computer screen and use your keyboard to make whatever changes you think are necessary. Repeat this process for subsections 1.1.2 and 1.1.3. When you are happy with what you have on your screen for these sub-sections DELETE the ACTIVITY box and its contents, SAVE your work, and go on to sub-section 1.2.

You go on reading each ACTIVITY as you come to it, doing what it tells you to do, then deleting that ACTIVITY box and its contents, saving your work, and so on till you have completed and saved the whole Section 1 on your diskette.

Then go on to Section 2 of the workbook. In this section, in addition to the textual material there are some tables. You enter your own data into these files, SAVE, and then use the tabulated material in writing your textual entries as instructed in the ACTIVITY box which relates to the table or worksheet.

So you proceed through the workbook, carrying put whatever it is the ACTIVITY box tells you to do when you come to it, deleting the ACTIVITY box and its contents as you complete a sub-section.

In order to complete the plan you will have to consult with colleagues as to what is to be included in the text, and you will have to obtain data from various sources to complete the tables and worksheets. But by the time you have completed Section 7 you will have produced the first draft of the workforce plan.

The first draft should be used as a working document to be reviewed and modified until you have a final version accepted by the relevant decision makers as a guide to action in matters relating to future staffing of the health care system and the training of personnel.

You will see that the workbook content stresses the vital importance of keeping the workforce plan under regular and systematic review with scheduled "rolling over" in order to keep it up-to-date with changes in the current situation and the foreseeable future.

The workbook is really quite easy to use once you get started, and it was designed as a "do-it-yourself" planning tool. However, experience has shown that it is very helpful to have some initial guidance and

support from someone experienced in health workforce planning and in using the workbook. Queries and comments regarding the use and content of the workbook may be addressed to:

Dr John Dewdney
Centre for Public Health
University of New South Wales
Sydney, NSW 2052, AUSTRALIA
FAX: 612 9385 1526
E-MAIL: J.Dewdney@unsw.edu.au

2 May 2001

DEPARTMENT OF HEALTH, PLANANIA

DRAFT

**NATIONAL HEALTH WORKFORCE PLAN
PLANANIA 1998-2020**

MALOLO, January 2000

DEPARTMENT OF HEALTH, PLANANIA

Workforce Planning Group

**Director General, Department of Health - Dr Albert Code
Director of Clinical Services - Dr Henri Sar
Director of Community Health Services - (Vacant)
Director of Nursing Services - Mrs Teresa Sen
Director, Administration – Mrs Rita Jull
Director, Finance – Mr Orlando Wull
Director, Policy and Planning - Mr Uri Rak
Senior Human Resources Officer – Mr Alberto E Vak**

and

**Dr John Dewdney, Consultant
Centre for Public Health
University of New South Wales
Sydney, Australia**

The preparation and format of this plan have been based on the health workforce planning model developed at the WHO Regional Training Centre, Sydney, under contract for the World Health Organization, Western Pacific Regional Office, Manila

HEALTH WORKFORCE PLAN, DEPARTMENT OF HEALTH, PLANANIA

2000-2015

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31 January 2000

SECTION 1

Introduction

Important Note:

The sample entries and tabulations relating to a particular activity are given as examples of what might go into a particular sub-section of a Draft Plan. Do not simply copy them into your own draft - you will have to decide what entry is applicable to your Health Authority based on your knowledge and analysis of the situation.

1.1 Purpose and use of the plan

ACTIVITY: Read the following statements regarding the purpose, use and review of the health workforce plan. Some changes may be required to make the statement applicable to your situation - for example you may wish to adopt a ten-year or perhaps twenty-year planning period rather than the planning period used here. Make any changes to the text you think are necessary, then delete this box and its contents.

1.1.1 Overall purpose

The purpose of this health workforce plan is to provide guidance for the staffing of the health services and the training of health service personnel to the year 2015.

The plan will provide staffing targets for each of the major categories of health personnel. Taking into account the present level of staffing, losses from the workforce due to retirement, resignation and other causes, and entry into the workforce from training programs and other sources, the plan will indicate how intakes should be adjusted in order to match staffing requirements with the number of staff actually employed. The plan will also provide some indication of the future costs of staffing the services.

It is essential that this planning document be seen as a rolling plan, that is a plan which is regularly and systematically reviewed and up-dated in the light of any relevant changes that have occurred or seem probable to occur. These changes may be related to such determinants as developments in government policy regarding health or health service personnel, changes in the country's economic or social situation, demographic or epidemiological factors, changes within the health care delivery system - this list is by no means exhaustive.

Of course, the plan does not predict what will happen. It simply shows what would happen if the various assumptions made prove to be correct and the proposals presented in the plan are implemented. Thus, one can see "in advance" the consequences of actions and events, can monitor whether the various assumptions are true or not, and then take whatever action is appropriate to the situation.

1.1.2 Specific uses of the plan

The specific uses to which the plan may be put include:

- providing a framework within which consistent decisions may be made
- indicating where resources are inadequate or likely to become inadequate unless corrective action is taken.

- estimating the costs of staffing the service and of training; these estimates are of obvious use in budget negotiations and in monitoring costs
- providing a realistic indication to staff and potential entrants to the service of their likely career paths and prospects of advancement
- identifying needs for external assistance and so assisting the health authority in formulating proposals to be put to external funding agencies.

1.1.3 Plan review

The plan cannot be regarded as remaining static over the whole planning period. Inevitably the economic and political events which will occur during the next fifteen or so years, and indeed developments in the fields of health care and environmental management, cannot be predicted with certainty. Therefore, as mentioned above, regular, preferably annual, review of the plan should be undertaken to revise and extend the plan forward. In this way the plan becomes a regularly updated “rolling plan”. More details of the arrangements for review and revision are given in Section 7 of this document.

1.2 The health care system - structure

ACTIVITY: *Read the following summary statement regarding health care system organisation and function. Some changes will almost certainly be required to provide a brief description of your health care system. Make any changes to the text you think are necessary, then delete this box and its contents.*

The health portfolio within the Government of Planania is held by the Minister for Health. The principal agency for the management of health care delivery and operation of health services is the Department of Health (DOH). The Department is headed by a public servant, the Director General of Health. The DOH Head Office directs, manages and coordinates all government sector health care activity throughout the country. The government health service operates at three levels, national, district, and community.

Activities within the small non-government sector of the health care delivery service are regulated and closely monitored by the Department of Health.

1.3 National Health Planning

ACTIVITY: *Obtain a copy of your government's current or most recent National Health Plan (if there is one). Extract from it any points relating to the health workforce. Summarise the material and enter it here as subsection 1.3 of your own Draft Plan. If there is no National Health Plan or similar statement of Government intention note this under this subsection heading. The following paragraph is an example of an entry under this heading. Replace it with your own text, then delete this box and its contents.*

The current *National Health Strategic Plan 2000-2004* provides the framework for the development of annual program budgets and activity plans for the divisions and units within the Department. The content of the *Strategic Plan* has been taken into account in the development of this workforce plan, but the workforce plan necessarily covers a considerably longer time span.

1.4 National health workforce policy

ACTIVITY: Obtain any material containing statements regarding policy affecting the health workforce. Summarise the material. An example of an entry under this sub-heading is shown below, but your entry will almost certainly be different from this one. Enter your summary here as subsection 1.4 and delete this Activity box and the example.

There is at present no national health workforce policy document. However, the Public Service Department has formulated policies applicable to the staffing of all government authorities. These include:

- The average annual rate of growth in the total size of the public service workforce in any five-year period must not exceed the average annual rate of population increase in that period. However, an increase in the number of established posts within a particular department may increase at a rate higher than that of population increase, provided that (a) the total rate of increase for the public service as a whole does not exceed that of population increase, or (b) there are special circumstances which justify such an accelerated rate of increase.
- A non-citizen may be appointed to fill a Public Service post only if there is no adequately qualified Plananian citizen available to fill the post.
- Contracts for the employment of expatriate personnel will be for periods not exceeding three years.
- Public servants will retire on reaching their 60th birthday. In exceptional circumstances they may then be employed on a yearly contract basis, at a salary not exceeding the base rate for the grade in which they are to be employed under contract, or the base rate for the grade in which they were employed prior to retirement, whichever is the lower.

1.5 Organisational arrangements for workforce planning

ACTIVITY: Enter here the organisational arrangements for the formulation of the health workforce plan. The paragraph below provides an example of an entry in this subsection. You will have to change it in order to describe the arrangements within your own health authority.

The Director of the Policy and Planning Unit coordinates all activities related to health workforce planning. Under its Director, the PPU is responsible for the preparation of this draft national health workforce plan, and will act as the secretariat for the Workforce Planning Group.

The Workforce Planning Group is composed of the Director General of Health, the PPU Director, the Directors of Clinical Services, Preventive Health Services, Nursing, Administration and Finance and the Senior Personnel Officer.

In preparing the draft workforce plan the planning group liaises closely with the heads of all divisions and units within the Department and with officers of outside agencies including the Public Service Department, the Department of Education and representatives of the health professional associations, international organisations and non-government organisations (NGOs).

Arrangements for obtaining endorsement of the health workforce plan and its subsequent regular review and rolling over are set out in Section 7 of this document.

1.6 Health workforce data and information management

ACTIVITY: Enter here a statement regarding the arrangements for the collection and collation of data and the management of information relating to health service positions, personnel and training. Remember that some, maybe very many, members of the health workforce may work in non-government sectors of the health care system. Also, some health personnel employed by the government may be working in agencies other than the Department of Health, eg the Defence Forces, Ministries of Social Welfare, etc. You should amend the statement below to describe the arrangements in your own situation.

Note that in later sections of this plan you will need comprehensive data regarding the posts (jobs) within your health care system and the people who occupy those positions.

The *Public Service Establishment Register* and the *Public Service Staff List*, both published annually, are the principal sources of data regarding government health service posts and personnel.

The most up-to-date information regarding staff actually in employment at a particular point in time may be obtained from the fortnightly government payroll listing prepared by the Department of Finance.

The health professional registers, which are up-dated annually through a registration and annual re-licensing system, provide data regarding personnel not in government employment.

DOH has established a health workforce database with input from these sources. The database is located within the DOH Human Resources Office where it is up-dated twice a year. The material stored in this database is reconciled with the data held at the Public Service Department at the bi-annual up-date.

The health personnel training data-base, also maintained by the DOH Human Resources Office, receives input regarding students undertaking formal professional training for work in the health service field. This training may be directed to the acquisition of formal qualifications at pre-service, post-basic or post-graduate level. Sources of data for the training data-base include the DOH Training Division, the Department of Education, government and non-government training institutions, and agencies sponsoring students such as international development assistance organisations.

1.7 The planning context - assumptions relating to health workforce planning

ACTIVITY: As subsection 1.7 of your Draft Plan set out the major assumptions that underlie the formulation of the plan. The following are examples of assumptions that have been made in preparing the Planania health workforce plan. Read through them and then make whatever changes you think are appropriate. You may wish to add additional assumptions.

1.7.1 Population and population growth

The estimated population of Planania at 1 January 2000 was 170,000. It is assumed that the population to be served will continue to increase at an annual rate of 1.5 per cent throughout the planning period. This is in line with the “mid-level” population growth projection prepared by the national Bureau of Census and Statistics. Thus by the end of the year 2015 the projected population will number 215,718 persons, an increase of 27 per cent on the number at the beginning of the year 2000.

1.7.2 Economic growth

Current official forecasts see the national economy growing in real terms at 2.5 per cent per year for the next five years. It is assumed that this rate of growth will continue throughout the period covered by this workforce plan.

1.7.3 Proportion of government budgets allocated to health

There has in recent years been a real increase in government spending within the health sector. In 1995 health expenditure represented 7.9 per cent of total government expenditure. In 1998 this figure had risen to 9.4 per cent of total government expenditure. However, the Department of Finance considers it unlikely that in future years the proportion of government budgets allocated to health will increase beyond 10 per cent.

1.7.4 Proportion of government health budget allocated to personnel emoluments

Staff salaries and other emoluments constitute 63 per cent of the total DOH budget for 1999. There has been some variation from year to year over the past five years (range 61-72 per cent). The Department of Finance considers that in future the proportion of DOH budgets allocated to personnel costs in any one year will not be permitted to exceed 70 per cent of the total DOH budget.

1.7.5 Private expenditure on health care

It is assumed that the present proportion of family expenditure on health care will rise as per capita incomes rise, as user charges for government health services are adjusted, and as the private sector of the health care delivery system grows.

It is likely that some form of health insurance system will be introduced in the coming years, presumably initially to provide some cover for people in paid employment. Among the effects of such an arrangement may be some re-distribution of service utilisation between the public and private sectors of the health care delivery system.

The impact of such developments on staffing and training requirements will be assessed in the roll-over reviews of this plan and adjustments made where appropriate.

1.7.6 Non-government provision of health services

It is assumed that non-government, non-subsidised provision of medical, dental, pharmaceutical, optical and other health services will grow more rapidly than will government provision of services. Areas of growth will include establishment of private hospital/nursing home type facilities, supply of pharmaceuticals through the retail market, expansion of the private practice of medicine, dentistry, clinical support services such as laboratory and medical imaging services, and some areas of allied health care such as physiotherapy.

Non-government Organization (NGO) activity in the health field will continue. The number of trained health personnel employed by NGOs is small and no account has been taken of their present and future numbers in this first version of the national health workforce plan.

There are limits to the extent to which private sector activity can supplement or replace government provision, but as yet these limits have not been explored.

As in sub-section 1.7.5 above, the impact of such developments on staffing and training requirements will be assessed in the roll-over reviews of this plan and adjustments made where appropriate.

ACTIVITY: Congratulations - you have made a start. Look back over your Section 1 and make sure you have deleted all the Activity boxes and their contents and any unwanted text. As you come to the end of a section of the workbook it is a good idea to insert the date. In subsequent reviews of this plan these dates will remind you when a particular section was last written or revised. So change the date below, then delete this box and its contents.

ACTIVITY: Save and print out your Section 1.

IMPORTANT NOTE:

One of the most difficult things in planning is to get something down on paper – once you have done that you can revise and, if necessary, extend what you have written.

You have now made a start in putting something on paper – keep up the momentum and go on to Section 2 – you can come back and revise Section 1 later.

SECTION 2

The Current Health Workforce

ACTIVITY: Read right through this section of the workbook before you start changing any of it. You will then know the sort of material you need to collect in order to prepare this part of your draft workforce plan. Much of the data you will need may already be available in various official reports, departmental records and existing databases. You will probably have to contact relevant personnel within your DOH and elsewhere to fill in the gaps.

2.1 Introduction

ACTIVITY: Read through the following introductory note regarding the health workforce and then make changes so that it is applicable to your own situation. Remember to delete the Activity box and its contents as you complete a sub-section.

Almost all health service personnel in Planania work within the Department of Health. DOH personnel (around 1,000 people in total) are employed by the Public Service Department. The staff of DOH includes some ex-patriates employed on 2-year renewable contracts.

A very small number of health personnel (less than 20) work in the private sector of the health care delivery system.

An even smaller number of health workers work for international developmental assistance agencies such as WHO which have their own offices in Planania. From time to time individual consultants or small specialised teams of health personnel visit Planania for short periods to conduct training activities or provide clinical or technical services to augment those of the Department, for example in such areas as surgical sub-specialities and bio-medical engineering.

This workforce plan is principally concerned with the staffing of DOH and the training of personnel working, or being prepared to work, within the Department's services. It also covers professional personnel in the private sector. The staff of international organisation offices operating in Planania and visiting health personnel are not included in this review of the current health workforce situation.

2.2 The size, composition and deployment of the current DOH workforce - January 2000

ACTIVITY: Using the material you have collected, change the text and Tables 2.1, 2.2 and 2.3 below to describe the current staffing situation in your health authority. You will probably have to add or delete some of the categories listed in the tables

2.2.1 The Department of Health workforce - posts and personnel - January 2000

In January 2000 the Public Service Department had approved 1,000 staff posts within the Department of Health, but only 795 of these were actually filled. As shown in Table 2.1, of the 795 staff in employment, 513 (64.5%) were "health personnel" and the remaining 282 (35.4%) were "other personnel". The health personnel group includes all staff who have received formal training to qualify them to work in a health occupation. The "other personnel" group includes all the other personnel within DOH who provide the

managerial, administrative, maintenance, housekeeping, transport and other ancillary services necessary for the effective functioning of the Department's services.

There were 886 established posts within the Department of Health, of which 681(76.9%) were occupied and 205 (23.1%) vacant. Of the 886 established posts, 676 (76.4%) were for health personnel and 210 (23.6%) for other personnel.

In addition to the established posts, the approved staffing complement of the Department included an additional 114 unestablished posts. Most of these posts call for relatively low-levels of skill and very limited on-the-job training. Occupants of these posts are paid on a daily basis and do not have access to most of the benefits offered to occupants of established posts. All of the unestablished posts were in the "other" category, and all were occupied. So if all of the 1,000 public service posts allocated to DOH by the Public Service Department were filled, 676 (67.3%) would be occupied by health personnel, and the remaining 328 (32.7%) by other personnel.

Table 2.1: Planania DOH - Established and unestablished posts, filled and vacant, January 2000

Category of posts	Posts		Posts filled	Posts vacant	
	Number	%		Number	%
Established posts for health personnel					
Medical Officers	43	4.9%	32	11	25.6%
Dental personnel	54	6.1%	46	8	14.8%
Nursing personnel	442	49.9%	320	122	27.6%
Pharmacy personnel	16	1.8%	13	3	18.8%
Laboratory personnel	38	4.3%	30	8	21.1%
Medical imaging personnel	23	2.6%	18	5	21.7%
Physiotherapy /OT personnel	5	0.6%	4	1	20.0%
Nutrition/dietetics personnel	8	0.9%	7	1	12.5%
Health promotion personnel	10	1.1%	7	3	30.0%
Environmental health personnel	24	2.7%	23	1	4.2%
Medical records personnel	4	0.5%	4	0	0.0%
Bio-engineering personnel	4	0.5%	3	1	25.0%
Health service management group	5	0.6%	5	0	0.0%
<i>Sub-total health personnel</i>	<i>676</i>	<i>76.4%</i>	<i>512</i>	<i>164</i>	<i>24.2%</i>
Established posts for "Other personnel"					
<i>Sub-total other personnel</i>	<i>210</i>	<i>23.6%</i>	<i>169</i>	<i>41</i>	<i>19.6%</i>
Total established posts	886	100.0%	681	205	23.1%
Unestablished posts					
Total unestablished posts	114		114	0	
Grand totals DOH	1,000		795	205	
<i>Percent</i>	<i>100.0%</i>		<i>79.5%</i>	<i>20.5%</i>	

Regarding vacant established posts, 23.4% (164/676) of the posts for health personnel were unoccupied, and 19.2% (41/210) of the posts for other personnel were unoccupied.

2.2.2 The Department of Health workforce - gender and age distribution - January 2000

Table 2.2 shows that among the health personnel working within DOH at the beginning of 2000, women outnumbered men by three to one. This reflects the absence of males in the nursing workforce. Among the other DOH personnel in established posts women were in the majority, but the female:male ratio is much closer to 1:1.

Table 2.2: Planania DOH workforce - established personnel, gender and age distribution, January 2000

Gender	Age group (years)								Total	
	<21	21-30	31-40	41-50	51-60	61-70	>70	Number	%	
Health personnel (in established posts)										
Female	4	104	143	74	44	16	2	387	75.4%	
	1%	27%	37%	19%	11%	4%	1%	100%		
Male	0	36	53	12	17	7	1	126	24.6%	
	0%	29%	42%	10%	13%	6%	1%	100%		
Total	4	140	196	86	61	23	3	513	100.0%	
	1%	27%	38%	17%	12%	4%	1%	100%		
Other personnel (in established posts)										
Female	0	33	26	16	14	1	0	90	53.6%	
	0%	37%	29%	18%	16%	1%	0%	100%		
Male	1	22	24	19	12	0	0	78	46.4%	
	1%	28%	31%	24%	15%	0%	0%	100%		
Total	1	55	50	35	26	1	0	168	100.0%	
	1%	33%	30%	21%	15%	1%	0%	100%		
All personnel (in established posts)										
Female	4	137	169	90	58	17	2	477	70.0%	
	1%	29%	35%	19%	12%	4%	0%	100%		
Male	1	58	77	31	29	7	1	204	30.0%	
	0%	28%	38%	15%	14%	3%	0%	100%		
Total	5	195	246	121	87	24	3	681	100.0%	
	1%	29%	38%	18%	13%	4%	0%	100%		

Thirty-four per cent of health personnel currently in established posts are aged forty or more years and most of these will have reached the official age of retirement by the end of the period covered by this health workforce plan.

Similarly, about one third of the other DOH personnel currently in established posts will have reached retiring age by the year 2020.

For both the health and other personnel groups the age distribution of females is very similar to that for males.

2.2.3 Categories of DOH personnel - January 2000

The major categories of health personnel and the numbers employed within DOH are listed in Table 2.1 above. Section 4 of this plan gives more detailed information regarding individual categories of health personnel.

The "Other personnel" category in Table 2.1 covers a wide range of occupational groups. Details will be included in later revisions of this workforce plan.

2.2.4 The Department of Health workforce - salaries - January 1998

The Public Service Department's *Public Service Salary Scales and Allowances* sets out the salary level and grade steps for every established post designation throughout the Government service.

For the fiscal year 2000 the estimated average annual salary and total DOH expenditure on salaries for personnel occupying established positions are as follows:

	<u>Average salary pa</u>	<u>Total DOH salary expenditure</u>
Health personnel	P\$9,697	P\$4,956,100
Other personnel	5,896	1,020,015

Total health and other personnel P\$8,228 P\$5,976,115

The above salary statistics relate only to basic salaries - they do not include allowances or other emoluments paid to staff occupying established posts.

Unestablished DOH staff are paid on a daily wage basis. The average annual salary of an unestablished member of DOH staff is P\$3,000 per annum.

2.2.5 DOH - places of work

DOH staff are employed at the following locations:

DOH Head Office

Situated on the campus of the National Hospital, this is the administrative centre of the health service. The offices of the Minister and senior managerial personnel, their staff and a number of ancillary personnel are located here.

The Planania National Hospital

This 250-bed institution is located in the centre of Malolo, the capital of Planania. The hospital provides a wide range of hospital services at primary, secondary and tertiary levels for both in-patients and out-patients. Outreach services are provided to the population living in the immediate vicinity of the hospital. It acts as the national referral centre and is the principal training centre for health personnel.

The National Hospital is also the base for community health service staff covering the population of the National Hospital District (NHD).

District Health Centres

There are 3 District Health Centres (DHCs) with bed-complements from 10 to 25 beds, providing primary and secondary level hospital services to in-patients and out-patients in the Districts A, B and C. Referrals are received from community health centres within the district covered by that DHC. Located at each District Health Centre is the District Health Office that manages all government health services (including the DHC) and supervises all other health services within the

district. The staff establishments for the DHCs in Districts A and B both include a post for a medical officer.

Community Health Sub-Centres

Seventeen Community Health Centres (CHCs) provide primary health care to out-patients only and serve as bases for outreach services. Nine CHCs are located within the National Hospital District, three in each of the Districts A and B, and two in District C.

2.2.6 Geographical location of posts and deployment of DOH personnel - January 2000

Table 2.3 on the following page shows the geographical location of established posts and the deployment of personnel. The table shows that the distribution of staff is very similar to the distribution of posts. Thus staff vacancies are quite evenly spread throughout the DOH service network.

Regarding geographic differences in personnel:population ratios, the table shows that within the National Hospital District (which includes the National Hospital and DOH Head Office) there is one doctor for every 3,666 people, in Districts A and B the doctor:population ratio is 1:25,000 and in District C there is no doctor for the population of 10,000 people. However, the National Hospital is the centre to which patients are referred from throughout Planania, and thus the medical, nursing and other hospital staff serve a population which extends beyond the geographic boundaries of the National Hospital District. Also, medical and other health personnel based at the National Hospital are required to conduct scheduled clinics at district health centres throughout the country and also to make other supervisory, supportive and training visits to all DHCs from time to time.

In Districts A, B and C the “general practitioner” workforce may be seen as made up of medical officers and nurse practitioners - registered nurses who have completed post-basic training in advanced clinical practice.

Also, experienced nurses at the DHCs and CHCs are trained to diagnose and treat common health problems.

2.2.7 Functional allocation of DOH posts and personnel

The staffing of the National Hospital is aimed at providing personal and community health services at primary, secondary and tertiary levels. Staffing at district health centres permits the delivery of both primary and a limited range of secondary level services. Community health centre staffing provides some essential elements of primary health care. Major concerns of staff at both DHCs and CHCs include health surveillance and problem identification, triage and referral. A 24-hour-a-day radio/telephone network links all health centres to the National Hospital,

Although the environmental health service cadre is based at the DOH Head Office (Table 2.3), the service operates throughout the country.

Table 2.3: Planania DOH workforce - geographical location of posts and deployment of personnel, January 2000

Category of post and personnel	Head Office	National Hospital	N H District	District A	District B	District C	Nursing School	Total
<i>Population</i>			110,000 64.7%	25,000 14.7%	25,000 14.7%	10,000 5.9%		170,00 100%
POSTS								
Established posts - health categories								
Medical	3	38	0	1	1	0	0	43
Dental	0	36	10	3	3	2	0	54
Nursing	4	198	130	40	44	20	6	442
Allied Health	23	83	0	3	3	1	0	113
Environmental Health	20	0	0	2	2	0	0	24
<i>Total health posts</i>	50	356	140	49	53	23	6	676
<i>%</i>	7.4	52.6	20.7	7.2	7.8	3.4	1.0	100%
Other established posts								
<i>Total other posts</i>	77	99	0	14	14	5	1	210
<i>%</i>	36.8	46.9	0.0	6.7	6.7	2.4	0.5	100%
All established posts								
<i>Total estab posts</i>	127	454	140	63	67	28	7	886
<i>%</i>	14.3%	51.2%	15.8%	7.1%	7.6%	3.2%	0.8%	100%
PERSONNEL								
Health personnel in established posts								
Medical	2	28	0	1	1	0	0	32
Dental	0	28	10	3	3	2	0	46
Nursing	4	165	76	28	28	15	4	320
Allied Health	19	67	0	2	3	0	0	91
Environmental Health	19	0	0	2	2	0	0	23
<i>Total health personnel</i>	44	288	86	36	37	18	4	512
<i>%</i>	8.6	56.1	16.8	7.0	7.2	3.5	0.8	100%
Other personnel in established posts								
<i>Total other personnel</i>	60	83	0	14	8	3	1	169
<i>%</i>	35.7	48.8	0.0	8.3	4.8	1.8	0.6	100%
All personnel in established posts								
<i>Total established personnel</i>	104	370	86	50	45	21	5	681
<i>%</i>	15.3%	54.3%	12.6%	7.3%	6.6%	3.1	0.7	100%

2.3 The private sector health workforce - January 2000

ACTIVITY: Collect the data necessary to give an account of the private sector health workforce. You will find it very helpful to either set up your own database covering private sector health service personnel, or to have access to databases maintained by other agencies such as national health personnel registration and licensing boards. Using the data you have collected amend the entry below to describe the local private sector staffing situation.

The entry below is very brief because the private sector in Planania is limited in size and the scope of services offered. You may need to expand this sub-section along the lines of sub-section 2.2 above.

Health personnel employed by the Government as public servants are not permitted to engage in private practice activities.

In January 2000 nine medical practitioners were working “full-time” in the private sector in Planania, eight in Malolo and one in Maski (the second largest urban centre in the country). Of these nine doctors, two (a psychiatrist and an ENT specialists) were employed at the National Hospital as Visiting Medical Officers for a limited number of hours per month on an hourly-payment basis.

Five dentists were in private practice in Malolo. Some of them employ dental technicians which they trained on the job.

Three qualified pharmacists were working in the private sector of the health care system - two in Malolo and one in Maski.

A total of four registered nurses were employed by doctors in private practice - three in Malolo and one in Maski.

2.4 Current staffing issues - January 2000

ACTIVITY: Read through the following list of possible areas of staffing problems (2.4.1 to 2.4.8) and decide which if any, of these are relevant to the staffing situation in your health service.

- 2.4.1 Current staff shortages*
- 2.4.2 Public/private employment of health personnel*
- 2.4.3 Age/sex distribution of health personnel*
- 2.4.4 Inconsistencies and inequity in grading of posts and salary scales*
- 2.4.5 Geographic distribution of health personnel*
- 2.4.6 Functional allocation of health personnel*
- 2.4.7 Workload distribution*
- 2.4.8 Recruitment and re-employment problems*
- 2.4.9 Other current staffing problems*

Delete or amend any headings that which are not relevant to your situation and add any others you think are appropriate.

For each heading write a short note setting out the nature of the problem, with any current or proposed activity aimed at dealing with the problem. Do not include problems relating to training here - they belong in Section 3.

Type your notes below this box then delete the box and its contents.

Check that you have deleted all the Activity boxes and their contents and all unwanted text. Insert today's date. Save your work and print out this section of your plan.

You are now ready to go on to Section 3 of the Workbook.

SECTION 3

Training Programs and Training Issues

3.1 Training policy and principles

ACTIVITY: Read the following statement regarding principles guiding the formulation of training policy and training programs. Prepare a list of the principles that are to be applied by your health authority in formulating training policies and programs. Enter your list in place of the example below and then delete this Activity box and its contents.

The following principles underlie Department of Health policy regarding training of health personnel.

- So far as is practicable, staff are to be trained in-country rather than elsewhere.
- So far as is practicable, the modular approach to curriculum design, course programming and the development of teaching/learning materials should be adopted. This will economise in the use of expertise required for course development and delivery, and facilitate sharing of materials both across in-country courses and with health training authorities in other countries.
- Training program development should reflect the desirability of providing for career progression by means of the completion of successive levels of training.
- The Department of Health will maintain close liaison with other government agencies and non-government organisations that offer programs for the training of health personnel.

3.2 Training responsibilities

ACTIVITY: Change the following entry to describe the allocation of responsibilities for training matters within your DOH.

The Department of Health provides basic professional training for major categories of allied health personnel through programs conducted within the Department. DOH provides funding for students to undertake basic and post-basic training in nursing at the University College of Planania. Other pre-service, post-basic and post-graduate training of health professionals out-of-country, and in-service and continuing education activities in-country, are funded either directly by DOH or under agreements between DOH, the Department of Education, other government agencies and a number of international development assistance arrangements.

The DOH Senior Management Committee (SMC) advises the Minister on health personnel training matters. The Senior Administrative Officer (Personnel and Training) and his staff provide the secretariat for the SMC in matters relating to training and maintain the DOH training database.

The Director General of Health is a member of the Department of Education Scholarships Committee - an inter-departmental body responsible for all matters relating to the allocation of government scholarships for pre-service, post-basic and post-graduate training both in-country and elsewhere.

The Director General of Health, with advice from the DOH Senior Management Committee, participates in the allocation of health service related study awards of all types funded by non-government agencies such as international development assistance agencies.

The Director General of Health is a member *ex officio* of the Council of the University College of Planania (UCP) and the Director of Nursing is a member of the UCP Nursing School Advisory Committee.

Local training of health personnel is coordinated by the DOH Training Coordinator. This person is directly responsible to the Director General of Health for the organisation and overall supervision of all the local training activities undertaken by the Department of Health. Divisions and sections within DOH play a major role in the actual design and conduct of relevant local training activities.

The Research Section within the DOH Policy and Planning Unit is responsible for implementing research activities approved by the National Health Development Committee in matters relating to the training of health personnel through pre-service education, post-graduate training and short courses.

3.3 Types, location and duration of current training programs

ACTIVITY: *When you have read through the following statement regarding the types, location and duration of training programs, make whatever adjustments are needed to describe your local situation.*

Listed below are the main types and duration of training programs pursued by staff of the Department of Health or people aspiring to enter a health occupation as an employee of the Department.

(a) Out-of-country training

Pre-service training (undergraduate diploma or degree 3-6 year courses) at out-of-country institutions:

Medicine, dentistry, nursing, pharmacy, laboratory science, medical imaging, physiotherapy, dietetics and nutrition, medical records administration, environmental health science, health service management.

Post-basic and post-graduate training leading to formal qualification out-of-country while in DOH employment but on study leave (course duration varies but at least one year - usually longer)

Medical, dental and nursing specialist training; training in public health and health services management.

(b) In-country training:

Basic professional training (local certificate) while in DOH employment (1-3 year courses) - training undertaken in training institutions or training programs under the control of the Department of Health or at the Planania University College (UPC)

Basic nursing (UPC diploma course)
Enrolled Nurse (DOH certificate course)
Health Inspector (DOH certificate course)
Assistant Pharmacist (DOH certificate course)
Assistant Laboratory Technician (DOH certificate course)
Assistant Radiographer (DOH certificate course)
Dental Therapist (DOH certificate course)

Post-basic training undertaken in-country while in DOH employment (9-12 month courses)
Nurse practitioner training, midwifery, public health nursing

(c) In-country or out-of-country training

In-service training to refresh, up-date and extend specific knowledge, skills and performance of DOH staff (duration from a few days to a few weeks)

Local workshops and seminars, generally conducted in-country within DOH, but DOH staff may be nominated to attend short courses offered by UCP, the Public service department or other local training agencies. DOH personnel may be funded by DOH or nominated for funding by other agencies for participation in short-term training related activities out-of-country.

Continuing education/continuing professional development activities whereby individual health workers undertake activities to maintain and extend their professional competence and performance

DOH may nominate staff for participation in CE/CPD activities such as seminars, conferences etc both in-country and elsewhere where other agencies meet some or all of the costs involved. Applications for DOH support are treated on a case by case basis.

3.4 Teaching/learning facilities in Planania

ACTIVITY: Amend the following material to provide a description of relevant teaching/learning facilities available for the training of health service personnel.

The scope and scale of health personnel education and training that can be carried on in Planania are obviously limited by factors such as small numbers of students, few qualified teachers, limited teaching material and so on. The principal in-country teaching/learning facilities are:

The Department of Health provides training leading to local certificates through its Schools of Dental Science, Environmental Health Science and Laboratory Sciences. The Department's Radiology and Pharmacy Divisions also provide training leading to local diplomas in radiography and pharmacy respectively. These activities are located on the campus of the National Hospital. The Department also conducts a one-year course leading to a Nursing Certificate which is accepted by the Nurses Registration Board for enrolment as an Enrolled Nurse (EN). Trainees entering these DOH courses become paid government employees and are subject to the provisions of the Public Service Regulations so far as their employment is concerned.

The School of Nursing, University College of Planania is located on a site adjacent to the National Hospital. Although the School is a unit within the University College, the nurse educators there are public servants employed within the Department of Health and on the DOH payroll. The other teachers at the School occupy posts funded by the Department of Education through the UCP.

The School offers a three year pre-service course leading to the Diploma in Nursing - a qualification accepted by the Nurses Registration Board for registration as a registered nurse (RN). The School can accept an annual intake of up to 30 new students. Students undertake practical work at the National Hospital and DOH health centres. Virtually all of the students in this basic nursing program are public service employees occupying student nurse posts within the Department of Health, and are on the DOH payroll.

The School of Nursing is also responsible for conducting post-basic training of nurses in-country. Courses offered include a twelve-month course leading to the award of the Nurse Practitioner Diploma, and six-month certificate courses in midwifery and in public health nursing.

In addition to these major training institutions, the Training Unit of the Public Service Department offers a range of courses in management, government accounting, government office procedures and computing skills. These courses are utilised for the in-service training of DOH personnel. This Training Unit also offers short (1-2 week) training of trainers courses for government employees who have some involvement as in -service trainers.

3.5 Curriculum development and approval

ACTIVITY: *Replace the following statement with a note regarding curriculum development and approval applicable to your own situation.*

Curricula for the courses offered within the Department of Health are developed by staff of the respective divisions in which trainees are to be employed. WHO advisers and other external consultants have contributed to the development of a number of the courses. Draft curricula are submitted to the Department's SMC for approval.

Draft curricula are forwarded by Divisional Heads to the National Health Development Technical Sub-Committee for discussion and recommendations. The Sub-Committee's recommendations are submitted to the SMC for consideration and decision.

Curricula for the courses offered at the UCP School of nursing are developed by the School staff in consultation with the Nurses' Registration Board (NRB) and DOH.

Registration/enrolment under the provisions of the nursing registration legislation as an enrolled nurse, registered nurse, nurse practitioner, midwife, or community health nurse is conditional upon completion of training approved by the NRB.

3.6 Recruitment and training of teaching personnel

ACTIVITY: *Change the following entry to describe the arrangements for the recruitment and training of teaching personnel in your situation.*

Each the DOH schools and training programs referred to in sub-section 3.3 above is headed by an experienced senior practitioner who, in addition to their formal professional training, has completed some training in teaching. Other staff members who participate in teaching programs may have completed short training of trainers courses.

Teaching staff at the UCP School of Nursing, including DOH personnel seconded to the School, are required to hold qualifications acceptable to the College.

3.7 Recruitment, selection, retention and employment of trainees

ACTIVITY: *Replace the following statement with a note regarding the recruitment, selection, retention and employment of trainees in your situation.*

The recruitment and selection of trainees to the local training programs of the Department of Health is the responsibility of the DOH Personnel and Training Division in cooperation with the Establishments Division of the Public Service Department. The Director General of Health nominates appropriate officers to participate in the selection process.

The authority for appointment of trainees to the Public Service resides in the President's Cabinet. Once the DOH selection process is completed a submission is forwarded to the Prime Minister's Office for appraisal by the Public Service Staff Board prior to its submission to Cabinet for approval.

The award of scholarships to school-leavers and other non-DOH employees for pre-service training at out of country institutions is a joint function of the Department of Education, the Public Service Department and the Department of Health. Holders of pre-service overseas scholarship holders remain under the supervision of the Department of Education until they complete their training and then enter DOH employment.

The process for selecting DOH personnel for longer term training out of country involves DOH and the Public Service Department as members of the Inter-Departmental Committee on Health Personnel Training. When sponsorship involves another agency such as WHO this committee will co-opt representation from the agency concerned. Nominations for the award of scholarships are submitted to Cabinet for approval. DOH personnel awarded out-of-country scholarships remain on the staff of DOH for all administrative purposes.

All holders of formal tertiary training scholarships and fellowships for overseas study must sign a bond with government prior to their departure overseas. The bond states that they will return to the country upon completion of their training and work for a minimum period equivalent in duration to the length of their training course.

The Director of Health in consultation with the appropriate divisional head nominates DOH personnel for participation in short term training activities such as workshops and seminars. If these activities are to be conducted out of country nominations are forwarded to the Minister for Health for a decision.

On completion of their training, DOH pre-service trainees are normally appointed to substantive posts within DOH and are employed subject to the provisions of the Public Service Regulations. Subject to satisfactory performance and good behaviour they may expect security of tenure to retirement and entitlement to a pension on retirement

3.8 Current training statistics

ACTIVITY: If your health authority does not have a training database already in operation you will need to collect the relevant statistics and so set up a database. The following table provides an indication of the data required, but you will have to adjust the Table to accommodate your own data.

Table 3.1 shows the numbers of trainees in each of the major health personnel training programs.

Table 3.1: Current training statistics - health personnel, Planania January 2000

Course	Location	Year of entry	Number of new entrants	Year of graduation	Expected number of graduates
B Medicine & Surgery (6 yrs)	OOC*	1994	4	2000	4
		1995	4	2001	3
		1996	4	2002	4
		1997	3	2003	3
		1998	4	2004	4
		1999	4	2005	4
Dip Nursing (3 yrs)	UCP	1997	28	2000	25
		1998	25	2001	22
		1999	32	2002	29
Enrol. Nurse Certificate (1 yr)	DOH	1999	25	2000	25
BDS (5 yrs)	OOC	1995	1	2000	1
		1996	0	2001	0
		1997	0	2002	0

		1998	0	2003	0
		1999	0	2004	0
Dip Dental Therapy (3 yrs)	DOH	1999	4	2002	4
Dip Dental Technol (3 yrs)	DOH	1997	0	2000	0
		1998	0	2001	0
		1999	0	2002	0
B Pharmacy (4 yrs)	OOC	1997	1	2001	1
		1998	1	2002	1
		1999	2	2003	2
Cert Pharmacy (2 yr)	DOH	1999	2	2001	2
B Laboratory Science (3 yrs)	OOC	1997		2000	
		1998		2001	
		1999		2002	
Dip Laboratory Sc (3 yrs)	DOH	1997		2000	
		1998		2001	
		1999		2002	
Dip Radiography (2yr)	DOH	1997		2000	
		1998		2001	
		1999		2002	
Dip Physiotherapy (3 yrs)	OOC	1997		2000	
		1998		2001	
		1999		2002	
Dip Dietetics (3 yrs)	OOC	1997		2000	
		1998		2001	
		1999		2002	

* OOC - Course is conducted at an out-of-country institution.

3.9 Current training issues

ACTIVITY: Read through the following list of problems relating to training. Then replace this list with a list of the training-related problems currently facing your health authority. Don't forget to delete this activity box and its contents.

The following matters are among the major training-related issues confronting the Department of Health.

a) Bonding arrangements

Despite the existence of “bonding” arrangements, some students who complete their training overseas fail to return to employment in Planania or leave government employment very shortly after their return to the country. There is a need to review the conditions and operation of the bonding system. This review will involve both DOH and other government agencies including the Department of Education and the Public Service Department.

b) Development of a detailed plan for the post-graduate training of medical graduates as specialists

Over the next few years a number of new medical graduates will enter DOH employment. A number of specialist medical officers will retire shortly. Other specialists are ex-patriates. A schedule for the post-graduate training of Plananian medical officers is required to ensure that over the next two decades an appropriately trained cadre of national medical specialists is built up.

c) Recruitment of nurse trainees

Only a small proportion of high school graduates meet the standard of educational attainment required by the UCP for entry to the Diploma in Nursing course. Among this group relatively few choose to enter a career in nursing.

d) Up-dating and expansion of knowledge and skills of trainers in local training programs

The knowledge and skills of staff who are engaged as trainers in local training programs require up-dating through a planned program of in-service training and continuing education activities.

ACTIVITY: Look back over your Section 3 and make sure you have deleted all the activity boxes (including this one) and any other material that is not required. Then insert today's date below, and go on to Section 4

SECTION 4

PLANNED CHANGE - WORKFORCE PROJECTIONS AND TRAINING INTAKES

Important note:

To complete this section of your plan you will have to consult with the top-level decision makers in your health authority, heads of divisions and units within the health authority and senior personnel in the training institutions outside the health authority. You will also need to consult relevant people in other government and non-government agencies who have an interest in the future development of the health workforce.

It is a good idea to work through this section using the data you have collected in writing sections 1, 2 and 3 and making what appear to you to be reasonable assumptions regarding points on which you do not yet have any information. You can then use this preliminary draft as the basis for discussion with the stakeholders, checking the data you have used and adjusting the assumptions you made in the light of the stakeholders' opinions and wishes. At this stage of planning a series of meetings, each with one or a few informed people to discuss in detail the material for the occupational category or group of categories of their particular interest, is likely to be more productive than "workshops" with large numbers of participants.

At this point you should read through this section to get an idea of its activities and the material to be produced.

(This note should be deleted before you print out your completed Section 4.)

ACTIVITIES:

1. Look through this section of the workbook to get an idea of the sort of material you will be preparing as you work through the activities.

Note that each occupational category has its own sub-section. Sub-sections for most major categories are presented in detail in this workbook but you will have to develop sub-sections for all the occupational categories to be covered in your own workforce plan.

2. Go to the spreadsheet labelled WORKSHEET INSTRUCTIONS in the EXCEL file PLANWB4 WORKSHEETS.

This is the basic worksheet for projecting year by year staffing targets (called "required posts" in the worksheet), expected numbers of actual staff (these numbers may be different from the target numbers), required training intakes and outputs, and also estimates of annual salary costs. These cost estimates will be used later in Section 5. (All the other spreadsheets referred to in this section of the workbook are also on your diskette in the EXCEL file PLANWB4WORKBOOK.xls.)

(It is assumed that workbook users have sufficient experience in using EXCEL to add or delete rows, make adjustment to formulae, and link worksheets when required.)

Now you can delete this activity box and start the Introduction to your Section 4.

4.1 Introduction

ACTIVITY: *Read the following statement and make any alterations or additions you consider appropriate. You may decide to make no change at the moment but will come back and make any necessary changes when you have completed the rest of this section.*

This section of the workforce plan is concerned with determining the numbers of staff positions required to provide an adequate level of service (the “Required posts”), the numbers of personnel staff actually to be employed, the numbers of staff entering and leaving the health service, and the numbers of entrants into and graduates from training programs.

Several methods have been employed in determining the number of required posts, each method having its particular applicability and particular limitations.

IMPORTANT NOTE: DO NOT ASSUME THAT THE STAFFING LEVELS AND STAFFING PATTERNS IN THIS WORKBOOK ARE APPROPRIATE TO YOUR SITUATION. The WHO HRH Toolkit contains several sections relating to methods of determining appropriate levels and patterns of staffing. If you are not familiar with these now is the time to look them up. Delete this note when you have read it.

Having determined the baseline required establishment for the current population this has been projected into the future taking into account such factors as the expected population growth rate, epidemiological changes, changes in the productivity of health personnel and planned changes in the range and level of services to be provided.

Each of the following sub-sections 4.2 to 4.15 provides information regarding the requirements, supply and training arrangements for one category of health personnel in the health workforce. For each of these categories there is a projection sheet linking year by year the required number of posts, the actual staff to be employed and the training intakes required. Also on the sheets are projections of estimated staffing and training costs that will be used in Section 5 of the plan. The projection sheets are to be found following the particular personnel category to which they relate.

It must be emphasised that the projections presented in this plan are based on information currently available. As mentioned earlier in this document the plan must be regularly and systematically reviewed and “rolled over” in order to reflect changing policies, changing needs, and to incorporate all available relevant information regarding the workforce situation.

Sub-section 4.2 begins on the following page.

4.2 Medical Officers - requirements, staffing and training

ACTIVITY: *Decide how you are going to approach setting medical officer staffing targets for the coming years. Targets may have already been set, for example in a national health plan. If you do not have ready-made targets then you will have to choose your own approach. The example in this sub-section uses the Facility/Service Staffing Schedule approach - but you may decide to use some other method or combination of methods.*

- *Facility/service staffing schedule approach - taking into account the type of facility or service to be operated and the categories and productivity of personnel needed for that operation, a schedule of staffing standards is drawn up and applied to the particular facility or service that the health authority is going to provide.*

Other approaches include :

- *Personnel:population ratio approach - the target number of, say, registered nurses will be directly related to the size of the population to be served, but you will have to decide on an appropriate RN:population ratio.*
- *Service targets approach - staffing targets are determined by the type and volume of items of service to be provided - the staffing targets will have to reflect the productivity level of the staff concerned.*
- *Variants of these basic approaches and some others are described in the WHO HRH Toolkit and workforce planning texts.*

When you have decided how you are going to approach target setting for the medical officer cadre you are ready to start working through the following subsections of 4.2.

4.2.1 The DOH Medical Officer cadre, 2000

ACTIVITY: *Using the data you collected for your Section 2 description of the current workforce, modify the following text and Table 4.2.1 to describe your health authority's current medical officer cadre in some detail. This will serve as the baseline for the projections to be made a little later in this sub-section.*

From your Table 4.2.1. enter into your Worksheet 4.2.1 the required number of posts and the number of medical officers for the base year (in this example 2000)

The following table presents the DOH medical officer staffing situation as in January 1998.

Table 4.2.1: Planania DOH - Medical Officers, January 2000

Designation of position	Number of posts	Number of posts occupied
Director General of Health	1	1
Director of Medical Services	1	1
Director of Community Health Services	1	0
Consultant Specialist	8	6
Consultant	2	1

Senior Registrar	3	3
Senior Medical Officer	2	1
Registrar	15	10
Medical Officer	11	10
Total	44	33

Of the medical staff shown in the above table, eight (8) are expatriates employed on two-year contracts.

In addition to the full-time staff at the National Hospital, DOH also employs a psychiatrist and an ENT surgeon from the private sector to work at the National Hospital for up to four hours a week on an hourly-payment basis as required.

4.2.2 DOH medical cadre development plan, 2000-2020

In consultation with DOH medical staff the following staffing standards were agreed.

- Medical and surgical service teams - 3-4 medical officers per team
- Paediatrics and obstetrics/gynaecology service teams - 2 medical officers per team
- Accident/emergency service teams - 3 medical officers per team
- Anaesthetics/Intensive Care service teams - 3 medical officers plus anaesthetic technicians per team
- ENT, ophthalmology, psychiatric service teams - 1 medical officer per team
- Laboratory and medical imaging service teams - 2 medical officers per team
- District Health Centre teams - 2-4 medical officers per team depending on population to be served

Using these standards, the staffing targets shown in Table 4.2.2 were agreed upon by the Medical Services Committee as providing an appropriate cadre of medical personnel (about 70 doctors) to staff a comprehensive government medical service covering a population numbering 200,000 to 250,000 people (the projected population of Planania in the year 2015 is around 215,000).

Table 4.2.2: Planania DOH - Target establishment for medical cadre, 2015

Department or Service	Required posts, 2015
Medicine	8
Surgery	6
Obstetrics and Gynaecology	4
Paediatrics	4
Anaesthetics/Intensive Care	6
Accident and Emergency and Outpatients	6
ENT	2
Ophthalmology	2
Medical Laboratory Service	2
Radiology and Ultra-sound	2
Psychiatry	1
District Health Services and General Pool	12
Public Health Services	8
Medical Administration	5
Total	68

The basic clinical team in a major specialty would be expected to comprise one consultant specialist (clinical masters degree, Board certification or fellowship), one or more specialists (post graduate clinical diploma or higher qualification), and one or more other members, some of whom would be pursuing (or may have completed) post graduate studies leading to a clinical diploma or higher qualification.

In the smaller clinical specialties and sub-specialties the team consists of one or two specialists with support from the general medical officer, resident medical officer (RMO) and intern pool.

In the clinical support specialties (laboratory and medical imaging) the head of the service would be expected to be of consultant specialist level (masters degree, Board certification or fellowship) and the second in charge to hold (or be studying for) a postgraduate diploma (eg Diploma in Clinical Pathology, Diploma in Diagnostic Radiology) or higher qualification. Support may be provided from the pool mentioned above.

The above schedule does not show in full detail the services to be provided and work to be undertaken by medical staff. For example, this proposed staffing pattern does not explicitly provide posts for a number of specialties such as dermatology, STD/HIV/AIDS physical and rehabilitation medicine. These areas would be covered by one or another member of a major specialty team or a member of the Community Health Services team.

Because of unavoidable absences of team members to attend post-graduate training course and other activities, there will have to be flexibility in the utilisation of medical staff with scope for medical officers to be allocated to duties outside their specialty or area of special interest.

Assuming the population growth rate continues at around 1.5 per cent per year, a DOH medical cadre totalling 70 doctors plus at least 18 doctors in private practice by the year 2015, there would be one doctor for every 2,400 people in Planania.

Medical officers at all levels within the medical cadre will assume some responsibility for the regular field support, supervision and continuing education of nurses and other personnel employed in facilities such as community health centres not staffed by medical officers.

In view of the present low occupancy rate and short average in-patient stay of the country's hospitals this staffing schedule may appear somewhat generous. It may be that in the future some of the higher level consultant posts will be filled on a sessional rather than on a full-time basis.

4.2.3 Losses from the medical cadre

ACTIVITY: Read the following. If you think your health authority will have problems arising from losses of medical staff in the future make what alterations to the example are appropriate.

In the "Exit - retirement" row of your worksheet enter numbers of staff reaching retirement age year by year - this data should come from the age distribution you prepared for Section 2.

Enter in the "Assumptions" section of your worksheet 4.2.1 your assumptions regarding resignations from the DOH medical officer cadre.

Also in the "Assumptions" section enter the assumptions your are going to make regarding the numbers and frequency of exits due to death/invalidity etc.

In the immediate future DOH faces the loss of senior medical personnel who have already passed the age of 65 years. The government policy of replacing expatriate personnel with national staff means further losses of experienced doctors from the medical cadre over the coming years. Also, some medical officers will undoubtedly leave DOH for private practice in Planania or to take up employment elsewhere.

Losses due to retirement are generally predictable, those due to other causes less so.

Among factors which may minimise future attrition from this cadre are the introduction of structured internship program at the National Hospital, changes in the medical officer salary and career structures, the provision of opportunity for government medical officers to undertake limited private practice and the development of a well-organised and properly implemented program to enable medical graduates to gain formal specialist qualifications. A structured program of continuing professional education directed to the up-dating and extension of medical officers skills, covering doctors in both DOH and the private sector, will also play some part in maintaining a high level of commitment to work within the Plananian health care delivery system.

It will be assumed that one DOH MO will leave DOH for private practice every five years, and one resign for some other reason every five years.

4.2.4 Medical undergraduate training

ACTIVITY: Amend the following entry to describe your health authority's approach to medical undergraduate training.

Enter the numbers of expected graduates in the "Graduates" row of your worksheet 4.2.1

On the basis of recent experience, enter in the "Assumptions" section of your worksheet 4.2.1 our assumption regarding failure of medical students to complete their course and failure to enter DOH employment on completing their training.

In the past students sent out of Planania for medical training have failed to return to Planania on graduation, or have left Planania for employment elsewhere very soon after entering DOH employment. However, a bonding system was brought into operation around 1990. This means that medical graduates emerging from the training pipeline may be effectively bonded to return to Planania for employment for a defined period, or face penalties for breach of the conditions of the bond.

At the beginning of the year 2000 twenty-three Plananian nationals were pursuing the MBBS course at either the Swotana School of Medicine or at medical schools in New Zealand and Australia. Four new graduates returned to Planania for employment as interns in 1998 and another four new students commenced MBBS courses in this year. DOH currently proposes a future annual entry to MBBS courses of up to 4 or 5 new students. The following table indicates by years the expected numbers of Plananian medical graduates from overseas medical schools to enter DOH employment to the year 2004.

Table 4.2.3 Planania - number of MBBS graduates expected to return to Planania and enter DOH employment, 2000-2005

Year of return	Expected number of returning MBBS graduates
2000	4
2001	3
2002	4
2003	3
2004	4
2005	4

The DOH Medical Officers Worksheet 4.2.1 at the end of this subsection shows the impact of the undergraduate medical training program on the numbers of medical officers likely to be in the DOH medical cadre from year to year.

4.2.5 Medical postgraduate training

The recent and impending further loss of the most senior national specialist medical officers from DOH presents problems not only in terms of providing services to patients but also as regards the post-graduate training of other medical officers.

Ensuring that there will be an adequate number and range of specialists on the staff of DOH to provide specialised supervision and training of registrars preparing themselves for the examinations and other requisites for the award of formal specialist qualifications is the greatest challenge confronting the DOH medical training program over the next 10-15 years.

Future rolling over of this workforce plan should include the incorporation of a post-graduate training schedule showing year by year the proposed entrance and progression of DOH medical officers into and through post-graduate training courses.

4.2.6 Projection of future DOH medical officer staffing and staffing cost

ACTIVITY: Enter a brief statement of your staffing target in the "Staffing target" row of your EXCEL Worksheet 4.2.1. Also, in the Assumptions area of the worksheet enter the assumptions on which your entries into the worksheet will be based.

Enter the national population estimate for the base year in the "Population at start of year" row of your worksheet 4.2.1. Enter the percentage average annual population growth rate in the cell below.

Enter into the "exit" rows of your worksheet the numbers and timing of exits in line with the Assumptions you have already entered on the worksheet.

Enter in the "Intake from training" row the number of new graduates entering DOH in the base year (here 2000).

Adjust the "Other exits" row in the student training section in line with your assumptions regarding failure to complete training and failure to enter DOH employment upon graduation.

In the "New student intake" row adjust student intake numbers year by year so that the number of "Total MOs at start of year" is equal to the number of "Required posts at start of year". The maximum intake of students in any one year must not exceed the capacity of the medical school/s to accept them, nor may it exceed the likely availability of appropriately qualified entrants.

Note that you are unable to change the number of new intake from training for the first seven years of the projection - these numbers are already determined by the number of students in the medical undergraduate program in the base year.

If you are unable to reach the staffing target by adjusting student intake numbers, you may decide to accept the shortfall, or reduce the resignation rate, or recruit qualified doctors from other sources, eg import expatriates, or modify your retirement and engagement policies, or reduce student dropout rates.

Enter the average annual MO salary from your database and the average annual training cost relating to one student in the appropriate boxes on your worksheet 4.2.1. Printout the completed worksheet.

When you have completed the worksheet write a brief commentary on the projection to replace the example below.

The projection of staffing numbers, student intake and output and salary and training costs shown in Worksheet 4.2.1 DOH Medical Officers at the end of this sub-section is based on the following assumptions:

- Retiring age 65 years (ie automatic extension of employment to 65th birthday)
- Exit to private practice - 1 DOH MO every five years
- Exit - other resignation - 1 DOH MO every five years
- Exit death etc - 1 DOH MO every eight years
- One medical student fails to complete the MBBS course or does not return to DOH employment on graduation every third year.

The worksheet shows year by year the required numbers of entrants to the undergraduate medical course. It appears that, despite retirements of medical officers now over 65 years of age, normal retirement at 65 years of age, the phasing out of expatriate contract medical officers, and resignations from DOH, a "target establishment" of 70 medical officers will be reached by the end of the year 2015.

The worksheet 4.2.1 also shows that in the coming years the medical cadre can probably be maintained at this target level with annual average entry of 4 students a year to the MBBS course.

The worksheet does not indicate the pattern of entry to post graduate training programs.

4.2.7 Medical practitioners in the private sector

ACTIVITY: Complete the Worksheet 4.2.2a in the EXCEL Planwb4 file of your diskette. Print out the completed worksheet. Then write a brief statement regarding private practitioners along the lines of the following example.

Government specialist medical officers may be granted permission to use government facilities for the treatment of private patients. Some abuse of this privilege has been reported and strict controls will be put in place to avoid such problems in the future.

In January 2000 nine medical practitioners are working “full-time” in the private sector - none of them holding public service posts. From among this group a psychiatrist and an ENT specialist are employed at the National Hospital for a limited number of hours per week on an hourly-payment basis.

It will be assumed that the number of doctors in private practice will have doubled (ie reach 18) by the year 2020.

Worksheet 4.2.2a at the end of this sub-section shows that this number of private medical practitioners can be reached in the year 2015 with one DOH doctor resigning to enter private practice every five years and six doctors coming into Planania to practise (possibly Plananians currently practising in other countries) during the planning period 2000-2015.

4.2.8 The total Plananian medical workforce 2000-2015

ACTIVITY: Look at Worksheet 4.2.2b - you will see that the numbers of private medical practitioners and DOH medical officers have been automatically entered there. Write a brief note to replace the example below.

Worksheet 4.2.2b shows year by year the number of medical practitioners expected to be practising in Planania either within the DOH services or in the private sector.

The total number of practitioners increases from 42 at the start of the year 2000 to 88 at the end of the year 2015. The doctor:population ratio improves from 1:3,700 to 1:2,400 over this period.

4.3 Nursing Service personnel - requirements, staffing and training

4.3.1 The DOH nursing cadre, January 2000

ACTIVITY: From your database prepare a statement and summary table regarding the present nurse staffing position along the lines of the example below. Replace the text and table with your own material.

The DOH nursing cadre comprises two major groups of personnel, registered nurses (RNs) and enrolled nurses (ENs). Under the Director of Nursing Services there are three groups of posts – hospital nursing posts, community health services posts and nurse education posts. The following table shows the DOH nursing cadre establishment and staffing in January, 2000.

Table 4.3.1: Planania DOH - Nursing cadre - posts and staffing, January 2000

Designation of posts	Posts	Staff	Vacancies
<u>Registered nurse posts</u>			
Director of Nursing Services	1	1	0
Principal Nurse, National Hospital	1	1	0
Principal Nurse, Community Health	1	1	0
Principal Nurse, Research and Development	1	1	0
Nurse Manager, National Hospital	13	8	5
Nurse Manager, Community Health	11	9	2
Nurse Practitioner	8	6	2
Staff Nurse, Hospital	145	121	24
Staff Nurse, Community Health	150	76	74
Principal Nurse, Education	1	1	0
Senior Lecturer, School of Nursing	6	4	2
Lecturer, School of Nursing	4	3	1
<i>Sub-total RN posts</i>	<i>342</i>	<i>232</i>	<i>110</i>
<u>Enrolled nurse posts</u>			
Enrolled Nurse, Hospital	30	25	5
Enrolled Nurse, Community Health	40	36	4
Enrolled Nurse Trainee	30	27	3
<i>Sub-total EN posts</i>	<i>100</i>	<i>88</i>	<i>12</i>
Total nursing cadre	442	320	122

In the year 2000 one in every eleven RNs was already past retirement age, and by the end of the year 2015 another 77 will have reached their 60th birthday.

The EN group is markedly younger. No ENs will reach retiring age until the year 2008 and by the end of 2015 a total of eleven ENs will have passed their 60th birthday.

4.3.2 DOH nurse cadre recruitment and attrition problems

ACTIVITY: Replace the following statement with appropriate comments regarding recruitment into and attrition from the nursing cadre.

- Comparatively low scales of remuneration for registered nurses. The salary scales are similar to those for school teachers - who do not work shifts or public holidays and enjoy longer holiday benefits
- Unattractive working conditions - shift work; work on public holidays; unacceptable interference in the running of district health centres by local Women's Committees who "manage" the health centres and collect fees from patients for services provided; poor housing accommodation for nurses posted to rural areas; poor facilities at some small health centres eg no piped water supply, with nursing staff expected to cart water from an outside water point.
- The increasing number and range of career opportunities opening up for female high school leavers qualified to enter under-graduate programs at the UCP.

These problems also contribute to the high resignation rate among registered nurses. However the most common reason for resignation is emigration to take up a nursing post in a more affluent country where nursing salaries and career prospects are much superior to those in Planania. The majority of the emigration related resignations are among RNs in the 25-35 age group - very few RNs over the age of forty-five have emigrated in recent years.

There are currently continuous difficulties in maintaining adequate staffing levels at the hospital and health centres, and proposals for improvements in the quality and range of nursing services provided have had to be abandoned. Community nursing services have been chronically under-staffed and the community health services are operating at low levels of coverage and efficiency.

A considerable number of trained nurses in the community who resigned from DOH in the past in order to meet family commitments may now be interested in returning to the nursing workforce. These nurses would require some "Back-to-nursing" refresher training to update their knowledge and skills.

The number of applicants for entry to the enrolled nurse-training program always exceeds the number of places eg in 1999 there were 36 applicants for 10 places. The dropout rate among trainees is relatively high (15-20% per intake), but those who do complete training tend to remain in employment. The emigration rate among ENs is very low.

4.3.3 Nursing Service development and staffing targets

ACTIVITY: Replace the following statement with one regarding the proposed staffing targets for your DOH nursing service.

Make an appropriate entry in the "Staffing target" row of your EXCEL Worksheet 4.3.1 and enter the staffing target numbers in the "Required posts at the start of year" row.

Several years ago a nursing service development plan was written some years by the then Director of Nursing Services (DNS). The plan proposed an RN ratio of 1:500 and an RN:EN ratio of 3:1. Although tentative adjustments were made to the nursing establishment to provide for the employment of nursing staff along the planned lines, the plan was never fully implemented.

That plan has been reviewed by the present DNS, her senior nursing colleagues and the Workforce Planning Committee. In view of the difficulties encountered in recruiting entrants to the UCP nurse training program, and the ease of recruiting trainees to the enrolled nurses training program, it was suggested that considerably greater use be made of enrolled nurses. This proposal was not favoured by a number of senior nursing staff.

It has now been agreed that the proposed ratios represent desirable targets and have been adopted as the staffing targets to be reached by the end of the year 2015 as shown in the table below.

Table 4.2 Planania DOH – Nursing service staffing targets, 2015

	Actual staffing, 2000	Target staffing, 2015
Registered nurses	232	431
RN:population ratio	1:733	1:500
Enrolled nurses	88	143
EN:population ratio	1:1,700	1:1,500
RN:EN ratio	2.6:1	3:1

It was also agreed that the EN:population ratio of 1:1,500 be reached within five years, and maintained at that level for the remainder of the planning period.

4.3.4 DOH nurse training programs

ACTIVITY: Replace the following statement regarding future training of nursing personnel with one relating to training of nursing personnel for employment within your DOH.

(a) Training of enrolled nurses

The enrolled nurse-training course extends over one year - half this time being spent on formal study with practical work occupying the other half. There has been no difficulty in recruiting suitable entrants to this training program, and none is anticipated.

(b) Training of registered nurses

The UCP School of Nursing program has stated that although its facilities and equipment were designed to accommodate a maximum annual intake of thirty new students, it will accept up to 40 new trainees per year.

As noted, there have been difficulties in recruiting entrants to this course. It is proposed that DOH and the Nurses' Registration Board will jointly mount a campaign designed to attract school leavers and other appropriately qualified people to enter the profession.

DOH has also commenced a "Back-to-Nursing" program designed to recruit trained nurses back into the nursing workforce. On re-entering DOH employment these 'returnees' undertake a "refresher" training program on full pay. Three nurses will enter this program in the year 2000. It is expected that five RNs will return to DOH employment in each of the subsequent years of this program.

(c) Post-basic nurse training

The post-basic training program at the UCP School of Nursing offers a twelve-month course for RNs leading to an Advanced Diploma in Nursing (ADN). The program has been designed to take in around ten registered nurses each year. The course consists of generic core studies plus elective studies in either primary health care, midwifery or mental health. Nurses who wish to undertake the primary health care elective stream must have had at least five years approved nursing experience prior to commencing the ADN course.

Nurses who complete the primary health care electives may be registered by the NRB as nurse practitioners subject to satisfactory completion of a one-year clinical internship. Nurses completing the midwifery electives will be eligible for NRB registration as midwives. Nurses completing the mental health nursing electives will be eligible for NRB registration as mental health nurses.

In order to maintain a high standard of up-to-date knowledge and skills within the nursing cadre it will continue to be essential to program out-of-country specialist post basic training for nurses who, on their return from training will act both as practitioners in their specialty and as trainers of other nursing personnel. It is proposed that in any one year 2 or 3 RNs will commence out-of-country courses to up-grade their qualifications from diploma to Bachelor of Nursing degree level, and 1 or 2 will be pursuing post-graduate studies at masters or doctoral degree level.

(d) Continuing education of nursing personnel

There is a need to maintain a structured program for the up-dating and extension of the professional awareness, knowledge and skills of all nursing personnel. The DOH Principal Nurse Education is responsible for the design, programming and implementation of appropriate continuing education activities for DOH nursing personnel. The Nurses' Registration Board (NRB) is currently reviewing regulations regarding eligibility for annual licensing to include provisions relating to continuing education activities.

4.3.5 Nursing personnel in the private sector

ACTIVITY: Prepare a statement regarding nursing personnel in the private sector of your health care delivery system and enter it in place of the statement below.

A small number of nursing personnel work in the private sector of the health care delivery system. As activity in this sector increases there will be demand for experienced nurses to move over from the government service. In particular the opening of private facilities such as a hospital would call for the employment of a number of nurses, particularly those with specialised knowledge and skills.

Thus, to the expected attrition arising from migration overseas and other causes mentioned above, must be added the possible exodus of some registered and enrolled DOH nurses to the local private sector. In this first projection of nursing requirements and availability no special provision will be made for these contingencies but the movement of nurses from government to private employment will be monitored and, if necessary, adjustments made as the workforce plan is regularly "rolled over".

Nurses working in the private sector are required to hold a current annual practising licence from the NRB, and will therefore have to meet the Board's requirements requiring continuing education. Nurses working in the private sector may be given access to the DOH continuing education program- it is expected that non-DOH nurses will be charged fees for participation.

4.3.6 Projection of nursing service requirements, staffing and training - Registered Nurses

ACTIVITY: Following the same procedures as were used for completing the Medical Officer worksheet, complete Worksheet 4.3.1.

Replace the following commentary with material relating to your projections.

The projection of staffing numbers, student intake and output and salary and training costs shown in Worksheet 4.3.1 Registered Nurses at the end of this sub-section is based on the following assumptions:

- "Intake other" includes nurses who at some time resigned from DOH employment but re-enter the service
- Retirement of RNs on reaching 60th birthday
- Exits due to death, invalidity etc - 1 per year

- Maximum number of new student intake - 40 per year
- Percentage of new student intake not completing the training course or not entering DOH employment on graduation - 10%

The worksheet shows that, with an annual student intake of 40 new students and 28 trained nurses re-entering DOH employment over the first six years of the planning period, the target RN:population ratio target (1:500) will be reached by the end of the year 2015.

4.3.7 Projection of nursing service requirements, staffing and training - Enrolled Nurses

ACTIVITY: *Following the same procedures as were used for completing the Medical Officer worksheet, complete Worksheet 4.3.2.*

Replace the following commentary with material relating to your projections.

The projection of staffing numbers, student intake and output and salary and training costs shown in Worksheet 4.3.2 Enrolled Nurses at the end of this sub-section is based on the following assumptions:

- “Exit- resignation” loss rate 10 per cent per year
- Retirement at age 60 years - 2 per cent will retire annually from the year 2010 annually
- Losses due to death, invalidity, dismissal etc - 1 every five years
- Trainee loss rate - 10% per intake

The worksheet shows that, with annual student intakes as indicated year by year, the target EN:population ratio target (1:1,500) will be reached by the end of the year 2003 and maintained for the remainder of the planning period.

ACTIVITY: *As in the sub-section for Medical Officers, print out this section and place the printouts of the EXCEL spreadsheets at the end of the sub-section.*

ACTIVITY: *Change the following material to provide a description of the current staffing situation within your DOH Dental service.*

There are posts for four fully qualified dentists registered under current legislation to be employed as dental officers within the Department of Health. Dental therapists are also registrable in Planania. Dental assistants are trained on the job and are not registrable under current legislation.

The health personnel establishment and staffing of the DOH Dental Service as in January 2000 are shown in the following table.

Table 4.4.1: Planania DOH - Dental cadre - posts and staffing, January 2000

Designation of posts	Posts	Staff	Vacancies
<u>Dental Officer posts</u>			
Director of Dental Services	1	1	0
Principal Dental Officer, Clinical	1	1	0
Principal Dental Officer, Public Health	1	1	0
Principal Dental Officer, Training and Research	1	0	1
<i>Sub-total Dental Officer posts</i>	<i>4</i>	<i>3</i>	<i>1</i>
<u>Dental Therapist posts</u>			
Principal Dental Therapist, Training and Research	1	1	0
Senior Dental Therapist Tutor	1	1	0
Assistant Dental Therapist Tutor	1	0	1
Charge Dental Therapist, Clinical	2	1	1
Charge Dental Therapist, Public Health	1	0	1
Dental Therapist Tutor	1	1	0
Supervisor Dental Therapist, Clinical	1	0	1
Supervisor Dental Therapist, Public Health	1	0	1
Dental Therapist Clinical	8	8	0
Dental Therapist Public Health	17	17	0
Dental Therapist Trainee	5	4	1
<i>Sub-total Dental Therapist posts</i>	<i>39</i>	<i>33</i>	<i>6</i>
<u>Dental Assistant posts</u>			
Senior Dental Assistant, Clinical	1	1	0
Dental Assistant, Clinical	5	5	0
Dental Assistant, Public Health	1	1	0
<i>Sub-total Dental Assistant posts</i>	<i>7</i>	<i>7</i>	<i>0</i>
<u>Dental Technician posts</u>			
Charge Dental Technician	1	1	0
Senior Dental Technician	1	1	0
Dental Technician	2	1	1
<i>Sub-total Dental Technician posts</i>	<i>4</i>	<i>3</i>	<i>1</i>
Total dental cadre	54	46	8

Both the Director of Dental Services and the Charge Dental Technician will reach their 60th birthday in the year 2000. The Principal Dental Officer will reach the age of retirement in 2006 and the Senior Dental Technician in 2012. No other member of the present staff will reach retirement age before the end of the year 2015.

4.4.2 Dental services - future development

ACTIVITY: *In the following example it is assumed that the volume of dental service to be provided will expand in line with the rate of population growth. You will have to consult with the head of your health authority's dental service and other relevant decision makers as to proposed future activities of the service, and the numbers and types of posts required for future staffing.*

Enter the numbers of required posts in the "Required posts at start of year" row in your Worksheet 4.5.1 Pharmacy personnel.

Change the text in the following example as necessary.

Government policy favours the encouragement of private dentistry and provides only a limited dental service covering school children, the aged and certain disadvantaged groups in the community. No change in the range and coverage of government provision of dental care during the next fifteen years is envisaged. There is to be no increase in the number of dental officer posts over the planning period. To maintain the present level of dental therapist service the number of posts for dental therapists will increase in line with the rate of population increase.

4.4.3 Training of dental service personnel

The DOH School of Dental Science offers a three-year training program leading to the award of a Diploma in Dental Therapy. Four students, employed as Dental Therapist trainees, commenced their training in 1999 and are expected to graduate in 2002. The School can also provide training for dental technicians extending over a three-year period leading to the award of a Diploma in Dental Technology, although there have been no dental technology trainees for several years.

No pre-service or postgraduate training of dentists is available in-country. From time to time selected trainees are awarded Government Overseas Scholarships and sent to the Central Islands Dental School to undertake the five-year course leading to the award a Bachelor of Dental Science degree. One Plananian Government scholarship-holder is expected to graduate from CIDS in the year 2003 and enter DOH employment as dental officer.

4.4.5 Projection of DOH Dental Service requirements, staffing and training

ACTIVITY: *Use your own data to complete the worksheets WS4.4.1 Dental Officers, WS4.4.2 Dental Therapists and WS4.4.3 Dental Technicians. Then replace the textual commentary below. .*

Dental Officers

Staffing all four required DO posts throughout the planning period will require two students to commence the BDS course at CIDS in the years 2000, 2005 and 2011. It will also be necessary to re-employ two dental officers for limited periods upon their reaching the age of retirement. The alternative to this re-employment approach would be to import ex-patriate dentists on limited term contracts.

Dental Therapists

Increasing the number of dental therapist posts in line with population increase and filling them will require an intake of eighteen new trainees to the DOH School of Dental Science over the years covered by this plan.

Four intake groups are planned, one group in each of the years 2000(intake of 5 trainees), 2003 (intake 5), 2007 (intake 4) and 2011 (intake 4). An intake of 4 or 5 will be required in 2015 to meet staffing requirements beyond the years spanned by this plan.

Dental Technicians

To keep all four technician posts staffed throughout the planning period it will be necessary to re-employ the Charge Dental Technician for three years beyond his 60th birthday, to recruit two trainee dental technicians in the year 2000 and another trainee in the year 2009.

Dental Assistants

Dental Assistants are trained on the job. No increase in numbers is planned. Suitable people will be recruited to vacancies as they occur.

Dentistry in the private sector

In January 2000 there were five registered dentists in private practice in Planania – two Plananians and three ex-patriates. Some of these dentists have trained their own dental technicians. Under current legislation regulating dental practice dental therapists trained in the DOH School of Dental Science are not permitted to practise in the private sector. Although the Government favours expansion of dentistry in the private sector there is no program designed to assist dentists to establish private dental clinics. There are no proposals under consideration at government level for the introduction of dental insurance arrangements or for government subsidisation of private dentistry.

4.5 Pharmaceutical Service personnel - requirements, staffing and training

4.5.1 DOH Pharmaceutical Services - current situation

ACTIVITY: Change the following material to provide a description of the current staffing situation within your DOH pharmaceutical service.

There are in Planania eight fully qualified pharmacists registered or eligible for registration under current legislation. Five of these pharmacists are employed by the Department of Health, the others working in the private sector of the health care system.

The current (January 2000) health personnel establishment and staffing of the DOH pharmaceutical service are shown in the following table.

Table 4.5.1 Planania DOH - Pharmaceutical services - posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Chief Pharmacist	1	1	0
Pharmacist	4	4	0
Senior Assistant Pharmacist	2	1	1
Assistant Pharmacist	5	4	1
Assistant Pharmacist Trainee	2	2	0
Pharmacist Stores	1	1	0
Total	15	13	2

One pharmacist is 68 years of age, another will reach his 60th birthday in the year 2000 and another in 2001. The fourth pharmacist is an ex-patriate employed on a two-year (renewable) contract. The Senior Assistant Pharmacist will reach retiring age in the year 2013.

None of the Assistant Pharmacist group will reach retiring age before the end of the year 2015. One is expected to leave DOH employment in 2002 to study for a degree in pharmacy – self-funded. She is not expected to return to Planania. It is anticipated that two or three pharmacy assistants will leave DOH employment during the planning period, probably to work for pharmacists in the private sector.

4.5.2 Pharmaceutical services - future development

ACTIVITY: *The following example uses a workload related approach to future staffing requirements. Decide whether this is appropriate to your situation, and if not you will have to adopt another approach, for example the personnel:population ratio approach, or set up a service staffing standard schedule.*

When you have decided upon the approach you will use enter the numbers of required posts in the "Required posts at start of year" row in your Worksheets 4.5.1 and 4.5.2.

Change the text in the following example as necessary.

Over the past five years the number of prescriptions dispensed has increased by 5 per cent per year. It is anticipated that this rate of increase will continue and the staffing requirement will therefore increase. The Pharmacy Committee has proposed that the number of pharmacist posts be increased by one in the year 2007 and by another one in 2013. The number of Assistant Pharmacist posts will increase at the rate of 6 per cent per year.

4.5.3 Projection of pharmaceutical service requirements, staffing and training

ACTIVITY: *Complete the worksheets 4.5.1 and 4.5.2 at the end off this sub-section and enter your textual commentary below as you did in the preceding projection subsections.*

4.5.4 Training of pharmaceutical personnel

ACTIVITY: *Read through the following example entry. You may need a training schedule along the lines of this one for this sub-section and for other cadres. IF so, replace this example with a statement and schedule appropriate to your DOH training requirement.*

At present local training of pharmacist assistants is provided by way of a three-year structured program of instruction undertaken by employees within the service and leading to a DOH Assistant Pharmacist Diploma.

All other professional training of pharmacy personnel has to be undertaken out of country.

The following schedule indicates starting times and numbers of trainees to commence training out of country over the planning period. The numbers must of course be regularly reviewed and updated in the light of changing circumstances.

Table 4.5.2 Training schedule – Pharmacy personnel – Bachelor of Pharmacy and Assistant Pharmacist Diploma

Training course	Year	Number of trainees to commence training
DOH Assistant Pharmacist Diploma	2001	2
	2003	3
	2006	3
	2009	2
	2011	2
	2013	2
Bachelor of Pharmacy degree course (out-of-country)	2000	2
	2003	1
	2005	1
	2008	1
	2009	1
	2010	1

4.5.4 Private sector pharmacy services

ACTIVITY: *Relace the following text with a note regarding private sector pharmacy services in your country. If there are any, your note should include the current staffing situation and state what future health authority action in relation to staffing is planned.*

Three qualified pharmacists are registered under the relevant legislation to provide pharmacy services in the private sector. Two retail pharmacies have been established in Malolo and one in Maski. A limited range of non-prescription pharmaceutical products is offered for sale over the counter in department stores, supermarkets and trade stores. These private sector activities are conducted under DOH surveillance. Private sector pharmacists may participate in DOH continuing professional education activities.

4.6 Laboratory Service personnel - requirements, staffing and training

4.6.1 DOH Laboratory Service - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's laboratory service.

The DOH Laboratory Service is headed by the Director Laboratory Services, a medical officer holding the Post-Graduate Diploma in Clinical Pathology , University of Swotana. The current (January 2000) health personnel establishment and staffing of the DOH laboratory service are shown in the following table.

Table 4.6.1 Planania DOH Laboratory Service - posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Director Laboratory Services	1	1	0
Chief Laboratory Technologist	1	1	0
Supervisor Laboratory Technologist	6	5	1
Senior Laboratory Technologist	1	1	0
Senior Lab Technician	6	5	1
Lab Technician	7	2	5
Lab Assistant	15	14	1
Total	37	29	8

The Director Laboratory Services and a Senior Laboratory Technician are already more than 60 years of age. Three other qualified personnel reach their 60th birthday before the end of the year 2015.

4.6.2 Laboratory Service - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's laboratory services.

When you have decided upon the appropriate approach to future staffing enter the numbers of required posts in the "Required posts at start of year" row in your Worksheets 4.6.1 and 4.6.2.

There have been increases in the range of tests offered, in the number of specimens examined and in the average number of tests per patient over recent years. However the efficiency and productivity of the service has been improved by the introduction of automated methods and the greater use of test kits. The Medical Services Committee considers that in the past the service has been generously staffed, and further gains in efficiency are possible.

With future increasing numbers of doctors in both the government and non-government health services further increases in the demand for laboratory services are anticipated. A number of changes in staff rostering arrangements and in the organisation of specimen collection, processing, and the reporting of test results are expected to lead to further improvements in service efficiency.

The Medical Service Committee has proposed that over the planning period to the end of the year 2015 there will be no increase in the number of laboratory technologist posts ie remain at eight posts (nine including the post of Director Laboratory Services). When all currently established laboratory technician posts (13) have been filled, the number of required posts will be increased at an average rate of five per cent per year. The number of Laboratory Assistant posts will be increased at the rate of three per cent per year.

4.6.3 Projection of laboratory service requirements, staffing and training

ACTIVITY: Complete the worksheets 4.6.1,4.6.2 and 4.6.3. Depending on your health authority's arrangements for training laboratory staff you may need more or less worksheets. Note that if personnel do not follow an external formal pre-service training program (eg Laboratory Assistants in Planania), there is no "Training" section on the worksheet, and the main source of additional staff is usually through "direct recruitment".

Enter your textual commentary to replace the example below.

Worksheet WS 4.6.1 shows that with the return to Planania of trainees on completion of their four-year Bachelor of Laboratory Science course at the University of Swotana, re-employment of staff beyond retiring age, and a spaced intake of trainees in future years the staffing target for the laboratory technologist cadre can be achieved.

Worksheet WS 4.6.2 indicates the need to secure 1-2 Ministry of Education scholarships almost every year in order to send students out of country to undertake the Laboratory Technician's Diploma course at the Swotana Institute of Technology.

A suitable person, generally a high-school leaver, will be recruited to undertake on-the-job training as a Laboratory Assistant as and when a post becomes vacant (Worksheet WS 4.6.3).

4.6.4 Training of laboratory personnel

ACTIVITY: Read through the following example entry. Replace this example with text and a training intake schedule appropriate to your health authority's laboratory service.

At present local training of laboratory assistants is provided by way of a two-year structured program of instruction undertaken by employees within the service and leading to a DOH Laboratory Assistant's Certificate.

Selected school leavers are awarded Ministry of Education Out-of-Country Scholarships to undertake three-year Diploma in Laboratory Science course at the Institute of Technology in Swotana. Scholarship holders are bound to return to Planania to work for DOH for three years upon graduation. Graduates are normally appointed to Laboratory Technician posts.

Applicants with qualifications acceptable for admission to the University of Swotana Bachelor of Laboratory Science course may be awarded Ministry of Education Out-of-Country Scholarships to pursue the four-year BLabSc course there. Scholarship holders are bound to return to Planania to work for DOH for four years on graduation. Graduates are normally appointed to Laboratory technologist posts.

The following schedule indicates starting times and numbers of trainees to commence training over the planning period to the end of 2015. The numbers must of course be regularly reviewed and updated in the light of changing circumstances.

Table 4.6.2 Training schedule – Medical laboratory personnel

Year of entry to training	Number of entrants		
	DOH Certificate	DipLabSc	BLabSc
2000	If post/s become/s vacant	1	0
2001	ditto	0	1
2002	ditto	1	2
2003	ditto	1	0
2004	ditto	0	1
2005	ditto	2	0
2006	ditto	1	0
2007	ditto	1	0
2008	ditto	1	2
2009	ditto	1	0
2010	ditto	1	0
2011	ditto	1	0
2012	ditto	2	0
2013	ditto	0	0
2014	ditto	2	0
2015	ditto	2	0

4.6.5 Private sector laboratory services

ACTIVITY: Relace the following text with a note regarding private sector laboratory services in your country. If there are any, your note should include the current staffing situation and state what future health authority action in relation to staffing is planned.

There are at present (January 2000) no private sector laboratory services in Planania and DOH is not aware of any discussions or proposals regarding the development of such services.

4.7 Medical Imaging Service personnel - requirements, staffing and training

4.7.1 DOH Medical Imaging Service - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's medical imaging service.

The DOH Medical Imaging Service (MIS) is headed by the Director Radiology and Ultrasonography, a medical officer who holds the post-graduate Diploma in Diagnostic Radiology, University of Swotana. The current (January 2000) health personnel establishment and staffing of the service are shown in the following table.

Table 4.7.1 Planania DOH Medical Imaging Service - posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Director Radiology and Ultrasonography	1	1	0
Charge Radiographer	1	1	0
Senior Radiographer	5	5	0
Radiographer	4	4	0
Trainee Radiographer	4	3	1
X-ray Assistant	5	1	4
Total	20	15	5

The Director Radiology and Ultrasonography is over 60 years of age. One Radiographer will reach the retirement age of 60 years in the year 2010.

Trainee Radiographers are undertaking a three-year structured training course leading to the award of the DOH Diploma in Medical Imaging. On completing the training course, graduates are normally promoted to fill Radiographer posts.

X-ray Assistants are usually recruited from among high school-leavers as vacancies occur. They receive on-the-job training. If suitable, an X-ray assistant may be offered a post as a trainee (ie a Trainee Radiographer post) when a vacancy occurs.

4.7.2 Medical Imaging Service - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's medical imaging services.

When you have decided upon the appropriate approach to future staffing enter the numbers of required posts in the "Required posts at start of year" row in your Worksheet 4.7.1.

The introduction of ultrasonography equipment five years ago led to a considerable increase in the workload of the MIS and the creation of three additional posts within the MIS. There has however been little change in the workload over the past two years. Proposed increases in the numbers of doctors in both the government and non-government health services will further increase the demand for medical imaging services.

The Medical Service Committee has proposed that over the planning period to the end of the year 2015 the number of posts for qualified radiographers should be increased at the rate of 3 per cent per year. The intake of Trainee Radiographers will be adjusted to ensure that the posts for trained radiographers will be filled.

No change in the establishment (5 posts) for X-ray Assistants is proposed at present but the situation will be kept under review and adjusted if necessary.

4.7.3 Projection of Medical Imaging Service requirements, staffing and training

ACTIVITY: Complete the worksheets 4.7.1 and 4.7.2 and enter your textual commentary to replace the example below.

Worksheet 4.7.1 shows the spaced intake of trainee radiographers required in future years in order to reach the staffing targets for this service.

4.7.4 Training of medical imaging service personnel

ACTIVITY: Read through the following example entry. Replace this example with text and training intake schedule appropriate to your health authority's medical imaging service.

At present local training of radiographers is provided by way of a three-year structured program of instruction undertaken by employees within the service and leading to a DOH Diploma in Radiography.

Selected radiographers may be awarded Ministry of Education Scholarships to undertake the two-year conversion course for diplomates at the University for Swotana, leading to the degree of Bachelor of Medical Imaging. DOH continues to pay the salaries of these staff members during their two-year training period out-of-country.

The following schedule indicates starting times and numbers of trainees to commence training over the planning period to the end of 2015. The numbers must of course be regularly reviewed and updated in the light of changing circumstances.

Table 4.7.3 Training schedule – Medical imaging personnel

Training course	Year	Number of trainees to commence training
DOH Diploma in Radiography (3-year course)	2003	3
	2007	2
	2009	3
	2011	1
Bachelor of Medical Imaging (2-year conversion course, out-of-country)	2002	1
	2006	1
	2010	1

4.7.5 Private sector medical imaging services

There are at present (January 2000) no private sector medical imaging services in Planania and DOH is not aware of any discussions or proposals regarding the development of such services.

4.8 Environmental Health Service personnel - requirements, staffing and training

4.8.1 DOH Environmental Health Service - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's environmental health service.

The DOH Environmental Health Service (EHS) is headed by the Chief Environmental Health Officer who holds a Bachelor of Science (Environmental Health) degree from the University of Swotana. The current (January 2000) health personnel establishment and staffing of the service are shown in the following table.

Table 4.8.1 Planania DOH Environmental Health Service - posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Chief Environmental Health Officer	1	1	0
Environmental Health Officer	4	4	0
Environmental Health Assistant	18	18	0
Total	23	23	0

One Environmental Health Officer (EHO) will reach his 60th birthday in the year 2007, and the Chief Environmental Health Officer will reach that age in 2016.

Environmental Health Assistants (EHAs) undertake structured training while in employment. This training extends over two years and leads to the award of the DOH Assistant Health Inspector's Certificate.

Public health laboratory services are provided at the National Hospital Laboratory.

4.8.2 Environmental Health Service - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's environmental health services.

When you have decided upon the appropriate approach to future staffing enter the numbers of required posts in the "Required posts at start of year" row in your Worksheet 4.8.1.

The Community Health Services Committee has proposed an expansion of the Department's Environmental Health Service to strengthen staffing at district level. This will require the creation of two additional posts for EHOs and three additional posts for EHAs. Public health legislation, particularly that relating to food standards, meat inspection, housing standards and waste disposal is currently under review. It appears probable that an additional two EHO and 4 EHA posts will be required to implement the new legislation. These increases in the EHS staff establishment are to be phased in over the next ten years.

4.8.3 Projection of Environmental Health Service requirements, staffing and training

ACTIVITY: Complete the worksheets 4.8.1 and 4.8.2 and enter your textual commentary to replace the example below.

Worksheets WS 4.8.1 and WS 4.8.2 show the timing of staff intakes in order to meet the required staffing of EHO and EHA posts respectively.

4.8.4 Training of environmental health service personnel

ACTIVITY: Read through the following example entry. Replace this example with text and training intake schedule appropriate to your health authority's environmental health service.

As noted above, EHA's undertake two years of structured training while in DOH employment. The DOH Assistant Health Inspector's Certificate is awarded on completion of that training.

Appropriately qualified high-school graduates may be awarded Ministry of Education Scholarships to undertake the three-year BSc (Environmental Health) course at the University for Swotana. Scholarship holders are bound to complete at least three years in DOH employment upon graduation from that course. None of the presently employed EHAs has the educational requisites to enter the BSc course at Swotana University.

The following schedule indicates starting times and numbers of trainees to commence training over the planning period to the end of 2015. The numbers must be regularly reviewed and updated in the light of changing circumstances.

Table 4.8.3 Training schedule – Environmental health personnel

Training course	Year	Number of trainees to commence training
DOH Assistant Health Inspector's Certificate (2-year course)	2003	3
	2007	2
	2009	3
	2011	1
Bachelor of Science (Environmental Health) (3-year course, out-of-country)	2002	1
	2006	1
	2010	1

4.8.5 Private sector environmental health services

The Government of Planania is responsible for the regulation and provision of environmental health services throughout the country. There are no private sector agencies operating in this field.

30 January 2000

4.9 Physiotherapy Service personnel - requirements, staffing and training

4.9.1 DOH Physiotherapy Service - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's Physiotherapy service.

The DOH Physiotherapy Service is headed by the Charge Physiotherapist who holds a Bachelor of Science (Physiotherapy) degree from the University of Swotana. The current (January 2000) health personnel establishment and staffing of the service are shown in the following table.

Table 4.9.1 Planania DOH Physiotherapy Service - posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Charge Physiotherapist	1	1	0
Physiotherapist	1	0	1
Prosthetics Technician	2	2	0
Physiotherapist Aide	1	1	0
Total	5	4	1

The Charge Physiotherapist will reach her 60th birthday in the year 2003. One Prosthetic Technician will reach his 60th birthday in the year 2015.

Currently no Plananian students are undertaking pre-service training in physiotherapy.

Physiotherapy Aides are trained on the job.

4.9.2 Physiotherapy Service - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's Physiotherapy Service.

When you have decided upon the appropriate approach to future staffing enter the numbers of required posts in the "Required posts at start of year" row in your Worksheet 4.9.1.

The Medical Services Committee has proposed an expansion of the Department's Physiotherapy Service over the years covered by this workforce plan. This will require the creation of two additional posts for physiotherapists (one in 2006 and one in 2010). A post for a physiotherapist aide will be created to support each of the additional physiotherapist posts. The number of prosthetic technician posts is to be increased with the creation of an additional post in 2007.

4.9.3 Projection of Physiotherapy Service requirements, staffing and training

ACTIVITY: Complete the worksheets 4.9.1 and 4.9.2 and enter your textual commentary to replace the example below.

Worksheets WS 4.9.1 and WS 4.9.2 show the timing of staff intakes in order to meet the required staffing of physiotherapist and prosthetic technician posts respectively.

In order to fill the vacant physiotherapist post pending the arrival in 2003 of a Plananian graduate from pre-service training at the University of Swotana, an ex-patriate will be recruited to commence a three-year contract at the beginning of 2001.

On reaching retirement age in the year 2003, the Charge Physiotherapist will be re-employed for a further five years.

4.9.4 Training of Physiotherapy service personnel

ACTIVITY: Read through the following example entry. Replace this example with text and training intake schedule appropriate to your health authority's Physiotherapy service.

The Health Sciences School of the University of Swotana offers a three-year BSc(Physiotherapy) course. This school also offers a three-year BSc(Prosthetics and Orthotics) course for the training of prosthetic/orthotic technicians.

Appropriately qualified Plananian high-school graduates may be awarded Ministry of Education Out-of-Country Scholarships to undertake these courses. Scholarship holders are bound to complete at least three years in DOH employment upon graduation.

The following schedule indicates starting times and numbers of trainees to commence training over the planning period to the end of 2015. The numbers must be regularly reviewed and updated in the light of changing circumstances.

Table 4.9.2 Training schedule – Physiotherapy Service personnel

Training course	Year	Number of trainees to commence training
Bachelor of Science (Physiotherapy) (3-year course, out-of-country)	2000	1
	2003	1
	2005	1
	2007	1
Bachelor of Science (Prosthetics and Orthotics) (3-year course, out-of-country)	2004	1
	2012	1

As noted above, Physiotherapy Aides are trained on the job. Posts are filled as they become vacant.

4.9.5 Private sector physiotherapy services

There are no private sector services operating in this field.

4.10 Nutrition Service personnel - requirements, staffing and training

4.10.1 DOH Nutrition Service - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's nutrition service.

The DOH Nutrition Service is headed by the Chief Dietitian who holds a Bachelor of Science (Dietetics and Nutrition) degree from the University of Swotana. The current (January 2000) health personnel establishment and staffing of the service are shown in the following table.

Table 4.10.1 Planania DOH Nutrition Service - posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Chief Dietitian	1	1	0
Senior Dietitian	1	1	0
Nutritionist	1	1	0
Nutrition Assistant	1	1	0
Community Health Worker	2	2	0
Total	6	6	0

The Chief Dietitian will reach her 60th birthday in the year 2014. No other member of staff will reach retiring age during the period covered by this workforce plan.

Currently no Plananian students are undertaking pre-service training in Dietetics and Nutrition.

Nutrition Assistants and Community Health Workers are trained on the job.

4.10.2 Nutrition Service - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's Nutrition Service.

When you have decided upon the appropriate approach to future staffing enter the numbers of required posts in the "Required posts at start of year" row in your Worksheet 4.10.1.

The Medical Services Committee has proposed an expansion of the Department's Nutrition Service over the years covered by this workforce plan. This will require the creation of two additional posts for nutritionists (one in 2007 and one in 2014). One additional post for a Nutrition Assistant and two for Community Health Workers (Nutrition) will be created when each of the new nutritionist posts is filled.

4.10.3 Projection of Nutrition Service requirements, staffing and training

ACTIVITY: Complete the worksheet 4.10.1 and enter your textual commentary to replace the example below.

Worksheet WS 4.10.1 shows the timing of staff intakes in order to meet the required staffing of nutritionist posts.

4.10.4 Training of Nutrition Service personnel

ACTIVITY: Read through the following example entry. Replace this example with text and training intake schedule appropriate to your health authority's Nutrition Service.

The Health Sciences School of the University of Swotana offers a three-year BSc(Dietetics and Nutrition) course.

Appropriately qualified Plananian high-school graduates may be awarded Ministry of Education Out-of-Country Scholarships to undertake this course. Scholarship holders are bound to complete at least three years in DOH employment upon graduation from the course.

The following schedule indicates starting times and numbers of trainees to commence training over the planning period to the end of 2015. The numbers must be regularly reviewed and updated in the light of changing circumstances.

Table 4.10.2 Training schedule – Nutrition Service personnel

Training course	Year	Number of trainees to commence training
Bachelor of Science (Dietetics and Nutrition) (3-year course, out-of-country)	2004	1
	2010	1

As noted above, Nutrition Assistants and Community Health Workers are trained on the job.

4.10.5 Private sector nutrition services

There are no private sector services operating in this field.

4.11 Health Education and Promotion Service personnel - requirements, staffing and training

4.11.1 DOH Health Education and Promotion Service - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's Health Education and Promotion Service.

The DOH Health Education and Promotion Service is headed by the Chief Health Educator who holds a Bachelor of Science (Health Education) degree from the University of Swotana. The current (January 2000) health personnel establishment and staffing of the service are shown in the following table.

Table 4.11.1 Planania DOH Health Education and Promotion Service - posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Chief Health Educator	1	1	0
Senior Health Educator	1	1	0
Health Educator	4	3	1
Assistant Health Educator	4	2	2
Graphic Artist	1	1	0
Total	11	8	3

No member of staff will reach retiring age during the period covered by this workforce plan. The Chief Health Educator will reach her 60th birthday in the year 2016.

Currently one Plananian student is undertaking pre-service training in health education/health promotion at the University of Swotana and is expected to return to take up a Health Educator post in 2001.

Assistant Health Educators are trained on the job.

4.11.2 Health Education and Promotion Service - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's Health Education and Promotion Service.

When you have decided upon the appropriate approach to future staffing enter the numbers of required posts in the "Required posts at start of year" row in your Worksheet 4.11.1.

The Community Health Services Committee has proposed that an outside consultant be employed to undertake a thorough review of the activities, achievements and staffing of the service and to formulate recommendations as to its future activities and staffing. It is expected that this review will commence, and be completed in the year 2001. In the meantime a provisional projection of health educator staffing availability and training requirements will be made assuming no change of the number of posts.

4.11.3 Projection of Health Education and Promotion Service requirements, staffing and training

ACTIVITY: Complete the worksheet 4.11.1 and enter your textual commentary to replace the example below.

Worksheet WS 4.11.1 shows the provisional timing of staff intakes in order to meet the required staffing of health educator posts.

4.11.4 Training of Health Education and Promotion Service personnel

ACTIVITY: Read through the following example entry. Replace this example with text and training intake schedule appropriate to your health authority's Health Education and Promotion Service.

The Health Sciences School of the University of Swotana offers a three-year BSc(Health Promotion) course.

Appropriately qualified Plananian high-school graduates may be awarded Ministry of Education Out-of-Country Scholarships to undertake this course. Scholarship holders are bound to complete at least three years in DOH employment upon graduation from the course.

The following schedule indicates provisional starting times and numbers of trainees to commence training over the planning period to the end of 2015. The numbers must be regularly reviewed and updated in the light of changing circumstances.

Table 4.11.2 Training schedule – Health Educators (provisional)

Training course	Year	Number of trainees to commence training
Bachelor of Science (Health Promotion) (3-year course, out-of-country)	2011	1

As noted above, Assistant Health Educators are trained on the job. Posts will be filled through normal recruitment procedures when they become vacant.

4.11.5 Private sector Health Education and Promotion Services

There are no private sector services operating in this field.

4.12 Medical Records Service personnel - requirements, staffing and training

4.12.1 DOH Medical Records Service - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's Medical Records Service.

The DOH Medical Records Service is headed by the Chief Medical Records Officer (CMRO) who holds a Bachelor of Health Science (Health Information Technology) degree from the University of Swotana. The current (January 2000) health personnel establishment and staffing of the service are shown in the following table.

Table 4.12.1 Planania DOH Medical Records Service - posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Chief Medical Records Officer	1	1	0
Medical Records Supervisor	1	1	0
Medical Records Officer	2	2	0
Medical Records Clerk	21	19	2
Total	25	23	2

Medical records officers holding BHSc(Health Information Technology) or Diploma in Medical Records Administration qualifications fill the four senior posts - CMRO, Medical Records Supervisor and two Medical Records Officers.

Medical Records Clerks are recruited through the general recruitment procedures of the Public Service and are trained on the job.

No member of staff will reach retiring age during the period covered by this workforce plan.

Currently no Plananian student is undertaking pre-service training in medical records technology.

4.12.2 Medical Records Service - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's Medical Records Service.

When you have decided upon the appropriate approach to future staffing enter the numbers of required posts in the "Required posts at start of year" row in your Worksheet 4.12.1.

The Medical Services Committee has proposed that there be no change in the number of posts for Medical Record Clerks during the life of this workforce plan. One post for a Medical Records Officer is to be created in 2008 and another in 2014.

4.12.3 Projection of Medical Records Service requirements, staffing and training

ACTIVITY: Complete the worksheet 4.12.1 and enter your textual commentary to replace the example below.

Worksheet WS 4.12.1 shows the timing of staff intakes in order to meet the required staffing of qualified medical records personnel.

When posts for Medical Records Clerks become vacant they will be filled through the normal Public Service recruitment process, and recruits trained on the job.

4.12.4 Training of Medical Records Service personnel

ACTIVITY: Read through the following example entry. Replace this example with text and training intake schedule appropriate to your health authority's Medical Records Service.

The Health Sciences School of the University of Swotana offers a three-year BSc(Health Information Technology) course.

Appropriately qualified Plananian high-school graduates may be awarded Ministry of Education Out-of-Country Scholarships to undertake this course. Scholarship holders are bound to complete at least three years in DOH employment upon graduation from the course.

The following provisional schedule indicates starting times and numbers of trainees to commence pre-service training over the planning period to the end of 2015. The numbers must be regularly reviewed and updated in the light of changing circumstances.

Table 4.12.2 Training schedule – Medical Records Officers

Training course	Year	Number of trainees to commence training
Bachelor of Health Science (Health Information Technology) (3-year course, out-of-country)	2005	1
	2011	1

As noted above, Assistant Health Educators are trained on the job. Posts will be filled through normal recruitment procedures when they become vacant.

4.12.5 Private sector medical records services

There are no private sector services operating in this field.

4.13 Bio-medical Engineering Service personnel - requirements, staffing and training

4.13.1 DOH Bio-medical Engineering Service - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's Bio-medical Engineering Service.

The DOH Bio-medical Engineering Service is headed by the Charge Bio-medical Technician who holds a Bio-medical Technicians Certificate from the Killawarra Technical Institute. The current (January 2000) health personnel establishment and staffing of the service are shown in the following table.

Table 4.13.1 Planania DOH Bio-medical Engineering Service - posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Charge Bio-medical Technician	1	1	0
Senior Bio-medical Technician	1	0	1
Bio-medical Technician	2	2	0
Total	4	3	1

No member of staff will reach retiring age during the period covered by this workforce plan.

There is a rather high attrition rate among this group of employees. One resigned from the service in 1996 and another in 1999.

No training in bio-engineering technology is available in Planania and currently no Plananian student is undertaking training in bio-medical engineering elsewhere.

4.13.2 Bio-medical Engineering Service - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's Bio-medical Engineering Service.

When you have decided upon the appropriate approach to future staffing enter the numbers of required posts in the "Required posts at start of year" row in your Worksheet 4.13.1.

Visiting technicians from a number of foreign firms supplying equipment to DOH carry out periodic inspection and maintenance work on equipment they have supplied.

The activities of the DOH bio-medical engineering service now focus on preventive maintenance. The limited and increasingly restricted availability of replacement parts for older equipment demands a replacement rather than repair approach when equipment becomes faulty. The need to increase the number of technician posts will be reviewed regularly, but at present no necessity to increase the number beyond four is seen.

A 30-year old Swotanian bio-medical technician married to a Plananian nurse has been recruited and will take up the vacant DOH post in 2001.

In view of the difficulty in recruiting trained technicians, and the relatively high attrition rate among this group of employees, DOH will commence in 2001 a bio-medical technician training program with the training course extending over three years. Entrants would normally be selected from among high school leavers. Graduates from the course will be awarded the DOH Bio-medical Technician’s Certificate and appointed to a Bio-medical Technician post within the department.

4.13.3 Projection of Bio-medical Engineering Service requirements, staffing and training

ACTIVITY: Complete the worksheet 4.13.1 and enter your textual commentary to replace the example below.

Worksheet WS 4.13.1 shows the provisional timing of staff and trainee intakes in order to meet the required staffing of bio-medical technician posts.

4.13.4 Training of Bio-medical Engineering Service personnel

ACTIVITY: Read through the following example entry. Replace this example with text and training intake schedule appropriate to your health authority’s Bio-medical Engineering Service.

As noted above DOH is to commence in 2001 an in-house training program for the production of bio-medical technicians.

The following schedule indicates provisional starting times and numbers of trainees to commence training over the planning period to the end of 2015. The numbers must be regularly reviewed and updated in the light of changing circumstances.

Table 4.13.2 Training schedule – Bio-medical Technicians

Training course	Year	Number of trainees to commence training
DOH Bio-medical Technicians Certificate (3-year course)	2001	1
	2004	1
	2008	1
	2011	1
	2014	1

4.13.5 Private sector bio-medical engineering services

There are no private sector services operating in this field.

4.14 Health Service Management group - requirements, staffing and training

Note: Many of the posts included sub-sections 4.2 to 4.13 do carry managerial responsibilities. Their occupants are required to have specific professional qualifications and expertise in one or other health professional fields, but they must also possess managerial competence. Posts of this type include, for example, Director of Medical Services, Director of Nursing, Director of Dental Services.

In this sub-section we deal with a small group of posts that are predominantly managerial and call for personnel with specific health service management training, irrespective of their previous professional background – which may have been in some field other than health.

4.14.1 DOH Health Service Management group - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's Health Service Management group.

The majority of posts within the DOH top-level management cadre call for personnel with specific professional training in some field of a health care delivery such as medicine or nursing. These posts and staff occupying them are included in the relevant sub-sections above eg Director General of Health, Directors of Medical Services and Community Health Services in included in ss4.2 Medical Officers. These personnel may have post-graduate qualifications in medical administration, nursing administration, public health etc.

A small number of senior posts call for personnel with specific formal training in health services management, irrespective of their previous formal training. These posts are listed in Table 4.14.1. The incumbents of these posts may have been drawn from among, say, the medical or nursing professional groups, or may have been trained in management sciences, economics, finance or other fields.

The posts included within the DOH health management cadre and the current staffing situation (January 2000) are shown in the following table.

Table 4.14.1 Planania DOH Health Service Management cadre – selected posts and personnel, January 2000

Designation of post	Number of posts	Number of staff	Vacant posts
Director of Administration	1	1	0
Director Policy and Planning	1	1	0
Health Resource Planning and Policy Officer	1	1	0
Senior Health Planning Officer	1	1	0
Senior Health Research Officer	1	1	0
Total	5	5	0

The Director Policy and Planning passed his 60th birthday in 1998 but has not retired. He will retire in 2000 and then be re-employed until the end of the year 2003. The Chief Planning Officer will reach the age of 60 in the year 2004, and the Director of Administration in 2013. Both of these officers have expressed their intention to leave the service on reaching the age of 60 and not to seek DOH re-employment.

All staff in the posts listed in the above table have completed post-graduate training in health services management and hold masters degree in either health service management (MHSM), health planning (MHP) or public health (MPH).

4.14.2 Health Service Management group - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's Health Service Management group.

When you have decided upon the appropriate approach to future staffing enter the numbers of required posts in the "Required posts at start of year" row in your Worksheet 4.14.1.

No changes in the structure of this group are presently under consideration. Job descriptions for the posts listed in Table 4.14.1 are to be amended to include possession of a relevant degree at masters or higher level as an essential requisite for appointment.

4.14.3 Projection of Health Service Management group requirements, staffing and training

ACTIVITY: Complete the worksheet 4.14.1 and enter your textual commentary to replace the example below.

Worksheet WS 4.14.1 shows the timing of staff and trainee intakes in order to meet the required staffing of posts.

4.14.4 Training of Health Service Management group personnel

ACTIVITY: Read through the following example entry. Replace this example with text and training intake schedule appropriate to your health authority's Health Service Management group.

No formal post-graduate training programs in the health service management field are conducted in Planania. Selected public servants holding relevant qualifications (usually at least a bachelors degree) may be awarded Public Service post-graduate fellowships to undertake training out of country. Relevant post-graduate courses are generally of 1 to 2 years duration. Fellows are selected from among permanent Public Service officers (not necessarily officers employed by within DOH). Their salaries are paid by the nominating department (in this case DOH) throughout the training period and all other costs are met from the Public Service Post-graduate Fellowships Fund.

Fellowships for personnel who are to occupy posts in the senior management group described above would be for post-graduate study leading to the award of such degrees as Master of Health Services Management, Master of Health Planning or Master of Public Health (with a major concentration on service management related subjects).

The following schedule indicates provisional starting times and numbers of fellows to commence training over the planning period to the end of 2015. The numbers must be regularly reviewed and updated in the light of changing circumstances.

Table 4.14.2 Training schedule – Health service management professionals

Training course	Year	Number of fellows to commence training
Post graduate health service management degree eg MHSM, MHP, MPH (1-2 years out-of-country)	2001	1
	2002	1
	2011	1

ACTIVITY: Before going on to the next part of Section 4, look back over the groups of health personnel covered in sub-sections 4.2 to 4.14 to see if you have missed out any health professional categories in your health care system – or any categories which will be required in the future. Add any required sub-sections. For example, if your health authority has decided to set up an occupational therapy service in three years time you will have to have a sub-section and worksheet specifying the posts required, staffing, training and costs relating to this service.

When you are sure you have covered all the health personnel categories, go on to the following sub-section that is concerned with the “other personnel” component of the workforce.

4.15 Other DOH personnel - requirements, staffing and training

NOTE: The sub-sections 4.2 to 4.14 are concerned with posts to be staffed by personnel whose training relates specifically to the delivery of health care. But a significant part of the staff employed within a health service do not possess health care related qualifications, and their professional or vocational training is generally not within the health care field.

Some health workforce plans do not include any detailed consideration regarding requirements and staffing for this "other personnel" component of the health service workforce. You will have to decide how much detail you plan is to include. You may decide that each of the major occupational groups within this component will be given detailed treatment similar to that in sub-sections 4.2 to 4.14 above. In that case you may decide to have a separate section of your plan devoted to this component. The format for that new section and its sub-sections and worksheets could follow along the lines of Section 4.

This workbook presents a brief description of the "non-health" component and a note regarding its development.

4.15.1 Other DOH posts and personnel - current situation, January 2000

ACTIVITY: Change the following text and table to provide a description of the current staffing situation within your health authority's Health Service Management cadre.

Table 4.15.1 covers all the posts not included in the preceding sub-sections and shows the current (January 2000) staffing situation regarding these posts. Staff occupying established posts are employed as Public Servants with the rights and obligations set out in the legislation relating to public service employment. Those occupying unestablished posts are employed on a casual basis at daily rates of pay. Some of these groups include a range of occupations. For example the Administration and Clerical group includes, among others, administrative officers, personnel officers, clerks, keyboard operators and receptionists. The Engineering and Maintenance group includes a wide variety of tradesmen and plant operators. Unestablished posts are generally for unskilled workers.

Table 4.15.1 Other DOH posts and personnel, January 2000

Occupational group	Number of posts	Number of staff	Vacant posts
	<i>Established posts</i>		
Administrative and clerical	85	66	19

Domestic and portage	26	23	3
Drivers	10	8	2
Engineering and maintenance	20	18	2
Finance and accounting	26	19	7
Graphics artists	1	1	0
Kitchen and catering	15	14	1
Laundry and linen service	16	11	5
Ministerial aides	2	1	1
Security	9	8	1
<i>Sub-total</i>	<i>210</i>	<i>169</i>	<i>41</i>
	<i>Unestablished posts</i>		
<i>Sub-total</i>	<i>114</i>	<i>114</i>	<i>0</i>
Total	323	283	41

One in eight of the established posts is currently vacant. One in three of the present staff in established posts will reach their 60th birthday by the end of the year 2015.

4.15.2 Other DOH posts and personnel - future development

ACTIVITY: Replace the following material with a brief statement regarding the proposed future development of your health authority's "Other DOH posts and personnel".

When you have decided upon the appropriate approach to future staffing of this workforce component create and adapt worksheets if necessary and enter the numbers of required posts on the sheets you have prepared.

DOH and the Public Service Board have agreed that efforts will be made to fill all vacant established posts by the end of the year 2007. There are to be no increases in the total number of established posts for "other" personnel before the end of the year 2007.

It has been proposed that, subject to further review, the number of established posts to be created and filled in the remaining years of the life of this workforce plan (2008 to end of 2015) will be in line with the projected growth in population numbers (current official estimate is 1.5% increase in population per year). This proposal will be the basis for the provisional projection of the number of posts required for this component of the DOH workforce.

However, there are some indications that the number of unestablished posts could be reduced with no deterioration in service efficiency, effectiveness and safety. In 2001 the situation regarding unestablished posts is to be reviewed. It is possible that some

personnel currently occupying unestablished posts could be moved into vacant established posts.

Irrespective of the total number of posts to be made available, is probable that as the result of continuing review of staffing requirements there will be some adjustments in the distribution of established posts between occupational categories as time goes by.

4.15.3 Projection of “Other” DOH posts and personnel requirements, staffing and training

ACTIVITY: Complete any worksheets you have created for this part of your plan. Then enter your textual commentary to replace the example below.

Worksheet WS 4.15.1 shows the total numbers of established posts and annual staffing targets year by year throughout the planning period.

4.15.4 Training of Other DOH personnel

ACTIVITY: Replace this example with text appropriate to your health authority's workforce plan.

Personnel recruited into this component of the DOH workforce are expected to have the necessary qualifications in terms of formal training and/or work experience as prescribed in their job description. Recruits may be drawn from other areas of the Public Service or elsewhere.

DOH provides or arranges for appropriate induction, on-the-job and continuing in-service training for personnel in this component of the DOH workforce.

DOH is not responsible for the provision, arrangement or funding of pre-service training or other formal professional or vocational training of personnel within this component of the DOH workforce.

4.16 Summary of staffing requirements and staff availability

Table 4.16.1 presents in summary form the changes in the numbers of required staff (ie posts) and staff in post over the years from the beginning of year 200 to the end of 2015. The worksheet WS 4.16.1 shows year-by-year the changes in numbers of staff and posts for the different categories of staff.

The table shows the increase in the number of staff employed in established posts rising from 681 at the beginning of the planning period to 1099 at the end, an overall increase of

61 per cent. The rate of increase is higher in the earlier years of the period as posts vacant at the beginning of 2000 are filled.

Because of the large number of vacant posts at the beginning of the planning period, the overall increase in the number of posts (24 per cent) is considerably lower than the increase in staff numbers.

There is no change in the number of unestablished posts or unestablished staff throughout the planning period.

In the later years of the planning period virtually all posts are filled.

Taking all staff and all posts into account, the DOH staff increases in numbers by 53 per cent over the planning period, and the number of posts by 24 per cent.

Table 4.16.1 is on the following page.

Table 4.16.1 Planania DOH -Summary of required staffing and staff available, 2000-2015

DOH established health personnel posts and staff	<i>Start of 2000</i>	<i>End of 2005</i>	<i>End of 2010</i>	<i>End of 2015</i>
Total health personnel in post	512	655	772	866
Required health personnel (ie posts)	676	727	799	869

Other DOH established posts and staff	<i>Start of 2000</i>	<i>End of 2005</i>	<i>End of 2010</i>	<i>End of 2015</i>
Total other staff in post	169	195	216	233
Required other staff (ie posts)	210	210	216	233

	<i>Start of 2000</i>	<i>End of 2005</i>	<i>End of 2010</i>	<i>End of 2015</i>
Total DOH personnel in established posts	681	850	988	1099
<i>Increase on previous total %</i>	-	25%	16%	11%
<i>Increase on 2000 total %</i>	-	25%	45%	61%
Total DOH established posts	886	937	1,015	1,102
<i>Increase on previous total %</i>	-	6%	8%	9%
<i>Increase on 2000 total %</i>	-	6%	15%	24%
<i>Established posts vacant (%)</i>	23%	9%	3%	0%

Total DOH personnel in unestablished posts				
	114	114	114	114
Total DOH unestablished posts	114	114	114	114

GRAND TOTAL DOH STAFF				
	795	964	1,102	1,213
<i>Increase on previous total %</i>	-	21%	14%	10%
<i>Increase on 2000 total %</i>	-	21%	39%	53%
GRAND TOTAL DOH POSTS	1,000	1,051	1,129	1,216
<i>Increase on previous total %</i>	-	5%	7%	8%
<i>Increase on 2000 total %</i>	-	5%	13%	22%
<i>Grand total vacant posts (%)</i>	18%	8%	2%	0%
	<i>Start of 2000</i>	<i>End of 2005</i>	<i>End of 2010</i>	<i>End of 2015</i>

4.17 Summary of training intakes

Worksheet WS 4.17.1 on the following page shows year by year the number of trainees to enter training programs in order to fill existing vacant posts or posts which will become available in future years. This training schedule is concerned with basic and pre-service training. (The only exception is a small number of places for managerial staff to obtain masters degrees in health service management. All other provision for formal post-basic and post-graduate training is covered in Section 6 of this plan.)

In this table the entrants to DOH training programs become employees within DOH and are paid from DOH funds. The entrants to training programs out of country are holders of scholarships or fellowships awarded and funded by the Department of Education.

WS4.17.1 is on the following page.

A reminder: When you have completed all the subsections in this part of your Plan go back through them to make sure you have deleted all the activity boxes and their contents and anything else that should not appear in the printout of your draft plan.

SECTION 5

WORKFORCE AND TRAINING COSTS

ACTIVITY: Read through the whole of this section.

Then enter on each of the worksheets WS4.2.1 to 4.15.1 the current average annual salary per employee for the category of personnel on that worksheet. If trainees are paid a salary or training allowance by your health authority enter the average annual cost per trainee. The annual totals will appear automatically across the spreadsheet year by year.

The spreadsheets are linked to Summary Sheets WS5.1 Staff Salaries Summary, WS5.2 Trainee Salary Costs and WS5.3 Total DOH Salaries, and so your data should appear automatically the relevant summary sheet. If you have created new worksheets for Section 4 or modified the model sheets you will find that the linkages need attention. Check that the linkages have worked properly and adjust them if necessary.

Table 5.1 is an .xls file that you should check for completeness, adjust if necessary, and then copy into your .doc file.

Then change the textual content below to bring it into line with the salary and other staff-related costs and the funding arrangements of your health authority.

5.1 Costing the Health Workforce Plan

Staff emoluments constitute the largest single item in the health authority's budget. For a full appraisal of staffing costs to be met from the health authority's budget it is necessary to take into account not only basic salaries and wages. Staffing costs include allowances and pay loadings of all kinds, the costs to the Department of Health of providing superannuation benefits, worker insurance, housing and other services provided to staff. Also contributing to the cost of staffing are the expenses incurred by the Department of Health in providing training for those who are currently employed or are being prepared to enter employment in the health service.

5.2 Estimated workforce costs

The salary estimates used in the projection tables are based on salary costs in the year 2000. In the projection of workforce salary costs no account has been taken of possible

changes in salary scales or other relevant changes in the course of the next fifteen or so years.

Also, salary costs for a particular category of personnel depend on the grading and seniority of personnel within the category. These projections do not take any changes in these relativities into account.

Therefore the projections of salary costs and the discussion here should be taken as indicating the general direction and scale of change, but should not be taken as in any way definitive.

5.2.1 Salary costs

Table 5.1 at the end of this section presents the estimated salary costs of major personnel groups at current salary relativities and total salary costs for the years 2000, 2005, 2010 and 2015. The estimates are based on the workforce projections presented in Section 4 of this Plan. Detailed year-by-year estimates are presented on worksheet WS 5.1.

Estimated staff salary costs rise at around an average of 4 per cent every year over the period 2000-2008 and for the remainder of the planning period average an annual increase of around 2.5 per cent. The total staff salary cost rises from P\$6.32 million in 2000 to an estimated P\$10.37 million in 2015, an overall increase of 64 per cent.

Annual salary costs for health personnel show a 74 per cent increase from P4.97 million in 2000 to P\$8.64 million in 2015. Annual salary cost for other DOH personnel in established posts rises from P\$1.02 million in 2000 to P\$1.38 million in 2015, a more modest increase of 35 per cent. There is no change in annual salary costs for unestablished staff.

The rate of actual change in expenditure will be reviewed regularly and appropriate adjustments made as circumstances require.

5.2.2 Other staff costs

The above discussion relates only to salary and similar costs. Costs relating to staff such as provision for superannuation pensions, monetary allowances for overtime and on-call duty, housing, transportation and other benefits are not included.

5.3 Staff training costs

Table 5.1 shows the estimated total trainee salary costs to DOH (at year 2000 prices) for the years 2000, 2005, 2010 and 2015. A detailed year by year projection by category of trainee is presented on worksheet WS 5.1.2.

The annual expenditure estimates do not vary greatly from year to year, remaining within the range P\$255,000 to P\$295,000 through the planning period. At the beginning of the planning period trainee salaries account for around 4 per cent of estimated total annual salary expenditure, declining to less than 2.5 per cent by the end of the planning period.

There is currently discussion regarding the future location of a number of training activities that at present are undertaken within the Department of Health, such as the training of dental, pharmacy, laboratory and medical imaging personnel.

Furthermore, the present arrangements for the training of nurses within the University College of Planania while most of the costs of training are borne by the Department of Health is a somewhat anomalous situation. This matter is now under discussion with the relevant authorities.

A very significant portion of the cost of professional training out-of-country is currently met by the Planania Department of Education, with contributions from government and non-government development assistance agencies based in Europe, North America, Japan and Australasia, and international such as WHO.

These external agencies also support much of the continuing education activities in which DOH personnel participate.

In future reviews of the health workforce plan will include any changes in the sources, amounts and utilisation of training funds that arise as the result of review of the arrangements for the training of DOH.

5.4 Total DOH staff and trainee salary costs

Table 5.1 shows the total DOH salary cost of P\$6.54 million for the year 2000 rising to an estimated P\$10.62 million in 2015, an increase of 61 per cent, and an average annual rate of increase (compound) of 3.3 per cent. This is slightly more than double the expected compound rate of population growth (1.5 per cent per year).

Table 5.1 is on the following page

SECTION 6

External Support Needs and Priorities

Important note: The following example section is concerned only with the need for support for some types of training related activity. There may be other needs such as provision of specialist advice regarding workforce planning, supply of materials or equipment for in-country training programs, and so on. You will have to modify this example to cover the whole range of external support needs.

ACTIVITY: Read through the whole of this Section.

Using the material you presented in Section 3 and the training data from the worksheets and text in Section 4 enter into Table 6.1 the needs for external support for the out-of-country training of health personnel, year by year.

Then change the example text below to bring it into line with the content of Table 6.1.

6.1 General Principles

The Government of Planania through the Department of Education provides out-of-country scholarships for the pre-service training of health professionals and a limited number of fellowships for advanced training of graduate DOH employees. However the Government seeks support from external sources to expand and accelerate the further training and career advancement of its staff in order to more fully meet the Government's objective of providing comprehensive health care of the highest attainable quality to the people of Planania.

Because the Government gives high priority to improvement in the quality of health care delivery, high priority should be given to securing external support for health workforce development.

All external support to the health sector for activities relating to human resource development should be for activities or projects that are consistent with the Health Workforce Plan.

Support should be directed to those activities and projects that will have the greatest long-term benefits for the health of the population as a whole.

6.2 The "Support Needs Schedule"

The Support Needs Schedule for the years 2000-2015 is presented in Table 6.1 on the following page. This schedule lists the post-basic and post-graduate out-of country training placements proposed by the Workforce Planning Committee. The specific fields of further study to be supported from external sources are determined from time to time in the light of service needs and presented in the reports of the Workforce Planning Committee and its *Health Workforce Newsletter* distributed to all staff.

This schedule does not include any of the training places to be funded by either DOH or the Department of education and included in Section 4.

This external support needs schedule is to be updated and extended annually in the course of the regular review of the Workforce Plan.

Table 6.1 is on the following page

Table 6.1: Planania - External support - Post-basic and Post-graduate Fellowships - Needs List 2000-2015

Year to commence study	Number of new places required				
	Medical post-graduate (2-4 years)	Nursing up-grade (RN to BN) (1-2 years)	Nursing post-basic, post-graduate (1-2 years)	Allied health post-graduate (1-2 years)	Other advanced study (1-3 years)
2000	1	2	1	1	
2001	1	3	1		1
2002	1	2	1	1	
2003	1	3	1		
2004	1	2	1	1	
2005	1	3	1		
2006	1	2	1	1	
2007	1	3	1		1
2008	1	2	1	1	
2009	1	3	1		
2010	1	2	1	1	
2011	1	3	1		
2012	1	2	1	1	
2013	1	3	1		1
2014	1	2	1	1	
2015	1	3	1		

SECTION 7

Implementation, Monitoring, Review and Evaluation of the Health Workforce Plan

ACTIVITY: Read through this section. Then make any necessary changes to the text.

When this has been done delete this activity box and its contents

7.1 Arrangements for finalisation and adoption of the Health Workforce Plan.

This draft of the first National Health Workforce Plan will be reviewed as soon as copies have been circulated. Participants in this review will include the Minister of Health, the Director General of Health, all divisional heads and representatives of their staff most closely concerned in matters relating to personnel matters, staffing, training and the costs associated with them. Consultation with relevant officials in other Departments such as Finance, Education and the Public Service Department will be sought as considered appropriate.

Consideration may be given to the presentation of the departmental plan to the inter-departmental Budget Performance and Strategic Planning Committee for comment.

Following the incorporation into the plan of any amendments arising from this review, the plan will be submitted to the Minister for approval as an official Departmental document

7.2 Monitoring the implementation of the Health Workforce Plan

Responsibility for monitoring the implementation of the approved national health workforce plan will be responsibility shared between the top level management personnel of DOH and the heads of divisions and units.

Information to facilitate monitoring will be supplied by way of regular reports to divisional heads on the staffing situation from the DOH Human Resources Office. Reports will be prepared from the workforce and training databases to be maintained by the HR Office.

7.3 Review and rolling over of the Health Workforce Plan

In view of inevitable and sometimes unforeseeable changes in the health field and in the wider political and economic situation it is essential to make regular and systematic

reviews of the Health Workforce Plan. The Workforce Planning Group is responsible to the Director General of Health for the conduct of the review and rolling over process.

This annual review, revision and rolling over of the workforce plan is to be undertaken in association with the annual budget preparation process.

The DOH Human Resources Office will be responsible for the preparation of an annual overview report of staffing statistics, training statistics and other matters relevant to the review of the plan. Much of the data required for the preparation of this overview should be readily accessible through the DOH information system network.

The Policy and planning Unit will act as coordinator of any operational studies or other investigatory activities regarding staffing and training matters which relate to the revision of the workforce plan.

7.4 Evaluation of the Health Workforce Plan

At appropriate intervals, probably every five years, there will be a thorough and detailed review of all matters relating to staffing and human resource development. The Director General of Health will be responsible for the timely conduct of these reviews. These evaluative activities may lead to very considerable reformulation of the health workforce plan in the light of any major changes in government policy, in the country's health situation, or in other areas having significant impact upon the country's health care delivery system

ACTIVITY: Go back to the first few pages of the workbook and correct the title page and the listing of people on your planning committee, any acknowledgments etc. Then check that the Table of Contents includes any changes you have made in the layout and content of your draft plan.

FINAL ACTIVITY: Check the document to make sure all activity boxes (including this one), their contents and any other unwanted material have been deleted, then print out the whole of your draft of the Health Workforce Plan.

Revised 31 January 2000