Rural health workforce planning guidelines

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Other Rural and Regional Health Services Branch publications include:

- *Rural directions for a better state of health*
- *Rural birthing services – a capability based planning framework*
- *Credentialling and privileging (defining the scope of clinical practice) for medical practitioners in Victorian rural health services – a policy handbook.*

Foreword

There is an inextricable link between effective workforce planning and achieving the directions and goals of rural health services. These guidelines clearly articulate this link, but, more importantly, they show how to conduct workforce planning when you don't have access to human resource expertise and sophisticated data systems.

We understand that workforce shortages in rural areas create a challenging environment for health services to manage. It is difficult not to take a reactive approach to workforce issues in these turbulent times; however, this turbulence makes workforce planning and taking a considered approach to assessing the workforce gaps and designing the strategies even more important. Innovation will be needed to ensure the workforce responds to the needs of rural communities and health services now and into the future. Workforce innovations take time, considered planning, meaningful stakeholder engagement and collaboration. Workforce planning also enables managers to keep an eye on changes in the workforce environment and tweak their human resources strategies accordingly.

These workforce planning guidelines are designed to help rural health services undertake their own planning exercises. They go through the critical steps of workforce planning and contain easy-to-use templates and spreadsheets. A fictitious rural health service is used to illustrate the steps, and the example workforce plan can also be used as a template to assist rural health services write their own. However, workforce planning is not just about writing a plan. The processes of developing the plan, implementing the strategies and monitoring their impact are the principle aims of the exercise. This is why it is important to start small and start now.

These guidelines are another demonstration of this government's commitment to the future of rural health care, which is clearly articulated in *Rural directions for a better state of health*. One of the key aims identified in this policy statement is:

> *to ensure that the workforce is distributed where it is needed on the basis of robust workforce planning linked to broader health care and health systems planning*.

I commend these guidelines to you.

DR C W BROOK
Executive Director
Rural and Regional Health and Aged Care Services

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Introduction

Access to an appropriately skilled workforce is one of the most critical issues for rural health service provision. Ensuring a sufficient supply of suitably qualified and skilled staff, distributed equitably across the Victorian health system, is essential to achieving long term system sustainability and viability and ensuring service quality and safety. The role of rural health services in attracting and retaining a skilled workforce is very important. Health services provide the environment, infrastructure, training and resources health professionals need to retain their skills and deliver patient services safely.

The rural health sector is facing a number of forces that will make achieving these aims increasingly difficult. The key challenge comes from the ageing population, which not only changes the nature of health care demand, but also reduces the workforce pool available to respond to this demand. Workforce planning will be an important tool for rural health services in developing strategies to manage these challenges. It will enable rural health services to understand their workforce, how these changes impact on their people and, in turn, how changes to the workforce will impact on their services now and into the future. These guidelines are provided to assist rural health services to undertake their own workforce planning exercises.

In Victoria, rural health services articulate their goals and strategic directions in their service plans. To achieve these goals and directions, health services need to ensure they have the right people, with the right skills at the right time. A workforce plan provides the means of determining which people are needed to achieve these goals and what strategies are needed to attract and retain these people. Workforce plans can enable health services to make the best use of their staff skills, identify opportunities for up-skilling, define career pathways and undertake succession planning. Workforce planning will also indicate when existing roles may need to develop or change, and where new and non-traditional roles may be relevant.

These guidelines have been written for Victorian rural health services with few or no specialist human resources staff members. They are intended to provide practical approaches and tools to assist managers to develop knowledge and skills in workforce planning. They aim to:

- explain what workforce planning is and how it will help achieve health service goals and directions
- provide some tools to assist in conducting workforce planning in rural agencies.

Workforce planning is often considered complex. We hope these guidelines demonstrate that workforce planning is essentially a simple process. Recognising that not all agencies may be able to achieve the ideal at the outset, a range of approaches is presented in these guidelines. Each agency is encouraged to adopt the approach that best suits its needs: the best approach is to **start now, even if this means starting small**. With experience, you can develop more sophisticated approaches tailored to your agency.

For support and assistance with any aspect of the workforce planning process, please contact the Rural and Regional Health Services Branch, Department of Human Services on 03 9096 2011 or your regional office.

1. Service planning and workforce planning

1.1 What is a service plan?

A service plan clearly defines the role and function of an agency within the sub-region or region and overall health system now and into the future. Each agency is part of a larger system, so its role must be consistent within the roles and objectives of the overall system.

Service planning exercises provide an opportunity to examine current services, project future needs of the community and identify service developments and innovations. Through service planning, the optimal mix of services that agencies can offer to their catchment's population will be determined within the boundaries of quality standards and resource availability. Service plans are defined for a specified timeframe and purpose, such as process redesign to create operational efficiencies, to meet changing service demand or to inform capital planning.

In summary, the service plan and model of care describe several key features of the health system for an area as it currently stands and operates, and answers the following key questions:

- Who receives the services?
- Which services and what level or quantity of services will the community need in the future?
- Who will deliver these services (staff type and numbers)?
- How will these services be provided (through clinical pathways, service interactions, model of care, service configurations)?
- What facilities are required to provide these services (for example, inpatient or ambulatory, theatres, low care beds, high care beds, and so on)?
- How will agencies implement the service plan and model of care?

Most agencies will already have a service plan or a similar document that examines the needs of the community and articulates the role and objectives of the agency into the future. Advice on service planning can be sourced through Department of Human Services regional offices. If your agency does not have a service plan or similar document, these guidelines provide some advice on examining community needs and other factors that impact on an agency's service mix (see Chapter 3, 'Environmental scanning').

1.2 What is workforce planning?

Workforce planning is a continuous process of matching workforce requirements to the agency's business objectives. It is a crucial element in planning how to get the agency from where it is now to where it needs to be in the future. In simple terms, workforce planning aims to have 'the right people in the right place at the right time, all the time'.[1]

The principal steps in the workforce planning process are:

1. **Undertake environmental scanning**. Understand internal and external forces that will impact on agency services, operating context and workforce needs
2. **Forecast workforce demand**. Determine what roles, skills and numbers of people you will require to deliver the agency's service plan
3. **Forecast workforce supply**. Determine what staff you will have available if you do *nothing* to prevent natural attrition
4. **Analyse gaps and generate strategies**. Compare demand and supply to understand your most critical projected workforce shortages or surpluses. Design and implement solutions that will address the gaps
5. **Monitor and evaluate**. Determine successes and improvement opportunities for the next round of workforce planning.

1.3 Integrated service planning and workforce planning

Service planning and workforce planning are components of an integrated, iterative process. The service plan articulates the goals that workforce plans need to implement. Figure 1 illustrates the integrated and iterative nature of service and workforce planning, with the core service planning steps shown in blue and the workforce planning steps shown in green.

[1] Workforce planning and human resources strategic planning are often used interchangeably. For the purpose of these guidelines, workforce planning is considered a component of human resources strategic planning, which is the process of establishing objectives for staffing policies and programs, based on the agency's strategic objectives and external forces. Human resources strategic planning includes sub-components, such as **workforce planning**, organisational development, employee relations, compliance with employment legislation (such as, occupational health and safety), and policies relating to individual employees, such as performance assessment.

Figure 1: Integrated service and workforce planning

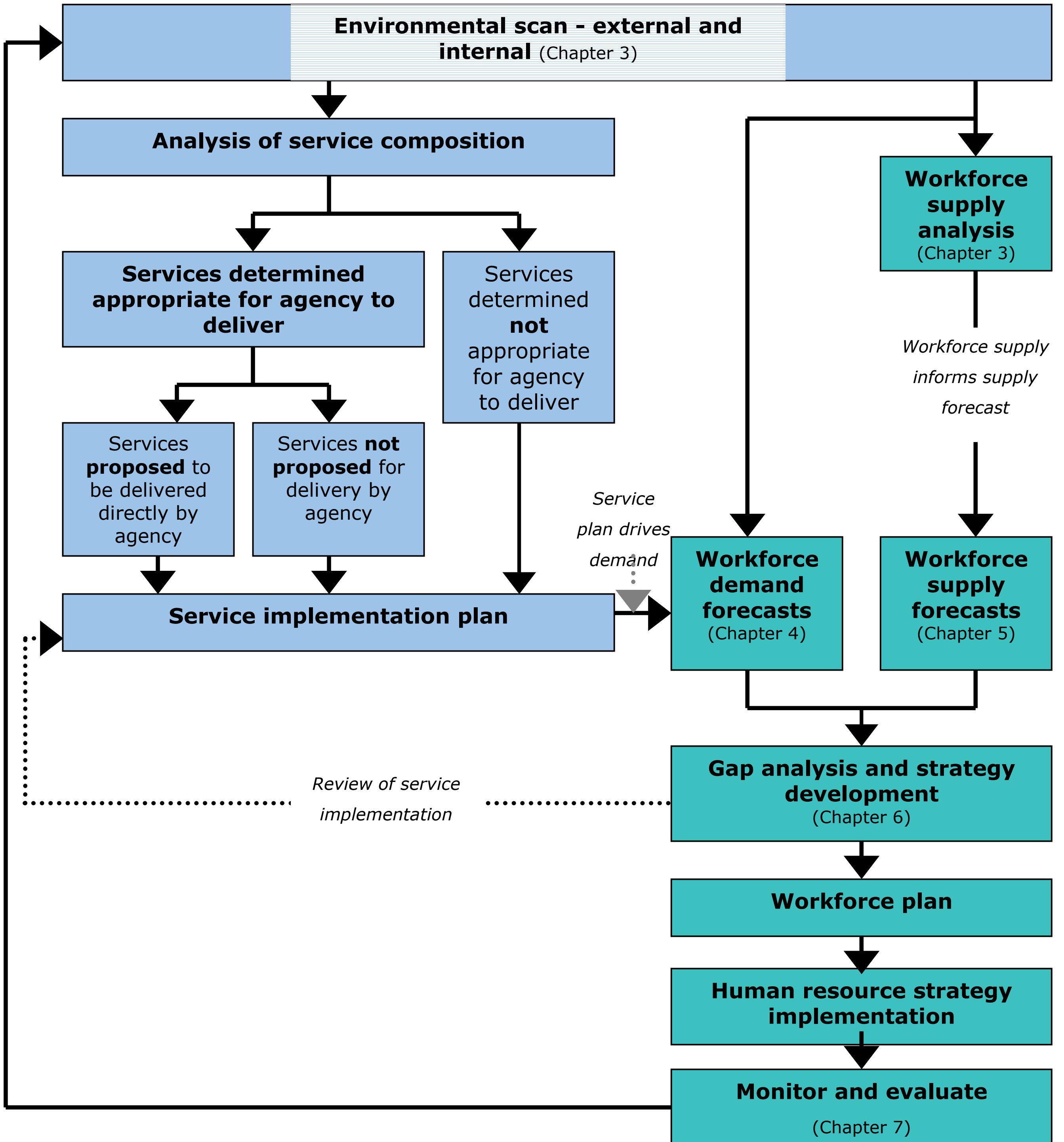

Figure 1 shows definite (hard line) and potential (dotted line) feedback loops from workforce planning to service planning:

- There is a definite feedback loop from the ‘monitor and evaluate’ step to environmental scanning. The outcomes of workforce planning need to be considered during environmental scanning, and thus inform the services to be delivered in the service plan.
- There is a potential feedback loop from workforce planning’s ‘gap analysis and strategy development’ step to service implementation plan. Ideally, service planning drives workforce planning; however, given critical shortages in some areas of rural health, workforce shortages may impact on the timeframe for achieving objectives in the service plan.

Note: The workforce plan should be informed by service and business plans and when complete should be fed back into the service, business and financial plans.

1.4 Principles of workforce planning

In this chapter, we have highlighted **integration** and **iteration** as two important principles of workforce planning. Other important principles are shown in Table 1 and include the need to **innovate** and **involve stakeholders,** be **informed** and **proactive,** and **prioritise.**

Table 1: Principles of workforce planning

Integrate	Workforce planning needs to **integrate** with service planning—in fact, with all planning and management processes within your agency. This is because future staffing requirements of your agency should be based on anticipated service needs rather than historical staffing levels. We must understand how the nature and scope of the agency's services are expected to change over the forecast period and then assess the workforce mix required to achieve these goals.
Iterative	Workforce planning is an ongoing, **iterative** process, which should be reviewed at least annually in conjunction with the agency's service and other corporate planning processes. With this in mind, it is better to start workforce planning now, even if that means starting small. You can improve the process or data sources as you continually revise.
Innovate	Agencies need to be **innovative** in developing solutions for emerging problems. Due to a global changing demographic profile, the workforce is ageing and there will be fewer workers available to respond to increasing demand for services. We need to think about new ways to address new challenges.
Involve stakeholders	It is important to **involve stakeholders** in the workforce planning process because it potentially affects many different groups of people, from employees and management to the community and unions. Managers are in the best position to make workforce planning decisions in consultation with other stakeholders who have relevant knowledge of service and staffing needs.
Informed	Workforce planning decisions need to be **informed** by the best available quantitative and qualitative information available.
Proactive	Workforce planning encourages a long term systems view that supports agencies in being **proactive—**anticipating workforce issues before they emerge and framing responses accordingly.
Prioritise	Workforce planning helps agencies **prioritise**—to focus attention on the problems or gaps that will have the greatest impact on service goals and directions and to which the health service is best able to respond.

1.5 Chapter summary

Workforce planning is not difficult, but can be daunting, especially for those not from a human resources background. Research[2] has demonstrated the need to 'start simple' when implementing workforce planning into an organisation. Agencies are therefore encouraged to use the components of these guidelines that they find immediately useful and achievable. Some of the techniques (for example, scenario planning and external supply forecasting) can be added into the process at a later date if they are not immediately achievable.

Before going through the core workforce planning steps, there are a few things you will need to do and consider. These are covered next in Chapter 2, 'Getting started'.

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[2] Australian National Audit Office 2005, *Workforce planning*, Audit Report No. 55 2004–05, Australian National Audit Office, Canberra.

2. Getting started

There are several things you need to think about before you start workforce planning. These are outlined in Table 2 and discussed later.

Table 2: Activities for getting started

Activity	Questions
Allocate project resources.	• What project roles do we need to support the planning process? • Can we access the information required for workforce planning?
Determine a planning timeline.	• When will we develop the plan?
Identify and engage stakeholders.	• Who will be involved? • How and at what stages will stakeholders be involved?
Develop a communication strategy.	• How will we keep stakeholders informed? • How will we seek their input?
Determine a forecast horizon.	• What is the forecast period?
Determine workforce structure.	• Decide on the workforce structure that will provide the basis for undertaking demand and supply forecasts.

2.1 Allocate project resources

Workforce planning processes need to be adequately resourced to be successful. What this means and how it is achieved will depend on the size of the health service and its access to specialised workforce planning resources. Larger health services will have access to more resources, but are also likely to engage in more complex workforce planning exercises because of the complexity of their services and workforce profile. For many smaller rural health services, the job of workforce planning will often fall to a senior manager. These smaller services are often also faced with the most significant change management exercises because environmental factors tend to have the greatest impact on smaller, more remote workforces.

The core project roles are likely to be:

Project management

This role requires someone who is familiar with the business or service and workforce planning process, has good project management and interpersonal skills, and has a direct line to senior management.

Project support

- Implementing the communication strategy
- Undertaking research
- Scheduling consultations
- Documenting the outcomes of meetings
- Collecting supply data
- Managing the demand/supply forecasting spreadsheet
- Maintaining all records
- Writing up the workforce plan and a strategy to implement and monitor the plan

In smaller agencies, these tasks might be undertaken by one person in conjunction with the payroll function. Other agencies may be in a position to form a small team of two or three people. In appointing a workforce planning project manager or team, consider both their ability (skills) and their capacity (other workloads) to undertake the required tasks.

In addition to allocating these human resources, you should investigate how to source relevant information, such as the metrics highlighted in Tables 4 and 5, as soon as practicable.

2.2 Determine a planning timeline

Ideally, workforce planning will integrate with the business or service planning process. If your agency does not have a business or service plan, or if the plans have already been developed, you can choose any convenient timeline for developing the workforce plan.

When scheduling a project timeline, consider the following issues:

- availability of stakeholders for consultation
- the potential for dovetailing with existing stakeholder consultation processes
- integration with other initiatives within your agency and the community
- availability of workforce supply information.

2.3 Identify and engage stakeholders

2.3.1 Why consult with stakeholders?

In planning for any changes to health services and associated workforce implications, it is important to consult with the people affected by the changes. Engaging stakeholders in workforce planning processes will:

- build a shared understanding of the workforce profile now and the forces that are impacting on it into the future
- provide an opportunity for stakeholder input into the planning process to ensure the process is based on the many perspectives and ideas available
- ensure planned changes in the provision of services reflect the needs of stakeholders
- allow stakeholders to take responsibility for the changes needed.

2.3.2 Who are the stakeholders?

The key stakeholders include the people most affected by workforce planning and the resultant strategies, and could include:

- senior staff members or management staff members
- health professionals, including nurses, general practitioners, visiting specialists, dentists, pharmacists, ambulance services, district nurses, allied health professionals, social or youth workers or counsellors, graduate nurses and intern medical practitioners
- ancillary staff, including support or hotel services, engineering, administration and so on
- unions, associations and peak bodies

- health service executive (this may also include members of the board depending on the board committee structure or the extent to which the board is involved in operational matters)
- quality, planning, finance and human resources within your agency
- neighbouring services (community services, local government, primary care partnership, health services)
- volunteers.

Stakeholders who may not be directly affected by the outcomes of workforce plans but may provide support, who need to know about workforce changes, or who can suggest strategies may include:

- education institutions, such as universities, TAFE colleges, secondary colleges, primary schools, and kindergartens. While these may not be key stakeholders, they are important for providing new recruits and supporting retention strategies
- Department of Human Services regional offices. Not only may the regional offices provide some assistance in the workforce planning process, but they will be interested in any significant workforce change that you propose from a system-wide perspective, especially if it has an impact on neighbouring health services, industrial relations and the health service clinical and financial viability
- funding bodies.

Note: Because agencies interact with a variety of stakeholders, these lists are indicative only. It is not essential to contact every group on this list; each agency needs only identify relevant stakeholders.

2.3.3 When should stakeholders be involved?

Table 3 lists stakeholders and notes the workforce planning steps in which they are most likely to be involved. Note that this table is not intended to be prescriptive. Depending on the culture and context of your agency, you may find it relevant to consult with more or fewer stakeholders at each stage.

Table 3: Stakeholders to consider in workforce planning process

Stakeholder	**Environmental scanning** (incl. external supply)	**Demand forecasting**	**Supply forecasting** (internal supply only)	**Gap analysis and strategy development**	**Monitor and evaluate**	**'For information' updates**
Executive management[3]	✓	✓	✓	✓	✓	✓
Middle management	✓	✓	✓	✓	✓	✓
Visiting clinicians (medical specialists, general practitioners, allied health)	✓	✓	✓	✓		✓
Employees[4]	✓	✓	✓	✓		✓
Board members	✓			✓	✓	✓
Planning specialists (quality, finance, human resources and so on)	✓	✓		✓	✓	✓
Unions	✓					✓
Contracted services	✓		✓	✓		✓
Potential employees[5]	✓			✓		✓
Educational institutions (secondary and tertiary)	✓			✓		✓
Regional Department of Human Services	✓	✓		✓		✓
Community health providers	✓					✓
Divisions of general practitioners	✓					✓

[3] For example, chief executive officer and departmental heads
[4] Through analysis of employee opinion survey or exit survey results
[5] Through feedback during clinical placements, career fairs or similar

2.3.4 Involving and engaging stakeholders

Means of consulting with stakeholders may include:

- interviews, focus groups, workshops
- staff meetings
- questionnaires
- discussion papers
- email communication. Done effectively, this can ensure everyone knows what is going on and has a chance to comment if they wish.

Useful advice on these approaches is in *Community engagement and consultation: a guide for rural and regional communities* developed by the Department of Human Services (2005).

It is important that all consultations promote the best possible two-way communication. The following pointers will assist in achieving this:

- Involve stakeholders early and often.
- Determine stakeholders' needs and how workforce planning can help. Identify any concerns as early as possible and set clear expectations about what can and cannot be done and why.
- Use examples and refer to issues they are familiar with and understand.
- Create an inclusive, non-threatening environment wherever possible. For example, avoid jargon-laden language.
- Prior to the meeting, distribute relevant information or the meeting agenda. This improves the stakeholder engagement and elicits more considered input.
- Encourage maximum input by using a structured and non-evaluative group technique that encourages equality of participation among consultation group members. Details of qualitative group techniques are outlined in Appendix 6.
- Be mindful of differences between consultation group members. This is particularly important when engaging and consulting with special communities, including people with a disability, Indigenous groups, young people, and people from diverse cultural and linguistic backgrounds.

2.3.5 Consultation versus decision making

Consultation is vital to effective workforce planning; however, at several points in the workforce planning process, it may be more practical in terms of efficiency and role accountabilities for an executive role or team to make decisions. This might be the chief executive officer, an executive team, or the agency's board. Examples of such workforce planning decision points are when 'signing off' on:

- scenarios (see Appendix 4)
- demand forecasts (see Chapter 4)
- the final workforce plan (see Appendix 12).

Note: Each agency is in the best position to decide on its decision makers and decision points, based on its own culture and context.

2.4 Develop a communication strategy

It is important to develop a communication strategy to support the consultation process and encourage awareness of and support for workforce planning outcomes. When developing your communication strategy, consider the following issues:

- Who are the key stakeholders?
- What messages need to be delivered to each stakeholder group? For example, explaining the need for the project and its benefits, keeping them informed of project progress, inviting their input and preparing them for future action.
- Can existing lines of communication be used for each stakeholder group rather than creating additional lines of communication?
- For each stakeholder group, how does this workforce planning project relate to any other initiative they are currently working on?
- How frequently do you need to communicate with each stakeholder group?
- Who will send the messages and how?
- Would it be worthwhile appointing a 'project champion' to promote the benefits of the workforce planning process? This could be the chief executive officer or other senior manager.

2.5 Determine a forecast horizon

Workforce planning involves making forecasts of workforce demand and supply. Before making the forecasts, you need to establish the 'forecast horizon' for your workforce plan. Ideally, this will be consistent with your business plan or service plan. In the absence of a long term business or service plan for your agency, a practical approach is to make forecasts at one year, three years and five years in the future.

2.6 Determine workforce structure

You need to decide how you will structure or consider your agency's services for the purpose of workforce forecasting, both demand and supply. In making this decision, you have several options to consider:

- service streams (for example, community care, alternative models of care, Hospital in the Home, acute beds, high care places, low care places, flexi places, mental health, ambulatory)
- departments (for example, corporate, clinical, community services)
- professional streams (for example, medical, nursing, allied health).

Some suggestions:

- An advantage of using service streams is that it is consistent with the agency's service plan.
- Some rural health services are less likely to be divided according to departments and this type of division has the potential to reinforce inflexible silos.
- A disadvantage of using professional streams is that it has the potential to reinforce traditional approaches to work. As discussed earlier, you need to adopt innovative ways of working to deal with today's and tomorrow's service challenges.

There may be other options relevant to your agency. For example, one rural agency allocates staff by its responsibility or cost centres:

- general
- hospitality
- acute and residential
- health promotion/community development
- regional health strategy
- community health
- home and community care
- hostel
- medical.

Note: The approach you choose may be dictated by how you can 'cut' the workforce supply data available from your human resources information system or payroll system. In Step 2 'Demand forecasting', demand forecasts are matched with supply forecasts to reveal workforce gaps (shortages or surpluses). There is no point in doing demand forecasts by service stream if you cannot report on your current workforce in this way.

In these guidelines we illustrate each step in the workforce planning process using a hypothetical agency called **Healthy Life Health Service**. **These examples are highlighted in blue text.**

Healthy Life allocates its staff by its services, as outlined in its service plan:

- emergency
- same-day surgical
- multi-day surgical
- obstetrics
- primary care
- diabetes.

3. Step 1: Environmental scanning

3.1 What is it?

Environmental scanning is a research process that aims to answer the question, 'What will impact on the way we provide services in the short and long term?'. It provides information from which to determine service provision and workforce directions and strategies.

This process involves reviewing the impact of environmental elements that are:

- **external** to the health service, such as government policy, technological change, competition, demographic change and society's norms and expectations for the future
- **internal** to the health service, such as the agency's future directions, policies and current workforce profile.

3.2 Have you already undertaken this step?

Service plans are based on a comprehensive review of the environment that impacts on the agency. Thus, if you have already undertaken an environmental scan during the development of your agency's service plan or business plan, it is not essential for you to read the rest of this chapter. Proceed to Appendix 4 'Scenario planning' or to demand forecasting in the next chapter.

Even if your agency's service plan is not current, it may provide valuable information about the health service's environment and how the agency intends to respond to it. This information may form the basis for the environmental scan you will need to conduct for workforce planning.

If your agency has not undertaken an environmental scan, or if you are interested in reading about possible approaches to this step, please read the remainder of this chapter.

Note: It is useful to conduct environmental scanning on an ongoing basis to maintain awareness of different forces that may arise.

3.3 Who is involved?

Section 3.4 provides examples of the range of stakeholders who might be involved in the environmental scanning process. In addition, the workforce planning project manager or team is responsible for gathering relevant information, such as that discussed in Section 4.4.

3.4 What information should be considered?

The two main sources of information in the environmental scan are:

- external and service-related information
- workforce information.

The following sections provide more detail on each.

3.4.1 External and service-related information

As noted, the Department of Human Services' *Guide to developing service plans and model of care* provides information on environmental scanning, covering issues such as:

- service principles or mission
- service setting: the existence of other providers in the area (number and type) and whether this is likely to change
- defining the agency's catchment: who receives services from the agency?
- catchment features; for example, remoteness, availability of public transport, level of industrialisation
- projected changes to catchment population (including size, age profile, diversity, seasonality and so on)
- health status
- service use and projected need
- service composition
- service innovations.

Other possible factors to consider are shown in Table 4. For each of these future developments, agencies can rate the **likelihood** of them affecting their service demand and the **impact** of any effect on service demand.

Table 4: Environmental scanning – sample information

Factors	**Examples of future developments**	**Likelihood** (High, medium, low)	**Impact** (High, medium, low)
Demography	• Ageing population and workforce • Shifting population due to tree change/sea change (for example, growth in the Murray–Goulburn region)		
Economic	• Challenges in achieving economies of scale with both staff and technology • Movement of industry into or out of the area • Cost of travel (staff and service users)		
Technology	• Medical, scientific and technological advances • New therapeutic and communication technologies • Corporate infrastructure, such as finance, inventory information systems • Online delivery of training/telemedicine		
Consumer expectations and behaviours	• Expectation of higher quality care • Increased litigation • Increasing use of complementary medicines in addition to mainstream health care		
Role of private health services	• Opportunities for collaboration • Threat of competition		
Environmental factors	• Changing weather patterns, such as global warming, could change the spread of communicable diseases and emergence of new ones, including lack of safe drinking water and food production • Depletion of ozone layer (skin cancer and cataracts) • Factors such as drought or floods could affect the local economy, demographics and socioeconomic status of the population and thereby change demand for heath services • Changes in crops or in focus of local industry		
Government policy and legislation	• *Health Professionals Registration Act 2005* • Medication endorsement of division 2 registered nurses • Introduction of new health workers, such as allied health assistants • Policies and planning frameworks; for example, *Rural directions for a better state of health*; *Rural birthing services – a capability based planning framework*; *Care in your community – a planning framework for integrated ambulatory health care*		

Variables such as the ageing population and scientific or technological advances are likely to result in increased demand for health services, and subsequently affect ability to deliver quality services (ultrasound, for example). Some variables, including the role of the private health sector, are likely to result in decreased demand for public health services, while others, such as changes to clinical practice, may result in changes to the nature of health service delivery and, hence, to the type of skills that staff require.

3.4.2 Workforce information

The environmental scan should also examine the nature of the current workforce, including its strengths and challenges. Relevant questions include:

- How has our workforce size changed in the past few years?
- What is the demographic profile of our current workforce?
- What are the strengths of the current workforce?
- What are the strengths of current and emerging leaders?
- What investment do we make in human capital?
- What is the health of our agency in terms of workforce morale and culture?

Table 5 provides examples of workforce metrics that can help answer these questions. For agencies just beginning workforce planning, focus on the metrics in bold.

Table 5: Environmental scanning – sample metrics

Environmental scanning	Example metrics	Formula or notes
How has our workforce size changed in the past few years?	• **Trend head count and full time equivalent (FTE) (employee and agency)** • **Overtime rate** • Net recruitment ratio • **Separation rates**	**Head count**: Actual number of people employed at end of period **FTE**: A computed measure whereby a full time employee is counted as one FTE and a part time employee is counted as a fraction of an FTE, based on the number of hours worked per week **Overtime**: Hours worked in addition to standard award hours **Net recruitment ratio**: Shows number of recruits in relation to terminations, indicating change (increase or decrease) in workforce size **Separation rates**: Employees who terminated during the reporting period as a percentage of total head count
What is the demographic profile of our current workforce?	**Staffing by age**, **tenure**, **gender**, management staffing ratio, diversity[6], **attendance type (full time or part time)**, **employment type (permanent, temporary, casual)**, home location (in relation to travel issues)	**Staffing profiles**: Number of staff in age, gender or other specified categories as a percentage of total head count **Management staffing ratio**: Ratio of managers to non-managers
What are the strengths of the current workforce?	• Staffing – key skills, qualifications, industry experience • Performance rating data, such as staffing rate by performance rating or average performance rating • Recruitment source ratio – permanent	**Recruitment source ratio – permanent**: Ratio of internal recruits to external recruits. This measure indicates the strength of internal development strategies and outcomes.
What are the strengths of current and emerging leadership?	Staff opinion survey data Recruitment source ratio – manager Participation in leadership development programs	
What investment do we make in our workforce?	• Remuneration as percentage of operating expenses • Training investment per employee ($)	**Remuneration as percentage of operating expenses**: Total remuneration/operation revenue **Training investment per employee ($)**: Training costs/total FTE
What is the health of our agency in terms of workforce morale and culture?	• **Voluntary separation rate** • **Sick leave absences (days per FTE)** • Number and cost of workers compensation claims by type of injury • Days lost to workers compensation by type of injury • Staff opinion survey data/exit interview data	

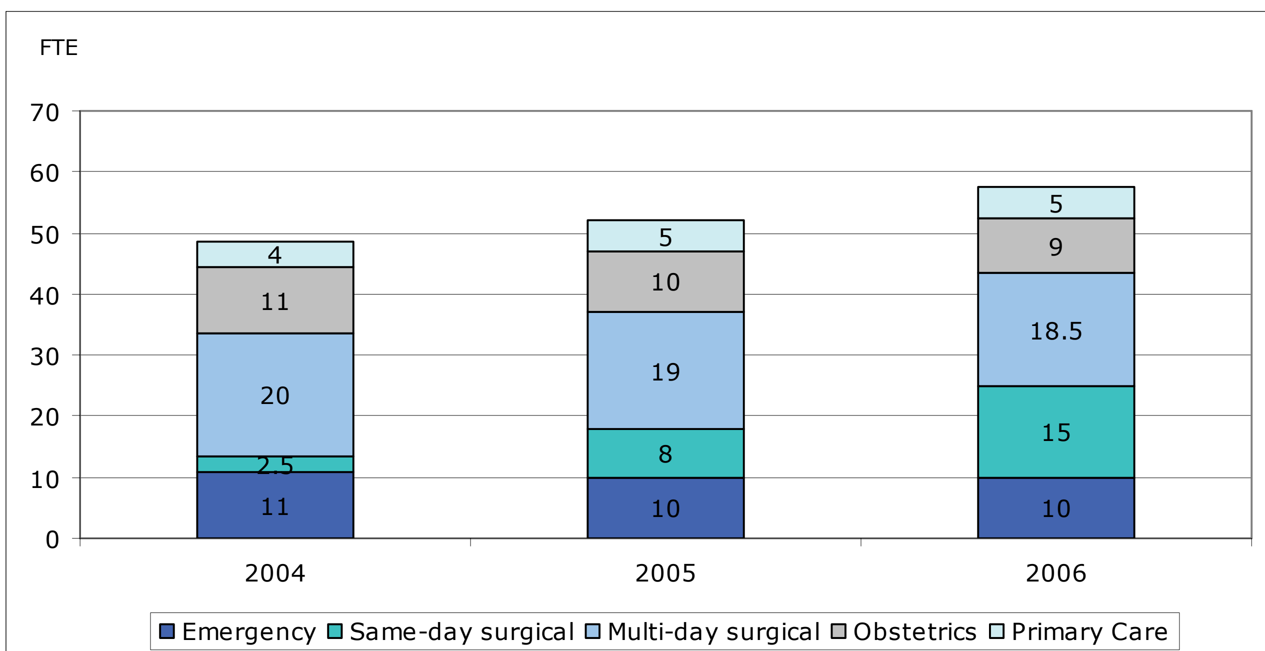
[6] Diversity measures include staffing rates for Indigenous people, people from diverse cultural and linguistic backgrounds, and people with a disability.

Ideally:

- The metrics should be analysed for the agency as a whole, as well as for department or service type if relevant.
- Other multidimensional analyses can be performed where relevant, such as staffing rate by gender, tenure or business unit.
- National and industry benchmarks can be compared with the agency's workforce profile (for example, www.infohrm.com).

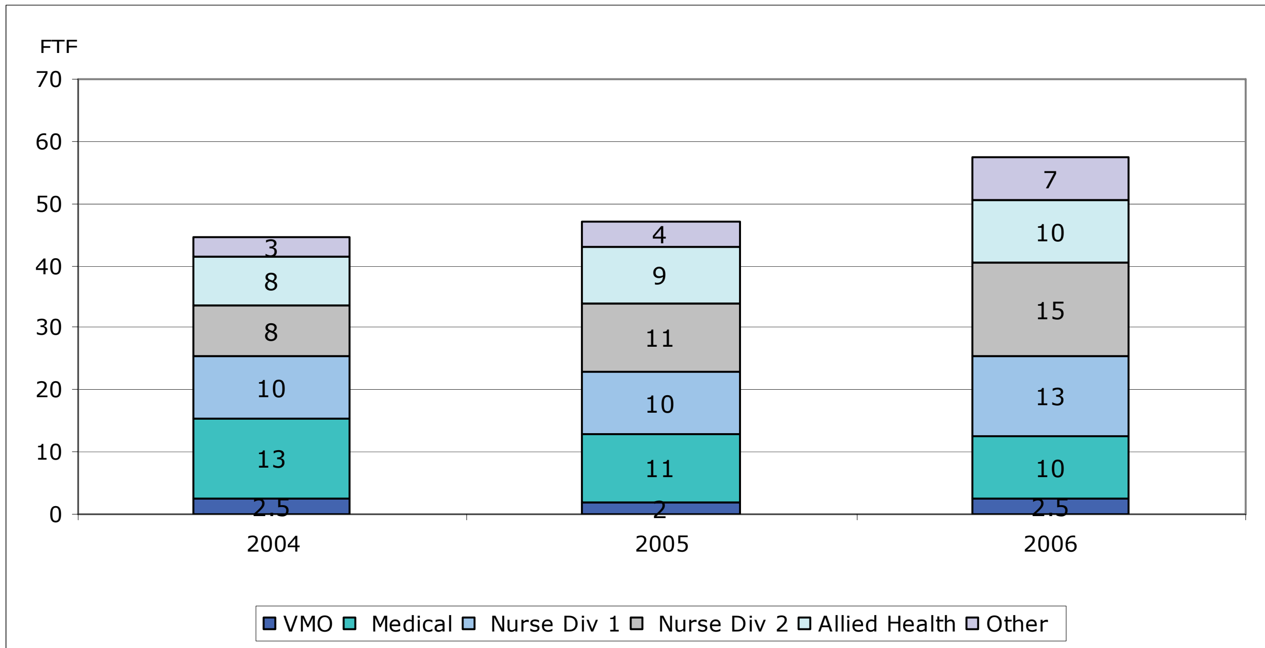
Chart 1 shows Healthy Life Health's trend FTE by service and occupational group. FTE increased by approximately 16 per cent from 2004 to 2006. This increase is due to increased staffing in same-day surgical, because all other services have reduced staffing over the period 2004–06.

Chart 1: Healthy Life Health Service – trend FTE by service



Considering the profile by occupational group, we can see a large increase in the registered nurse (division 2) occupational group.

Chart 2: Healthy Life Health Service – trend FTE by occupational groups



Note: VMO – Visiting medical officer

Additional supply analysis for Healthy Life, examining a range of other workforce metrics, is shown in Appendix 7.

3.5 What is the outcome?

At the completion of this step, you should compile a report that highlights the likely external and internal influences on the business and its workforce over the forecast period. Note that as with all workforce planning steps, this is an iterative process. While there may be quite a bit of work involved the first time around, in subsequent years you only need to review and update information rather than begin the research from scratch.

The environmental scanning report need not be a 'glossy publication'. Its purpose is to provide baseline data that will assist in scenario planning and demand forecasting. At a minimum, a useful outcome from this step will be a summary of proposed service composition for your agency, such as the one shown in Table 6 for the hypothetical agency Healthy Life Health Service.

Table 6: Healthy Life Health Service – proposed service composition

Service	Currently provided	Any service change
Emergency	Yes	Maintain service levels in the face of diminishing general practitioner numbers and on-call availability. Support clinicians to adopt innovative practices to ensure or enhance patient access to emergency services.
Same day surgical	Yes	Overall same-day surgical volume will increase by managing multi-day surgical as same-day surgical.
Multi-day surgical	Yes	Reduce volume and complexity of multi-day surgery by using innovative methods to treat traditional multi-day cases on same-day basis and strengthening area clinical network.
Obstetrics	Yes	Reduce level of service due to change in demand. Strengthen referral pathway and relationships in area, including clinical networks.
Primary care	Yes	Increase service to manage integrated approach, including primary care facilities and clinical network.
Diabetes	No	Introduce service due to demand identified via community consultations and burden of disease data.

From Table 6, we can see that the major service changes for Healthy Life Health Service are:

- increased service levels for same-day surgical and primary care
- reduced service levels for multi-day surgical and obstetrics
- stable service levels in emergency, but with reduced medical personnel
- introduction of the diabetes clinic.

4. Step 2: Demand forecasting

4.1 What is it?

Demand forecasting is the process of estimating how many and what sort of people the agency will require to accomplish future service objectives. The process addresses the following considerations for the forecast period:

- types of job roles required in the future
- number of people required for each job role
- types of skills required in the future.

Key points about demand forecasting are:

- Demand forecasts should be integrated with your agency's service and business plans. The forecasts should be based on future requirements, rather than historical precedents because it could be dangerous to base future workforce requirements on extrapolation of past trends due to the rate of change in all aspects of work and life.
- While many sophisticated techniques are available, demand forecasting is often informal, highly judgmental and subjective: it can only ever be an approximate science.
- While there will always be a degree of subjectivity in forecasting, it is important that forecasts are based on the best information that can be made available cost-effectively.
- The longer the planning timeframe, the less accurate the forecasts will be; however, the point of workforce planning is to make longer term forecasts to try to plan for emerging needs, and to inform and commence long term strategies.
- Generally, longer-term forecasts should look to the five-year mark. Anything beyond five years becomes highly uncertain. Forecasts at one and two or three years out are also necessary to plan for shorter term, operational needs and to establish the direction towards the five-year forecasts.
- Forecasting is the basis for development of people-related business strategies.

4.2 When is it done?

Demand forecasting is undertaken on completion of environmental scanning. It can be undertaken concurrently with supply forecasting.

4.3 Who is involved?

Managers are the best informed people to forecast the staffing needs necessary to achieve agency objectives. The quality of managers' judgments will be enhanced by:

- availability of the **best possible information**, such as that generated through the agency scanning and planning processes (see Chapter 3)
- using a **consultative process** in which the manager involves others with relevant knowledge of the agency's service provision and staffing needs

- using a **structured approach** to trigger consideration of the range of factors impacting on staffing needs.

4.4 What techniques are available?

When making demand forecasts, various approaches and techniques are available, ranging from the simple to the very complex, and falling into two main categories: statistical and judgmental.

- **Statistical** or quantitative techniques include regression analysis and staffing ratios.
- **Judgmental or** qualitative techniques include interviews, nominal group technique and the Delphi technique. These techniques are provided in some detail in Appendix 6.

Some organisations use a combination of statistical and judgmental techniques. Some organisations use judgmental techniques only. It would be quite rare for an organisation to use only statistical techniques because such techniques tend to be based on extrapolation of past trends. Demand forecasts should be based on future requirements rather than historical precedents.

Both statistical and judgmental forecasting techniques merely provide data. No technique can provide a completely accurate prediction of what will happen in the future; however, the techniques are structured to increase the objectivity of the predictions, and thus are more likely to deliver more informed predictions.

Note: When selecting a technique with which to forecast demand, make sure it is consistent with the method you will be using to predict supply. For example, demand information based on FTE estimates of clinical time cannot be compared with supply data if the FTE estimates include clinical time plus administration time and time on leave.

The following sections give an example of both a statistical and a judgmental demand forecasting technique.

4.4.1 Statistical technique – workload measures

A workload measure is generally based on activity/funding-based estimates of service demand (for example, FTEs per client per annum; funding-based formulas; FTE to infrastructure ratios).

Workload measure example for Healthy Life Health Service

This example uses a nurse/patient ratio of 1:6 in the morning, 1:7 in the afternoon, and 1:10 during the night. This is an average of 1:7.7 per shift.

In recent years, Healthy Life has had an average of 35 multi-day surgical patients per day, requiring 13.5 nurses according to this ratio over the course of three shifts (35 patients divided by 7.7 patients per nurse, multiplied by three shifts). Healthy Life's proposed service composition indicates a reduction in

multi-day surgical activity. If this reduced to an average of 30 patients, then the demand for nurses would be 11.7 FTE (30 patients divided by 7.7 patients per nurse multiplied by three shifts).

The Department of Human Services' workforce planning methodology includes guidelines for determining workload measures. In addition, the department's Service and Workforce Planning Branch has developed a model for the medical workforce to benchmark the number of trainees/consultants required for a particular service. This work is available at http://www.dhs.vic.gov.au/pdpd/html/swp.htm.

4.4.2 Judgmental technique – demand forecasting workshop

The following process for conducting a demand forecasting workshop is suggested as a guide. Agencies should adopt the aspects of this process that best suit their context. It involves the following stages, which are detailed below:

1. pre-workshop preparation
2. workshop (or interview) with relevant stakeholders.

Pre-workshop preparation

Prior to the demand forecasting workshop, compile any available information that will help managers to consider their future workforce requirements. You will have compiled a lot of this information during the environmental scanning step, with the core driver of workforce demand forecasts being the service plan.

Workforce trend metrics may also be relevant and can provide useful grounding information, but you should be wary of basing forecasts on extrapolation of trends due to changes such as those identified through the environmental scan. Table 7 suggests some relevant metrics to consider in the demand forecasting process. Other workload measures may also be relevant.

Table 7: Demand forecasting metrics

Demand Forecasting Considerations	Metrics
Historically, how many staff have been required to meet agency objectives?	Compare current and previous years' results for: • staffing FTE • agency FTE • overtime FTE • unscheduled absence FTE.
Historically, what has my staffing budget been?	Compare current and previous years' results for remuneration (staff and agency) as a percentage of operating budget.
Key activities performed by staff	Activity analysis

Conducting the demand forecasting workshop

The project manager or project team arranges a demand forecasting meeting, involving stakeholders who are in a position to make a demand forecast for their area of responsibility. The format of this meeting, whether it is an interview or workshop, will depend on the size or complexity of the agency, the number of stakeholders involved and their availability. The duration of the meeting would normally be between

one and a half and three hours depending on the size or complexity of the agency, number of stakeholders involved and their familiarity with workforce planning.

Prior to the workshop, participants should be asked to give some thought to relevant issues. A template entitled *Invitation – demand forecasting meeting* is included in Appendix 5. This appendix provides guidelines on how to facilitate a demand forecasting session, including qualitative group techniques that can be very useful in the demand forecasting phase.

A standard workshop outline is provided in Exhibit 1.

Exhibit 1: Demand forecast workshop outline

- Make introductions and clarify outcomes required from the workshop.
- Review available environmental scanning and service planning information, including outcomes from previous workforce plan and current supply analysis (as per Table 4).
- If you have not already done so, agree on the workforce structure that will be used to make and match the demand and supply forecasts (see Section 3.6).
- If you have not already done so, agree the forecast horizons: one, three and five years out is recommended.
- Consider the proposed service composition prepared in Step 1, 'Environmental scan'.
- For each scenario and each forecast period, consider:
    - types of jobs required in the future
    - number of people required for each job role
    - the skills your agency currently requires to meet its business needs
    - how these skills will change over the forecast period
    - the most critical skills currently required within your agency
- Thank participants and advise next steps.

Based on the participants' input, the project manager completes a demand forecasting spreadsheet (see Appendix 8 for template). This spreadsheet should document:

- the number of staff required at each forecast point for each stream or job role
- the 'assumptions' or rationale that led to the forecast numbers. This is very important because the rationale and assumptions can be monitored when reviewing the workforce planning forecasts and outcomes.

Note: If you have difficulty getting hard numbers for demand during the interview, there are two alternative approaches you can take:

1. Ask for a direction in which demand might move. For example, will demand increase, decrease or remain stable?
2. Ask for a percentage change. For example, will demand increase by 10 per cent? Will it decrease by 20 per cent?

After the interview, you can then work out the specific numbers from the current head count and go back to the interviewee for confirmation.

Healthy Life Health Service demand forecasting

A detailed demand forecasting table is shown in Chart 3 and Figure 2. This provides an overview for the whole agency over the entire forecast period. It shows, for example:

- For emergency, a slight increase in FTE has been forecast, from the current level of ten FTE to a forecast of 14 in Year 5. In addition to the extra FTE, further training will be required to equip nurses with skills to manage more emergency presentations.
- A new diabetes clinic is to be introduced to Healthy Life, requiring an additional four FTE in Year 1, and a total of six over the five-year forecast period.
- Primary care is to be increased within Healthy Life, requiring an additional one and a half FTE in Year 3, and a total of nine and a half FTE over the five-year forecast period.
- In total, Healthy Life has forecast an increase of 12 per cent FTE over five years, from the current 57.5 FTE to 64.5 FTE in five years.
- Depending on the composition of job roles within this total FTE, there may be an increase, decrease or stability in the staffing budget to support these forecasts. During the demand forecasting stage, managers need to be mindful of budget considerations.

Chart 3: Healthy Life Health Service – demand forecast by service

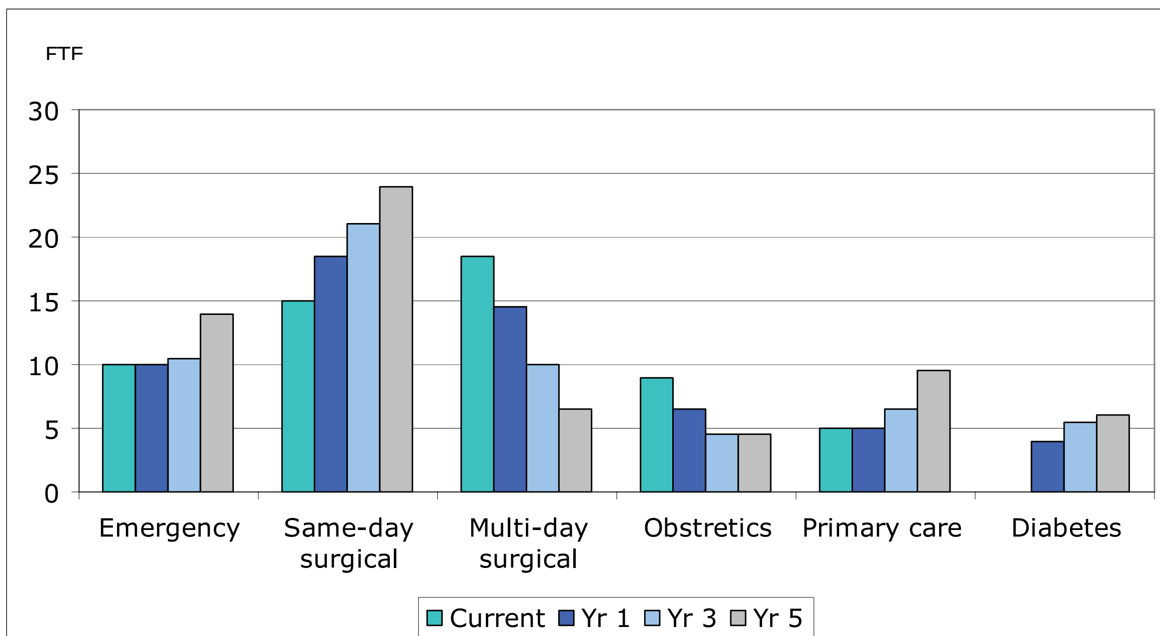


Figure 2: Healthy Life Health Service – demand forecast spreadsheet

		Current Staffing Levels	Forecasting Staff Numbers		
Service Stream	**Job Role**	**Current FTE**	**1 Years (FTE)**	**3 Years (FTE)**	**5 Years (FTE)**
Emergency	VMO	1	3	3	3.5
	Medical	3	0	0	0
	Nurse (Division 1)	2	3	3.5	4.5
	Nurse (Division 2)	3	4	4	5
	Allied Health	0	0	0	1
	Other (Nurse's Assistant)	1	0	0	0
	Other 2 (specify role)	0	0	0	0
	Other 3 (specify role)	0	0	0	0
	Total	**10**	**10**	**10.5**	**14**
Same-day Surgical	VMO	0.5	0.5	0.5	1
	Medical	2	1.5	1.5	1.5
	Nurse (Division 1)	4.5	7	8	9
	Nurse (Division 2)	5	6	7	8
	Allied Health	2	2.5	3	3.5
	Other (Nurse's Assistant)	1	1	1	1
	Other 2 (specify role)	0	0	0	0
	Other 3 (specify role)	0	0	0	0
	Total	**15**	**18.5**	**21**	**24**
Multi-day Surgical	VMO	1	1	1	1
	Medical	4	3	2	1
	Nurse (Division 1)	1.5	1.5	1.5	1
	Nurse (Division 2)	3	2	2	1
	Allied Health	6	4	3	2
	Other (Nurse's Assistant)	2	2	0	0
	Other 2 (specify role)	1	1	0.5	0.5
	Other 3 (specify role)	0	0	0	
			0	0	0
	Total	**18.5**	**14.5**	**10**	**6.5**

Note: VMO – Visiting medical officer

		Current Staffing Levels	Forecasting Staff Numbers		
Service Stream	**Job Role**	**Current FTE**	**1 Years (FTE)**	**3 Years (FTE)**	**5 Years (FTE)**
Obstetrics	VMO	0	0	0	0
	Medical	1	0.5	0.5	0.5
	Nurse (Division 1)	2	1	1	1
	Nurse (Division 2)	2	2	1	1
	Allied Health	2	2	1	1
	Other (Nurse's Assistant)	2	1	1	1
	Other 2 (specify role)	0	0	0	0
	Other 3 (specify role)	0	0	0	0
	Total	**9**	**6.5**	**4.5**	**4.5**
Primary Care	VMO	0	0	0	0
	Medical	0	0	0	0
	Nurse (Division 1)	3	3	4	4.5
	Nurse (Division 2)	2	1	1	3
	Allied Health	0	1	1.5	2
	Other (Nurse's Assistant)	0	0	0	0
	Other 2 (specify role)	0	0	0	0
	Other 3 (specify role)	0	0	0	0
	Total	**5**	**5**	**6.5**	**9.5**
Diabetes	VMO	0	0	0	0
	Medical	0	0	0	0
	Nurse (Division 1)	0	1	1	1
	Nurse (Division 2)	0	2	3	3
	Allied Health	0	1	1.5	2
	Other (Nurse's Assistant)	0	0	0	0
	Other 2 (specify role)	0	0	0	0
	Other 3 (specify role)	0	0	0	0
	Total	**0**	**4**	**5.5**	**6**
PERMANENT TOTAL WORKFORCE		**57.5**	**58.5**	**58**	**64.5**

Note: VMO – Visiting medical officer

4.4.3 Forecasting skill requirements

During the demand forecasting workshop, you also need to forecast skill requirements. Generally, a qualitative approach is used for this. There are several methods available to identify skill availability. For example, a skills audit of current staff could be undertaken and existing skills 'mapped' against future requirements.

Healthy Life Health Service uses a less complex approach, but one that suits its needs given available resources. Firstly, Healthy Life identifies its critical skills, then rates the extent to which these skills currently exist within the agency, using the following scale:

1 = Skills exist now.

2 = Skill GAPS exist and programs are in place to address these.

3 = Skill GAPS exist but no programs are currently planned to close gaps.

Healthy Life then forecasts how demand for these skills will change over the forecast period. The outcomes are shown in Table 8.

Table 8: Healthy Life Health Service – demand forecasting for skills

Critical skills	Current supply rating	How will change in future
Surgical	1	There will be a shift in skills needs as a result of an increase in same-day procedures.
Advanced nursing competencies[7]	2	These competencies will be increasingly important as nurses extend their roles in service delivery.
Advanced emergency nursing competencies	3	The service needs to increase the capacity of nursing due to changes in availability of Visiting medical officers and demand in emergency care.
Obstetric and intrapartum competencies	1	There will be a decreasing need for these competencies.
Antenatal, postnatal and domiciliary skills	3	These competencies need to be enhanced.
Advanced diabetes management	Not known; possibly 3	The service needs dieticians, health educators for prevention programs and chronic disease managers.
Primary care	1	The service needs to keep abreast of developments in the field.
Teamwork	2	Given the increasingly multidisciplinary nature of health service delivery, effective teamwork skills are critical. Healthy Life has had team working skills programs in place for the past one to two years but may need to extend these to all staff and continually update in line with changes to job roles.

7 These may be context-specific.

This assessment suggests the following issues for Healthy Life:

- the need to identify whether there are different skills required in same-day surgical compared with multi-day surgical, and to ensure staff transferring to same-day surgical have development plans to acquire these skills
- the need to assess whether any existing staff have advanced emergency nursing, advanced diabetes management, or primary care competencies, and to review development plans in accordance with future needs
- the need to ensure the appropriate level of obstetric and intrapartum skills are maintained and that antenatal, postnatal and domiciliary skills are enhanced
- the need to review status of current teamwork (multidisciplinary working) skills, and to review development plans accordingly
- the need to recruit staff with advanced diabetes management and dietetics competencies.

4.5 What is the outcome of demand forecasting?

Following the demand forecasting meeting, the project team compiles a report summarising workshop outcomes and forwards it to all workshop participants for confirmation or clarification. In some cases there may be multiple iterations of this process as the various views of stakeholders are clarified and consensus is reached.

5. Step 3: Supply forecasting

5.1 What is it?

Supply forecasting is a process of estimating how many current employees are likely to be available to the agency in the future. For example, how many of our current employees are likely to leave or retire over the forecast period? Or how many, and what type of, skills will we have left?

5.2 When is it done?

Supply forecasting can be undertaken concurrently with Steps 1 to 3; however, it needs to be completed before Step 4, 'Gap analysis and strategy development'.

5.3 Who is involved?

This step of the workforce planning process may be undertaken by the project manager or team and does not normally require involvement of other stakeholders. Much of supply forecasting involves data interrogation, based on automated or semi-automated extraction of data from the agency's human resources information system or payroll system.

5.4 What is the process?

5.4.1 Introduction

There are two components in supply forecasting—internal and external—as shown in Table 9.

Table 9: Supply forecasting components

Component	Details	Essential/not essential
Internal supply forecasting	Estimate numbers of current staff likely to be available in each job role at each of the forecast periods based on trends in turnover, anticipated retirements, internal transfers and promotions, and trends in overtime and absenteeism.	Essential
External supply forecasting	Research the likely availability of workers in the external labour force.	Desirable but not essential

Internal supply forecasting is discussed next.

5.4.2 Internal supply forecasting

This step involves estimating the numbers of current staff likely to be available at each of the forecast periods, based on trends in separation rates, anticipated retirements and, potentially, internal transfers and promotions, overtime rates and absenteeism.

The following ***core information*** is required:

- **voluntary separation rate**. Review resignation rates over the past two to three years, and decide whether there are any reasons that these would change in the future (for example, labour market conditions, change in management, agency change). If no significant changes are anticipated, average the results over the two to three years to determine a rate to apply to the forecast period. If significant changes are anticipated, estimate a likely turnover rate to apply to the forecast period. Apply the appropriate rate to current staffing numbers in order to estimate how many will leave in each year of the forecast period
- **retirements and age profile of current workforce**. Review retirement patterns over the past three to five years. Is there a pattern to the age of retirement? Consider the impact of superannuation schemes on the likely retirement age. Review patterns in terms of gender because quite often females will not have had the same continuity of employment and accumulated as much superannuation as males. Determine an 'average retirement age' for the purpose of this exercise and, based on the current workforce age profile, project number of retirements over the forecast period.

Note: If you do not have historical retirement data, you may wish to ask employees about their retirement intentions. This can be done directly or through means such as 'career development surveys' or general employee surveys.

Supplementary measures might include:

- involuntary separations (redundancies, dismissals)
- unscheduled absence (sick leave and workers compensation)
- maternity leave absences
- overtime
- long service leave.

If recent trends are expected to remain fairly stable, it may not be necessary to include these supply factors in your forecasts. For example, staff are regularly absent for reasons including sickness, parental leave and long service leave, and the agency generally 'over staffs' to deal with these irregular but not unexpected absences. So, if the level of recent absences is expected to remain fairly stable, there is no real need to undertake supplementary supply forecasts; however, if levels are expected to change (for example, an increase in proportion of staff eligible for long service leave), then you may need to include forecasts of anticipated absences.

This information is entered into a supply forecasting spreadsheet (see template at Appendix 9).

Healthy Life Health Service – internal supply forecasting

Chart 4 and Figure 3 show an example for Healthy Life Health Service. Issues to note from the figure include:

- Due to a combination of terminations (resignations) and retirements, Healthy Life's FTE is forecast to reduce from the current level of 57.5 FTE to 51.7 in Year 1, to 38.7 in Year 3 and to 21.3 in Year 5 (assuming no replacement action).
- Retirements will have most effect among division 1 and division 2 nurses, with seven and nine retirements respectively over the five years. Medical and allied health are forecast to have three and five retirements respectively within five years.
- Employee-initiated terminations are significantly highest among division 1 nurses, with 5.9 terminations forecast over five years.

Chart 4: Healthy Life Health Service – supply forecast by service

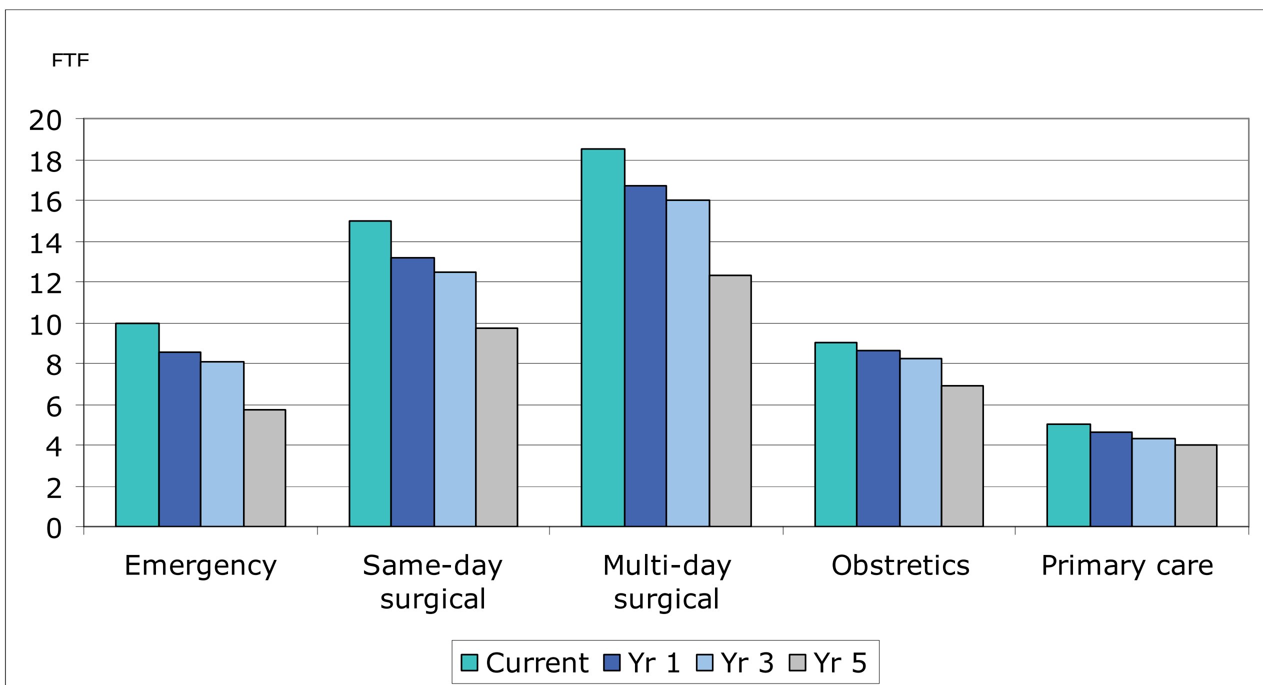


Figure 3: Healthy Life Health Service – supply forecast spreadsheet

Service Stream	Job Role	Current FTE	Term Rate (%)	Terminations			Retirements			Total Supply		
				1	3	5	1	3	5	1	3	5
Emergency	VMO	1.0	2.00%	0.0	0.0	0.0				1.0	1.0	1.0
	Medical	3.0	6.00%	0.2	0.5	0.8	1.0	2.0	2.0	1.8	0.5	0.2
	Nurse (Division 1)	2.0	12.00%	0.2	0.6	0.9		1.0	1.0	1.8	0.4	0.1
	Nurse (Division 2)	3.0	2.00%	0.1	0.2	0.3			2.0	2.9	2.8	0.7
	Allied Health	0.0	4.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other (Nurse's Assistant)	1.0	0.00%	0.0	0.0	0.0				1.0	1.0	1.0
	Other 2 (specify role)	0.0	5.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other 3 (specify role)	0.0	0.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Total	**10.0**		**0.5**	**1.3**	**2.0**	**1.0**	**3.0**	**5.0**	**8.5**	**5.7**	**3.0**
Same-day Surgical	VMO	0.5	2.00%	0.0	0.0	0.0				0.5	0.5	0.5
	Medical	2.0	6.00%	0.1	0.3	0.5			1.0	1.9	1.7	0.5
	Nurse (Division 1)	4.5	12.00%	0.5	1.4	2.0	1.0	1.0	3.0	3.0	2.1	0.0
	Nurse (Division 2)	5.0	2.00%	0.1	0.3	0.5		2.0	3.0	4.9	2.7	1.5
	Allied Health	2.0	4.00%	0.1	0.2	0.4			1.0	1.9	1.8	0.6
	Other (Nurse's Assistant)	1.0	0.00%	0.0	0.0	0.0				1.0	1.0	1.0
	Other 2 (specify role)	0.0	5.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other 3 (specify role)	0.0	0.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Total	**15.0**		**0.8**	**2.2**	**3.4**	**1.0**	**3.0**	**8.0**	**13.2**	**9.8**	**4.1**

Note: VMO – Visiting medical officer

Service Stream	Job Role	Current FTE	Term Rate (%)	Terminations			Retirements			Total Supply		
				1	3	5	1	3	5	1	3	5
Multi-day Surgical	VMO	1.0	2.00%	0.0	0.1	0.1				1.0	0.9	0.9
	Medical	4.0	6.00%	0.2	0.7	1.0				3.8	3.3	3.0
	Nurse (Division 1)	1.5	12.00%	0.2	0.5	0.7				1.3	1.0	0.8
	Nurse (Division 2)	3.0	2.00%	0.1	0.2	0.3		1.0	2.0	2.9	1.8	0.7
	Allied Health	6.0	4.00%	0.2	0.7	1.1	1.0	3.0	4.0	4.8	2.3	0.9
	Other (Nurse's Assistant)	2.0	0.00%	0.0	0.0	0.0			1.0	2.0	2.0	1.0
	Other 2 (specify role)	1.0	5.00%	0.0	0.1	0.2				1.0	0.9	0.8
	Other 3 (specify role)	0.0	0.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Total	**18.5**		**0.8**	**2.2**	**3.4**	**1.0**	**4.0**	**7.0**	**16.7**	**12.3**	**8.1**
Obstetrics	VMO	0.0	2.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Medical	1.0	6.00%	0.1	0.2	0.3				0.9	0.8	0.7
	Nurse (Division 1)	2.0	12.00%	0.2	0.6	0.9		1.0	1.0	1.8	0.4	0.1
	Nurse (Division 2)	2.0	2.00%	0.0	0.1	0.2			1.0	2.0	1.9	0.8
	Allied Health	2.0	4.00%	0.1	0.2	0.4				1.9	1.8	1.6
	Other (Nurse's Assistant)	2.0	0.00%	0.0	0.0	0.0				2.0	2.0	2.0
	Other 2 (specify role)	0.0	5.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other 3 (specify role)	0.0	0.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Total	**9.0**		**0.4**	**1.1**	**1.7**	**0.0**	**1.0**	**2.0**	**8.6**	**6.9**	**5.3**

Service Stream	Job Role	Current FTE	Term Rate (%)	Terminations			Retirements			Total Supply		
				1	3	5	1	3	5	1	3	5
Primary Care	VMO	0.0	2.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Medical	0.0	6.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Nurse (Division 1)	3.0	12.00%	0.3	0.9	1.4			2.0	2.7	2.1	0.0
	Nurse (Division 2)	2.0	2.00%	0.0	0.1	0.2			1.0	2.0	1.9	0.8
	Allied Health	0.0	4.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other (Nurse's Assistant)	0.0	0.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other 2 (specify role)	0.0	5.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other 3 (specify role)	0.0	0.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Total	**5.0**		**0.4**	**1.0**	**1.5**	**0.0**	**0.0**	**3.0**	**4.6**	**4.0**	**0.8**
Diabetes	VMO	0.0	2.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Medical	0.0	6.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Nurse (Division 1)	0.0	12.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Nurse (Division 2)	0.0	2.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Allied Health	0.0	4.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other (Nurse's Assistant)	0.0	0.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other 2 (specify role)	0.0	5.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Other 3 (specify role)	0.0	0.00%	0.0	0.0	0.0				0.0	0.0	0.0
	Total	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PERMANENT TOTAL WORKFORCE		**57.5**		**2.8**	**7.8**	**12.1**	**3.0**	**11.0**	**25.0**	**51.7**	**38.7**	**21.3**

5.4.3 External supply forecasting

The agency's ability to continue to source staff to replace turnover or grow the business depends on the availability of resources externally in the general labour market. Thus, for 'critical' job roles, more information on the availability of a labour supply source external to the agency should be explored. However, if you are just starting out with workforce planning, you may wish to postpone this step until you have completed the core steps to your satisfaction.

The metrics in Table 10 can be used to forecast the likely availability of skilled people in the external labour force.

Table 10: External supply forecasting – considerations and example metrics

External supply considerations	Example metrics	Example source
Can the agency attract people with the required skills? (Consider using nurse bank and agency staff if these staff members form part of the regular staff.)	• Recruitment response ratio (number of applications per job vacancy) • External acceptance rate (percentage of first offer candidates who accept the job) • Time to fill (average calendar days between posting job vacancy and successful candidate accepting the job offer)	• Human resources information system • Payroll systems (although these data are not always useful)
How is the skill composition of the workforce changing?	• Quantitative information	Various sources, for example: • Australian Bureau of Statistics • Department of Employment and Workplace Relations • National Institute for Labour Studies • Graduate Careers Council of Australia • Local information networks • Universities
What does external data reveal about industry and occupational trends?	• Separation rate • Staffing rate – age • Staffing rate – tenure • Staffing rate – gender • Staffing rate – diversity • Graduation rates/numbers from universities and TAFEs • Average remuneration per employee • Expectations and perceptions of the contemporary and emerging workforces	• Department of Human Services workforce studies, which are available at: http://intranet_2.csv.au/serviceplanning/ • http://www.health.vic.gov.au/workforce/index.htm • A recent example departmental report is *Nurses in Victoria: a supply and demand analysis 2003–04 to 2011–12* • Department of Human Services' Service and Workforce Planning Branch • National human resources benchmarking programs such as Infohrm (www.infohrm.com) • Australian Bureau of Statistics (www.abs.gov.au) • Department of Education, Science and Technology (www.dest.gov.au) • Department of Employment and Workplace Relations (www.dewr.gov.au) • Human resources and other business literature • Professional associations • Rural human resources forums
What legislation changes will affect workforce availability?	• Qualitative information	• Industrial Relations Commission • Health Legal • Victorian Health Industries Association • Victorian Employers' Chamber of Commerce and Industry • Department of Human Services • Local lawyers
What changes in economic conditions affect workforce availability?	• Workforce participation rate • Unemployment rate • Consumer Price Index	• Australian Bureau of Statistics
What societal changes affect the type of workforce that will be available in the future?	• Qualitative information	• A range of societal, business and human resources literature addressing issues such as generational change (X/Y generations, trends to 'downshifting), 'sea and tree change', immigration, globalisation, and so on • Agency staff

5.5 What is the outcome?

There are two possible outcomes from this step:

- **essential:** a populated supply forecasting spreadsheet
- **not essential:** a report on likely availability of people in relevant job roles in the external labour force.

These outcomes are used in Step 4, ‘Gap analysis and strategy development’.

6. Step 4: Gap analysis and strategy development

6.1 What is it?

Forecasts of demand and internal supply are compared to provide a picture of an agency's staffing surpluses and deficits. This process is commonly referred to as 'gap analysis'. Once the extent of the gaps has been determined and prioritised, strategies can be developed and implemented so the agency can act now to address future staffing needs.

Workforce planning focuses on where significant gaps in skills and in numbers are likely to occur in the future or where gaps occur in critical job roles. With limited resources, strategies are developed to address critical gaps, not all gaps. By focusing attention on gaps in critical job roles, the return on the investment of the resources required to implement the strategy will be more significant. Less critical gaps can be addressed in the normal course of workforce management and development at the business unit or team level.

6.2 When is it done?

Typically, gap analysis and strategy development are undertaken as soon as practicable after all previous steps have been completed.

6.3 What is the process?

The project manager or project team reviews demand and supply gaps and compiles an overview of potential strategies. Then relevant stakeholders attend a gap analysis and strategy development workshop where they confirm and prioritise gap issues and discuss and agree strategies in response to priority issues. These steps are explained below.

6.4 Review demand and supply gaps

The project manager or project team populates the gap analysis spreadsheet (Appendix 10), which combines the demand and supply forecasts.

Healthy Life Health Service gap analysis

Chart 5 and Figure 4 continue the example for Healthy Life Health Service by comparing the forecast demand with net supply (from Steps 2 and 3) in order to determine the gap. Focusing on the gap at Year 1, Healthy Life has projected a shortfall of 6.8 FTE overall, with 5.3 of these in same-day surgical and four FTE required to introduce the diabetes clinic. However, there are surpluses in multi-day surgical and obstetrics.

The gap continues in increase in Year 3, with a shortage of 19.3 FTE. By Year 5, retirements will have significantly reduced the internal supply of staff, with the gap widening to 43.2.

Considering individual services, the gaps are most significant for same-day surgical and emergency, with shortages of 19.9 and 11.0 respectively.

Chart 5: Healthy Life Health Service – gap

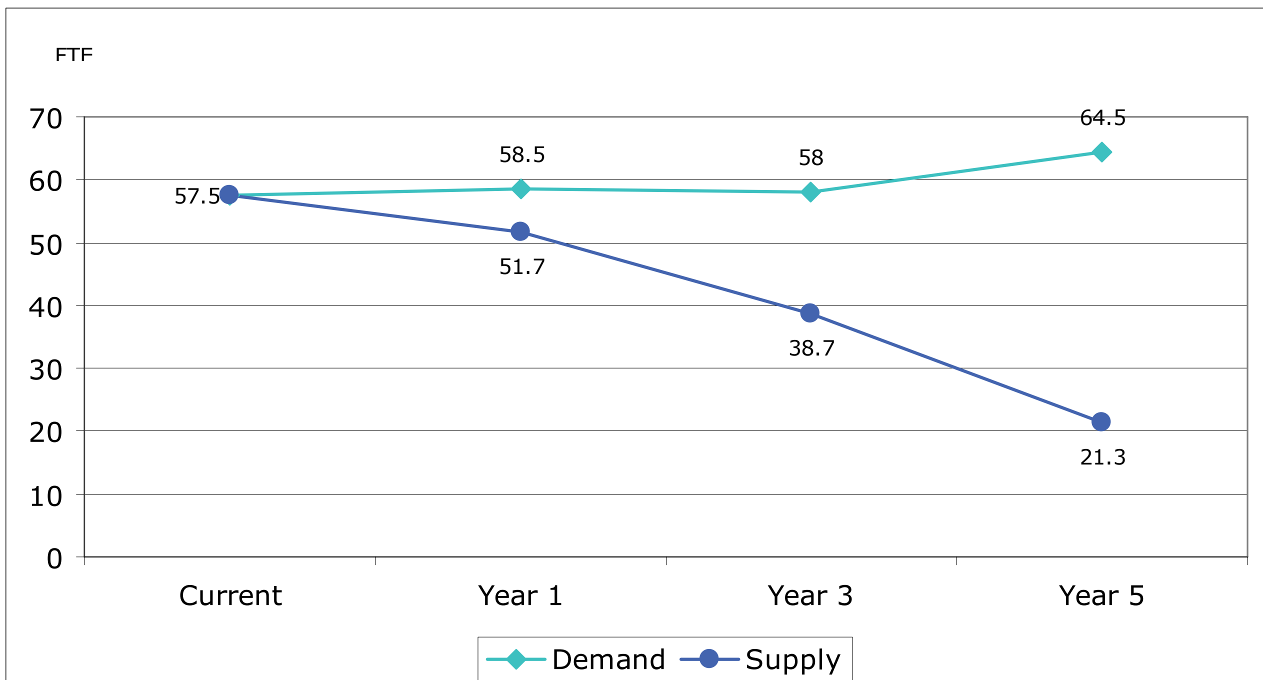


Figure 4: Healthy Life Health Service – gap analysis spreadsheet

Service Stream	Job Role	Current FTE	Net Demand			Net Supply			Gap		
			1	3	5	1	3	5	1	3	5
Emergency	VMO	1.0	3.0	3.0	3.5	1.0	1.0	1.0	**-2.0**	**-2.0**	**-2.5**
	Medical	3.0	0.0	0.0	0.0	1.8	0.5	0.2	**1.8**	**0.5**	**0.2**
	Nurse (Division 1)	2.0	3.0	3.5	4.5	1.8	0.4	0.1	**-1.2**	**-3.1**	**-4.4**
	Nurse (Division 2)	3.0	4.0	4.0	5.0	2.9	2.8	0.7	**-1.1**	**-1.2**	**-4.3**
	Allied Health	0.0	0.0	0.0	1.0	0.0	0.0	0.0	**0.0**	**0.0**	**-1.0**
	Other (Nurse's Assistant)	1.0	0.0	0.0	0.0	1.0	1.0	1.0	**1.0**	**1.0**	**1.0**
	Other 2 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Other 3 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Total	**10.0**	**10.0**	**10.5**	**14.0**	**8.5**	**5.7**	**3.0**	**-1.5**	**-4.8**	**-11.0**
Same-day Surgical	VMO	0.5	0.5	0.5	1.0	0.5	0.5	0.5	**0.0**	**0.0**	**-0.5**
	Medical	2.0	1.5	1.5	1.5	1.9	1.7	0.5	**0.4**	**0.2**	**-1.0**
	Nurse (Division 1)	4.5	7.0	8.0	9.0	3.0	2.1	0.0	**-4.0**	**-5.9**	**-9.0**
	Nurse (Division 2)	5.0	6.0	7.0	8.0	4.9	2.7	1.5	**-1.1**	**-4.3**	**-6.5**
	Allied Health	2.0	2.5	3.0	3.5	1.9	1.8	0.6	**-0.6**	**-1.2**	**-2.9**
	Other (Nurse's Assistant)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	**0.0**	**0.0**	**0.0**
	Other 2 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Other 3 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Total	**15.0**	**18.5**	**21.0**	**24.0**	**13.2**	**9.8**	**4.1**	**-5.3**	**-11.2**	**-19.9**

Note: VMO – Visiting medical officer

Service Stream	Job Role	Current FTE	Net Demand			Net Supply			Gap		
			1	3	5	1	3	5	1	3	5
Multi-day Surgical	VMO	1.0	1.0	1.0	1.0	1.0	0.9	0.9	**0.0**	**-0.1**	**-0.1**
	Medical	4.0	3.0	2.0	1.0	3.8	3.3	3.0	**0.8**	**1.3**	**2.0**
	Nurse (Division 1)	1.5	1.5	1.5	1.0	1.3	1.0	0.8	**-0.2**	**-0.5**	**-0.2**
	Nurse (Division 2)	3.0	2.0	2.0	1.0	2.9	1.8	0.7	**0.9**	**-0.2**	**-0.3**
	Allied Health	6.0	4.0	3.0	2.0	4.8	2.3	0.9	**0.8**	**-0.7**	**-1.1**
	Other (Nurse's Assistant)	2.0	2.0	0.0	0.0	2.0	2.0	1.0	**0.0**	**2.0**	**1.0**
	Other 2 (specify role)	1.0	1.0	0.5	0.5	1.0	0.9	0.8	**0.0**	**0.4**	**0.3**
	Other 3 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
			0.0	0.0	0.0				**0.0**	**0.0**	**0.0**
	Total	**18.5**	**14.5**	**10.0**	**6.5**	**16.7**	**12.3**	**8.1**	**2.2**	**2.3**	**1.6**
Obstetrics	VMO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Medical	1.0	0.5	0.5	0.5	0.9	0.8	0.7	**0.4**	**0.3**	**0.2**
	Nurse (Division 1)	2.0	1.0	1.0	1.0	1.8	0.4	0.1	**0.8**	**-0.6**	**-0.9**
	Nurse (Division 2)	2.0	2.0	1.0	1.0	2.0	1.9	0.8	**0.0**	**0.9**	**-0.2**
	Allied Health	2.0	2.0	1.0	1.0	1.9	1.8	1.6	**-0.1**	**0.8**	**0.6**
	Other (Nurse's Assistant)	2.0	1.0	1.0	1.0	2.0	2.0	2.0	**1.0**	**1.0**	**1.0**
	Other 2 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Other 3 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Total	**9.0**	**6.5**	**4.5**	**4.5**	**8.6**	**6.9**	**5.3**	**2.1**	**2.4**	**0.8**

Service Stream	Job Role	Current FTE	Net Demand			Net Supply			Gap		
			1	3	5	1	3	5	1	3	5
Primary Care	VMO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Medical	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Nurse (Division 1)	3.0	3.0	4.0	4.5	2.7	2.1	0.0	**-0.3**	**-1.9**	**-4.5**
	Nurse (Division 2)	2.0	1.0	1.0	3.0	2.0	1.9	0.8	**1.0**	**0.9**	**-2.2**
	Allied Health	0.0	1.0	1.5	2.0	0.0	0.0	0.0	**-1.0**	**-1.5**	**-2.0**
	Other (Nurse's Assistant)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Other 2 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Other 3 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Total	**5.0**	**5.0**	**6.5**	**9.5**	**4.6**	**4.0**	**0.8**	**-0.4**	**-2.5**	**-8.7**
Diabetes	VMO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Medical	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Nurse (Division 1)	0.0	1.0	1.0	1.0	0.0	0.0	0.0	**-1.0**	**-1.0**	**-1.0**
	Nurse (Division 2)	0.0	2.0	3.0	3.0	0.0	0.0	0.0	**-2.0**	**-3.0**	**-3.0**
	Allied Health	0.0	1.0	1.5	2.0	0.0	0.0	0.0	**-1.0**	**-1.5**	**-2.0**
	Other (Nurse's Assistant)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Other 2 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Other 3 (specify role)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.0**	**0.0**
	Total	**0.0**	**4.0**	**5.5**	**6.0**	**0.0**	**0.0**	**0.0**	**-4.0**	**-5.5**	**-6.0**
PERMANENT TOTAL WORKFORCE		**57.5**	**58.5**	**58.0**	**64.5**	**51.7**	**38.7**	**21.3**	**-6.8**	**-19.3**	**-43.2**

6.5 Overview of potential strategies

6.5.1 Introduction

Having identified the issues emerging from the initial demand and supply gap analysis, the project manager or team should research strategies to be reviewed during the gap analysis and strategy development workshop. The following sections relate to this research, and suggest a number of different strategies that may be useful to consider.

6.5.2 Key points about strategy development

A significant research base shows that good employment and human resources practice is directly linked to improved staff wellbeing and improved care for patients. Model employers attract, recruit and retain the best staff with the best skills and they can deliver the best services as a result. They can also attract 'hard to reach' groups. Good work–life balance and flexible working and healthy workplace policies are important to ensure staff are enabled to work to their full potential and have satisfying and rewarding careers.

Leadership that demonstrates a commitment to good employment practice is essential.

In developing strategies to address the gaps, the key words **integration** and **innovation** continue to apply.

Integration:	**Innovation:**
• With service and business planning • With community or regional planning • With other public and private health services • With legislative provisions	• Working differently • Flexible roles – focus on competencies rather than traditional professional boundaries • Automation • Reducing or changing demand • New work configurations – sharing specialist expertise across agencies

6.5.3 A framework for strategy development

To close the gap between workforce demand and supply, there are three broad approaches you can use:

- Reduce demand for health services.
- Find more cost-effective means of providing health services.
- Increase supply of health service workers.

Within each approach, there is a range of strategies you can consider, depending on the nature of the 'gap'. Table 11 summarises broad strategy areas within each approach, and the strategies are expanded in Appendix 11.

Table 11: Framework for strategy development

Broad approaches	Broad strategy areas
Reduce demand for health services.	• Managing public and political expectations of health service provision • Preventive measures – may shift skill requirements from acute to primary or community
Find different ways of providing health services.	• Encourage innovation • Service and role review • Information technology • Influence training of future staff • Community issues

Increase supply of health service workers.	• Recruitment
	• Retention:
	  ▪ Continuing professional development
	  ▪ Organisational climate (monitor and respond)
	  ▪ Changing roles and up-skilling
	  ▪ Professional development and review
	  ▪ Bonding
	• Agency workers
	• Volunteer workers
	• Retraining

6.6 Gap analysis and strategy development workshop

When these preparatory steps have been completed, the project manager or project team facilitates the gap analysis and strategy development workshop involving relevant stakeholders (see Section 3.4). A standard meeting outline is shown in Exhibit 2.

Exhibit 2: Gap analysis and strategy development workshop outline

Introduce participants and clarify outcomes required from the workshop.

Review available information: current workforce profile, gap analysis, external labour force availability (if available).

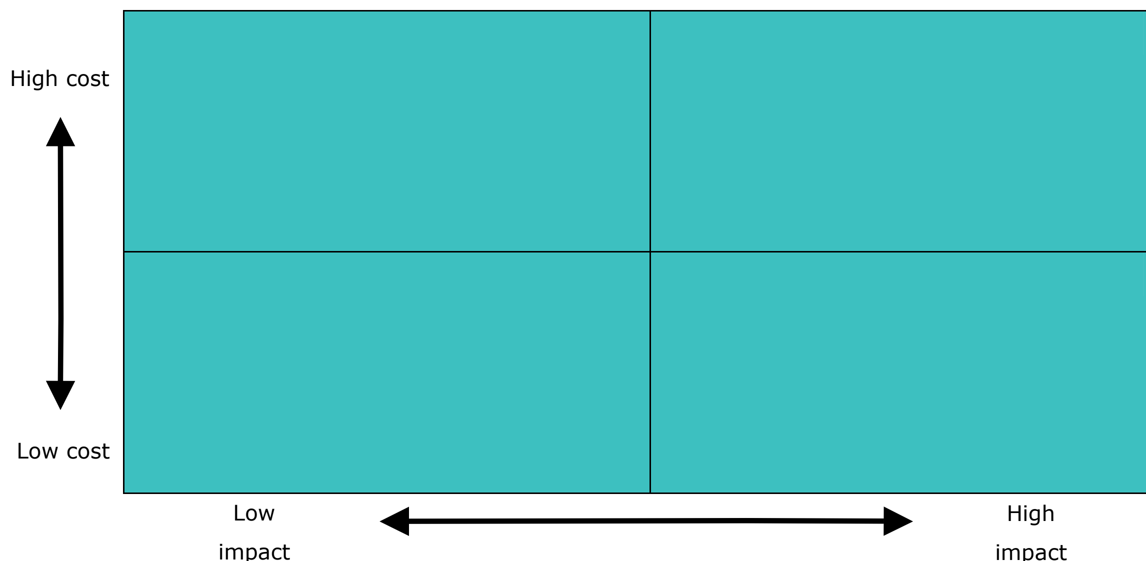
- Confirm and prioritise workforce issues identified from the analysis (see Section 7.4).
- Agree which issues to cover at the workshop.
- Review possible strategies, for example:
  - activities already underway at the agency
  - activities that have been tried before
  - activities undertaken by other agencies
  - additional activities to be considered.
- Discuss relevant strategies and action planning.
- Summarise and discuss next steps.

6.7 Prioritise workforce issues identified from the gap analysis

Determining priorities often involves trade-offs (such as, *'If we increase resources to this service then that service cannot be developed at this point')* so it may be useful to involve community stakeholders in the prioritisation process.

There are several techniques the project manager or team can use to prioritise the gaps during the gap analysis and strategy development workshop. One method is for stakeholders to map the significant gaps onto an impact/cost matrix as shown in Figure 5. For example, gaps plotted in the top right hand corner will have a large impact on service delivery and can be expected to require significant resources to address. Gaps in the 'low impact/high cost' quadrant may be a lesser priority. The gaps in the 'high impact/low cost' quadrant may be highlighted for immediate action while the agency considers alternatives for addressing the 'high impact/high cost' gaps.

Figure 5: Impact/cost prioritisation matrix



Another simple method is to use a process in which relevant stakeholders allocate a fixed hypothetical resource, say 100 points, to the identified gaps, thereby indicating their assessment of the priority of addressing each gap. These ratings can be averaged, with the highest averages indicating the highest priority issues to address. Table 12 provides a template for this.

Table 12: Prioritising workforce gaps

Gaps	Rating						Average
	Rater #1	Rater #2	Rater #3	Rater #4	Rater #5	Rater #6	
Total for each rater	**100**	**100**	**100**	**100**	**100**	**100**	**100**

In Section 7.4 we overviewed the main workforce gaps for Healthy Life Health Service. During a gap analysis and strategy development workshop, Healthy Life's departmental heads undertook a simple prioritisation exercise (using Table 12) to identify five issues as the critical workforce issues facing the agency over the next five years (Table 13).

Table 13: Healthy Life Health Service – prioritising workforce gaps

Gaps	Rating						Average
	Rater #1	Rater #2	Rater #3	Rater #4	Rater #5	Rater #6	
Same-day surgery	30	15	20	30	30	30	25.8
Turnover of nurse division 1	25	30	30	25	20	25	25.8
Different role responsibilities	20	10	25	20	25	15	19.2
Emergency	15	35	15	10	15	20	18.3
Diabetes	10	10	10	15	10	10	14.2
Total for each rater	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The most important gaps in Health Life have been determined as being:

- immediate and significant shortages in same-day surgery
- high turnover rates of nurse division 1
- skills development to equip staff to undertake greater or different role responsibilities (for example, advancing nurse practice or nurse practitioner role)
- projected shortages in emergency department.

The gaps for the diabetes clinic were considered of lower priority because this new service has been in the pipeline for several years and plans have been or soon will be implemented to staff this unit. However, the human resources or managerial resources necessary to recruit, select, induct and train these new staff are considered a priority issue that needs to be carefully considered.

Healthy Life's managers realised that each of these issues requires a range of complementary human resources initiatives. Accordingly, they developed an issue/initiative matrix, shown in Table 14.

Table 14: Healthy Life Health Service – issue/initiative matrix

Issues	Recruitment (internal and external)	Retention		Role and organisational review
		Various	Continuing professional development	
Shortages in same-day surgery and emergency	Collaborate with regional university and health services to develop strategies to attract skilled workers to the region.	Two multi-day surgical staff are due to retire within the next 12 months. Negotiate potential for continuing beyond this time in same-day surgical. Provide flexible arrangements.	Redeploy staff from multi-day surgical to same-day surgical.	Support emergency care nurse practitioner candidate. Establish transfer and telephone advice communication arrangements with neighbouring health services.
High turnover in nurse division 1	Ensure recruitment practices include realistic preview of life in the region and the organisation.	Identify causes of turnover through post-exit and pre-exit studies. Address priority issues identified in employee opinion survey.	Examine continuing professional development aspirations of current and likely future staff in this area.	Review nursing roles based on analysis of turnover reasons.
The need to increase and diversify nursing skills	Offer scholarships or bursaries.	Implement 'Zero Tolerance for Violence' policy	Partner with local universities and other agencies to develop appropriate continuing professional development programs.	Implement cultural change program.
The need to recruit and induct a large number of new staff in the next 12 months	Investigate the possibility of sharing recruitment and induction services with other local agencies.		Develop induction, transition and continuing professional development strategies for new staff.	Investigate optimum roles of new recruits so that staff can undertake highest order roles possible.

6.8 Gap analysis – the feedback loop

Service planning drives workforce planning; however, critical shortages in some areas of the rural health workforce, or unsuccessful strategies to secure the right workforce to meet the optimal service mix as articulated in the service plan, can impact on an agency's ability to implement their service plan. For example, your service and implementation plan may identify that your agency should establish a podiatry service within one to two years; however, initial strategies to recruit a podiatrist have been unsuccessful. As a result, you may need to revisit your service implementation plan and adjust the timeline for establishing a podiatry service and determine what arrangements will be made in the interim to address the need in the community for podiatry services. Alternative arrangements may include establishing a foot care clinic using an allied health assistant or establishing referral relationships with another service provider.

Conversely, an agency should not provide a service that is inconsistent with its service plan just because a particular skill set exists within the agency. For more information on this see *Credentialing and privileging (defining the scope of clinical practice) for medical practitioners in Victorian rural health services – a policy handbook.*[8]

6.9 What is the outcome?

The main outcome from the gap analysis and strategy development workshop is broad agreement on a range of strategies that address the agency's critical workforce challenges. The next steps will be to:

- In a workforce plan for the agency, document the process and decisions reached. Appendix 12 provides an example workforce plan based on the Healthy Life Health Service example used throughout these guidelines.
- Develop detailed action plans for each of the strategies, including accountabilities, budgets, timeframes and performance indicators.
- Implement the strategies.
- Evaluate and monitor (see Step 5).

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[8] Department of Human Services 2006. See www.health.vic.gov.au/ruralhealth.

7. Step 5: Evaluating and monitoring

7.1 What is it?

These guidelines have emphasised that workforce planning is an ongoing process that should be linked to the agency's annual service or business planning cycle. A component of environmental scanning (Step 1 of the workforce planning process) should be reviewing the success of previously implemented strategies, as well as highlighting emerging issues that will require the development of new solutions.

7.2 When is it done?

It is important to monitor the currency of workforce plans at six-monthly intervals. One of these six-monthly reviews is in fact the Step 1 environmental scanning of the formal, annual workforce planning cycle.

7.3 What is the process?

During the review of workforce plans and strategies, the following needs to be considered:

- If applicable, monitor scenarios to establish whether the assumptions on which the scenarios were based have changed.
- Keep abreast of internal changes (for example, restructures or priority changes that may affect workforce strategy, supply or demand).
- Keep abreast of external trends and changes that may significantly affect workforce supply.
- Evaluate the outcomes of workforce strategies and action plans that emanated from the workforce gap analysis and strategy development phase.

The metrics in Table 15 can be used to monitor and review the success of workforce strategies.

Table 15: Evaluating workforce planning outcomes

Evaluating workforce planning outcomes	Metrics
Is our workforce size consistent with strategic objectives?	• Current FTE • Overtime FTE • Absenteeism • Contractor FTE
Is the composition of our workforce consistent with strategic objectives?	• Workforce profile analysis
Are our recruitment and retention rates consistent with strategic objectives and external trends?	• Voluntary separation rate • External recruitment rate

In addition, the specific performance indicators developed for each strategy should be reviewed.

7.4 What is the outcome?

This step supports all aspects of the annual workforce planning process, in particular:

- as an input to Step 1, 'Environmental scanning' and, potentially, scenario development, resulting in reviewed scenarios for future organisational activity
- as an input to Step 4, 'Strategy development', supporting decisions to maintain, change or abandon specific workforce strategies.

8. Conclusion

Workforce planning is a structured and ongoing process of planning, strategy implementation and review, which is linked with your agency's service and business planning. It is an investment in time that should be well returned in terms of optimum skills and staffing levels and motivated staff.

We hope these guidelines have provided useful support for you in developing your agency's plan. As well as many templates and examples provided throughout the guidelines, we have summarised the main activities of the process in a checklist in Appendix 2.

As you use these guidelines you may feed back ideas for improvement to the Rural and Regional Health Services Branch and your regional offices.

9. Appendices

Appendix 1: Important references

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- ——, Tjosfold, D & Smith, KG (Eds) 2003, *International handbook of organizational teamwork and cooperative learning*, Wiley, Chichester.

Appendix 2: Workforce planning checklist

	Reference	Completed Y / N
Getting started		
Allocate project resources.	Section 2.1	
Prepare a planning timeline.	Section 2.2	
Identify and engage stakeholders.	Section 2.3	
Identify decision makers and decision points.	Section 2.3	
Develop a communication strategy.	Section 2.4	
Identify a forecast horizon.	Section 2.5	
Decide workforce structure to use for forecasting.	Section 2.6	
Environmental scanning		
Review adequacy of environmental scan undertaken for service plan.	Section 3.2	
If the service plan does not provide adequate environmental scan, research external and service-related information that will impact the agency over the forecast period.	Section 3.4	
Review workforce information to identify strengths and challenges.	Section 3.4	
Finalise environmental scan report (a summary of proposed service composition, plus external factors that will influence service delivery).	Section 3.5	
Demand forecasting		
Research available workload measures and decide whether these should be included in demand forecasting process.	Section 4.4.1	
Prepare demand forecasting metrics.	Section 4.4.2	
Prepare demand forecasting spreadsheets.	Appendix 8	
Schedule demand forecasting meetings (interviews, workshops).	Section 2.2	
Conduct demand forecasting meetings (interviews, workshops).	Section 4.4.2	
Liaise with relevant stakeholders to finalise demand forecasts of workforce roles, numbers and skills.	Section 4.5	
If relevant, decision maker authorises demand forecasts.	Section 2.3	

Supply forecasting		
Determine data requirements.	Section 5.4	
Determine data sources and liaise with relevant data sources to get the data you need.	Section 5.4.2	
Populate supply forecast spreadsheet.	Section 5.4.2	
Research external supply, if possible.	Section 5.4.3	
Gap analysis and strategy development		
Populate gap analysis spreadsheet.	Section 6.4	
Overview potential strategies in light of identified gaps.	Section 6.5	
Schedule gap analysis and strategy development workshop.	Section 6.6	
Conduct gap analysis and strategy development workshop: ○ Review gaps ○ Prioritise gaps ○ Develop strategies.	Section 6.7	
After the workshop		
Document the process and agreements in a workforce plan for the agency.	Section 6.9	
Decision maker reviews and authorises workforce plan.	Section 2.3	
Develop detailed implementation plans for each of the strategies, including accountabilities, budgets, timeframes and performance indicators.	Section 6.9	
Implement the strategies.		
Evaluate and monitor		
Evaluate workforce planning outcomes regularly, and as an input to environmental scanning (Step 1 of the recurrent workforce planning process).	Chapter 7	

Appendix 3: Invitation – environmental scanning meeting

<Date>

Dear stakeholder,

Thank you for agreeing to attend the workforce planning meetings over the next few weeks. The purpose of the first meeting on <*date month*> is to gain a better understanding of environmental factors that will impact on your service composition and future workforce needs. Therefore, prior to the meeting, it would be helpful if you could give some thought to the following issues:

- What are the key strategic objectives for service delivery over the coming three to five years?
- How is the workload of your area likely to change in the next one, three and five years?
- In what way will your customers' needs and expectations change in the future?
- What new services are likely to be introduced?
- What impact will new technology have on your services?
- How will the actions of external groups affect your operations?
- What are your most significant workforce strengths and challenges?

The outcomes of the meeting will form a basis for the scenario planning meetings on <*date month*>.

We look forward to meeting with you on <xxx day>, and thank you in advance for your time and input.

If you have any queries about this, please do not hesitate to call me on <phone number>.

Yours sincerely,

Workforce Planning Project Manager

Appendix 4: Scenario planning

Scenario planning is an optional step in the workforce planning process for Department of Human Services' rural health services. Agencies may wish to conduct the first 'round' of workforce planning without reference to scenario planning, and then include this step in subsequent iterations.

What is it?

Workforce planning scenarios outline possible futures. They provide a 'blue sky' or open-ended way of considering alternative and, in some cases, competing situations, thus promoting contingency planning for both favourable and unfavourable futures.

Scenarios are not intended to predict a *certain* future; they encourage managers to plan not just for the most likely future, but also for the less likely alternative futures. Scenario planning invites managers to consider the advantages to building flexibility into their operations (for example, designing facilities that can be used in different ways, training staff for broad-range tasks, developing strategies that have the flexibility to take advantage of new opportunities and deal with unexpected crises).

With at least two scenarios, variations in demand forecasts will be highlighted. Strategy development will need to take these alternative forecasts into account. A likely outcome is that strategies are geared to the most likely scenario, but with recognition of the need for close monitoring of the situation and possible change of strategy to deal with an alternative scenario.

The greater the variation between the different forecasts the greater the importance to initiate the following two activities:

- In Step 4 (gap analysis and strategy development), implement programs that provide maximum workforce flexibility (partnering with other providers, ensuring development of skills to meet each likely scenario, using contract staff, arranging staff secondments/temporary assignments to or from your agency).
- In Step 5 (evaluating and monitoring), monitor the assumptions underlying the scenarios to see which is unfolding or whether new conditions are emerging, and assess their implications.

When is it done?

Scenario planning makes use of information gathered during the environmental scanning process. The agreed scenarios are used as an input to demand forecasting. Thus, if undertaken, scenario planning needs to be completed between these two steps.

Who is involved?

Section 3.3 suggests a range of stakeholders who might be involved in the scenario planning process. A core minimum of stakeholders would likely be the chief executive officer and departmental heads.

What is the process?

The following is a suggested process for undertaking scenario planning:

Background research

The environmental scanning process should have outlined a range of drivers and future directions that provide a solid foundation to assist managers and workforce planners in developing scenarios. If you are unsure whether your environmental scan has provided sufficient background information, you can conduct a series of interviews with stakeholders. The purpose of these interviews is to determine the core business drivers, emerging challenges and opportunities, and potential impact of these factors on the current and future workforce.

Scenario planning workshop

Using information gathered from the interviews and environmental scan research, the project manager or team conducts a scenario workshop with relevant stakeholders. A standard workshop outline is shown in Exhibit 3.

Exhibit 3: Scenario planning and workshop outline

- Make introductions and clarify outcomes required from the workshop.
- Give feedback from 'scenario interviews' and supplementary research.
- Review the external and internal forces that may impact on the business, and discuss likely outcomes of each force.
- Identify any forces that have only one likely outcome, such as the ageing population. We call these 'underlying assumptions' which apply within all alternative scenarios.
- For the other forces, identify the range of possible outcomes: for example, you may foresee that changes to private health insurance will either (1) have no impact on demand for your agency's services, or (2) reduce demand.
- Rank the potential impact of the forces. You can use whichever ranking scheme best suits your agency. A common approach is to use the following three-point scale:
  - 3 = significant impact
  - 2 = considerable impact
  - 1 = low impact.
- Agree the top three to five forces most likely to impact on the service in the next five years.
- Using the information gathered, develop scenarios. Scenarios can be developed in many forms (for example, a set of short statements or a 'story' that outlines the likely futures). It is suggested that no more than three scenarios be developed (the optimum number is two).
- Thank participants and advise next steps.

Scenario sign-off

Material generated during the workshop is synthesised and reported back to the appropriate decision maker for authorisation.

Healthy Life Health Service – scenario planning

A hypothetical outcome from Healthy Life Health Service's scenario planning workshop is shown here.

Firstly, the environmental scan highlighted a number of outcomes that Healthy Life's stakeholders believe are likely to eventuate over the five-year forecast horizon. The stakeholders believe these likely outcomes (also called 'underlying assumptions') will play out regardless of other uncertain factors.

Likely outcomes (or 'underlying assumptions')

- Healthy Life's catchment population will continue to age, with an increasing number of people living alone.
- The birth rate will continue to decline.
- There will be an increase in prevalence of chronic diseases, including heart disease and stroke, cancer, respiratory disease, self-harm, depression, substance abuse.
- Medical, scientific and technological advances will continue, but will not have a significant impact on the overall level of demand for services. For example, some illnesses and injuries will be treated more easily or prevented, thus reducing demand for services, but other advances will make additional treatments and preventions possible, thus increasing demand for services.

Scenario variables

After considering all available research, the consultative group identified several variables or 'future forces' that have an unknown future. For example, some demographic and climactic data suggested that the area's population would decrease over the next five years. On the other hand, there was evidence that immigrant and refugee migration would cause an increase in the area's population.

This and the other uncertain scenario variables are shown in Table 16. These have been configured into two groups:

- those that will result in a reduced demand for health services
- those that will result in an increased demand for services.

Table 16: Healthy Life Health Service – alternative scenarios

Scenario variable	Scenario A: Reduced demand for services	Scenario B: Increased demand for services
Population profile	Drought and economic trends will contribute to a decline in the catchment's total population.	Increase in young immigrants and refugee migration causes an increase in the catchment's total population.
Disease trend	Increasing prevalence of chronic conditions will require greater ongoing care in community environments rather than the hospital environment.	Primary care services cannot cope with increased demand, and responsibilities default to Healthy Life.
Role of private sector	The role of private health service providers in the area will grow.	The role of private health service providers in the area will be stable or decline.
Consumer expectations and behaviour	Health promotion and lifestyle changes result in lower morbidity and mortality rates.	Increased consumer expectations result in higher demand for Healthy Life's services, particularly elective surgery.

In this case, Healthy Life's consultative group did not see a need to rank the impact and likelihood of the forces, so omitted this step. Thus, for Healthy Life Health Service, the two scenarios identified for workforce planning over the next five years are:

- Scenario A: reduced demand for services
- Scenario B: increased demand for services.

What is the outcome?

At the completion of this step, decision makers confirm the scenarios to be used for workforce planning purposes. These are then used in Step 2, 'Demand forecasting'.

Appendix 5: Invitation – demand forecasting meeting

<Date>

Dear Manager,

Thank you for your time in attending <*last week's*> scenario planning workshop, which was a successful first step in undertaking workforce planning for <*name of agency*>. Please find attached the scenarios developed during the workshop. These scenarios have been signed off by the executive team.

The next step in workforce planning is to forecast the number and type of staff that each stream will require under each of these scenarios. We have scheduled a demand forecasting meeting to be held on <*date*> at <*time*> in <*location*>. The meeting will be facilitated by <*workforce planner*>*.*

During the workshop, you and your line managers will be asked to provide your forecast staffing requirements for the next one year, three years and five years, based on the scenarios developed. To ensure your staffing needs are appropriately captured, you may wish to prepare in advance by considering the following for each scenario:

- What are your critical job roles, and why?
- In which job roles will you experience growth?
- For all job roles, how many staff do you anticipate you will need in total in one year, three years and five years?
- Are there any job roles that will diminish in number?
- Will any new job roles emerge? What are they and how many staff will you need in these new job roles?
- Will any existing job roles become obsolete?
- What skills (new or existing) will you require more of in one year, three years and five years time?

During the workshop, we will consider these questions and capture the information for input to a demand forecasting spreadsheet. These forecasts will be matched with supply forecasts to identify any gaps in staffing requirements, and be used as a basis for focusing human resource strategies.

If you have any queries about this, please do not hesitate to call me.

Yours sincerely,

Workforce Planning Project Manager

Appendix 6: Qualitative demand forecasting techniques

Structured interviews

Before you meet with managers you need to have a good grasp of current staffing levels, organisational capabilities and staff competencies. You would review this information with the manager before proceeding to a discussion about how the business will change during the planning period. You will be well prepared for these discussions given your previous involvement in the environmental scanning process and scenario development activities. Nevertheless, the interviewed manager will have additional insights of value to you in your workforce planning effort. Your job here is to tap into the manager's professional judgement, perceptions and opinions. When offered, these 'points of view' should be opened up for discussion, assumptions challenged and opinions validated. Ask the question, 'What if?'. As these discussions unfold, your job is to discuss how current staffing levels will vary over time, as forecast in your endorsed workforce planning scenarios.

Group techniques

The Delphi and Nominal Group techniques are special-purpose techniques used in situations where individual judgments must be tapped into, shared and discussed to arrive at workforce demand decisions that cannot be calculated by one person. These two group techniques are problem solving or 'creative decision making' devices that seek to build consensus around complex problems. They are particularly useful in situations where there is lack of agreement or incomplete knowledge about a particular issue.

The Nominal Group and Delphi techniques access the vitality of heterogeneous groups while ameliorating the difficulties often associated with group-based decision making. They build ownership and encourage cooperative action. These group techniques are also useful in the scenario development process or in any other activity when seeking to improve the effectiveness of group decision making.

Nominal Group

The Nominal Group technique uses the following process:

- Group members convene and silently generate ideas in writing.
- Group members give feedback in round-robin style so that each idea can be recorded in a short phrase on a flip chart. No assessment of ideas is undertaken at this stage.
- Each recorded idea is clarified and evaluated during a discussion.
- Group members then individually vote on priority ideas, with the group decision being quantitatively derived through rank-ordering or rating.

The Nominal Group technique adopts a balanced concern for social–emotional group maintenance and individual roles within the group. The group's performance of task-instrumental roles offers both social reinforcement and task accomplishment reward. Further, the silent and independent generation of ideas, followed by group discussion, analysis and listening during the round-robin procedure, leads to the validation of a broad range of ideas.

Delphi technique[9]

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[9] The technique was originally developed by the Rand Corporation in the late 1940s as a set of procedures designed to obtain the most reliable consensus of opinion among a group of experts (Milkovich et al. 1972).

The Delphi technique can be used for a long-range forecast where input from a number of managers or experts is desired. It is a systematic method of gathering views on a particular topic through a set of carefully designed sequential questionnaires interspersed with summarised information and feedback of opinions derived from earlier responses. It involves:

- obtaining judgments from a panel of 'experts' through a questionnaire or structured interviews
- feeding the various inputs in a summary form back to all of the panelists for their review and reconsideration
- repeating this cycle until general agreement is reached.

The Delphi technique does not require that participants meet face-to-face.

To conduct workforce demand forecasts using the Delphi process, two separate groups are involved:

- **a project manager or team**. The group that designs the initial questionnaire summarises the returns and redesigns the follow-up questionnaires. This is usually the workforce planners
- **a respondent group**. This is the group whose judgments are being sought and who are asked to respond to the questionnaire. The respondent group usually consists of business managers.

Some variation in the administration of the Delphi technique, subject to the problem's dimensions, time limits and resource availability, may be necessary. Possible variations include:

- offering or withdrawing respondent anonymity
- using open-ended or closed questions
- allowing several or only a few iterations of questionnaires and feedback reports.

A simplified two-cycle variation of the Delphi technique would adopt the following steps:

- The project manager or team develops an initial questionnaire and distributes it by internal mail or email to the respondent group.
- The respondents independently generate their ideas in answer to the questionnaire and return it.
- The project manager or team then summarises the responses to the first questionnaire and compiles a feedback report. The project manager or team also develops a second questionnaire for the respondent group, based on the main ideas identified from the first questionnaire.
- Respondents consider the feedback report and independently vote on priority ideas included in the second questionnaire. They then return their responses to the staff team.
- The project manager or team develops a final summary and feedback report to the respondent group.

Table 17 summarises the pros and cons of each technique.

Table 17: Pros and cons of the Nominal Group and Delphi techniques

	Nominal Group technique	**Delphi technique**
Pros	• Search behaviour is proactive, characterised by extended periods in generating and clarifying alternative dimensions of the problem. The technique tends towards high task-	• The isolated generation of ideas in writing produces a large quantity of ideas. • The process of writing responses to the questions forces respondents to

	Nominal Group technique	Delphi technique
	centred group effort, and the generation of new social and task-related knowledge. • The structured process forces equality of participation among members in generating information on the problem. • Nominal Group technique meetings tend to conclude with a perceived sense of closure, accomplishment and a common interest in future phases of problem solving.	think through the complexity of the problem, and to submit specific, high quality ideas. • Search behaviour is proactive since respondents cannot react to the ideas of others. • The anonymity and isolation of respondents provides freedom from conformity pressures. • Simple pooling of independent ideas and judgments facilitates equity among participants. • The technique is valuable for obtaining judgments from geographically isolated expertise. • At the conclusion of the process, participants may realise a sense of closure and accomplishment.
Cons	• Extended preparation for the technique meetings is necessary to clearly identify the information desired from a group. Nominal Group technique is not suitable for spontaneous group meetings. • Inflexibility of the structured Nominal Group technique format makes it difficult to make adjustments or to change topics in the middle of a meeting. Nominal Group technique is generally limited to a single purpose or single topic meeting. • The format structures the behaviour of participants, a condition which is not always welcomed by inexperienced Nominal Group technique participants.	• The lack of opportunity for social–emotional rewards in problem solving can lead to a feeling of detachment from the problem solving effort. • The lack of opportunity for verbal clarification or comment on the feedback report creates communication and interpretation difficulties among respondents. • Conflicting or incompatible ideas on the feedback report are handled by simply pooling and adding the votes of group respondents. While this process achieves a majority consensus, conflicts are not resolved.

Appendix 7: Healthy Life Health Service – supply analysis

Chart 6 show the workforce profile for Healthy Life Health Service, the hypothetical agency used to illustrate the workforce planning process in these guidelines.

Chart 6 shows that staff numbers have increased by a total of about 16 per cent from 2004 to 2006. This increase is the result of increased staffing in same-day surgical, because all other services have reduced staffing over the period. By occupational group (Chart 7), we can see a large increase in the division 2 nurses.

Chart 6: Healthy Life Health Service – trend FTE by service

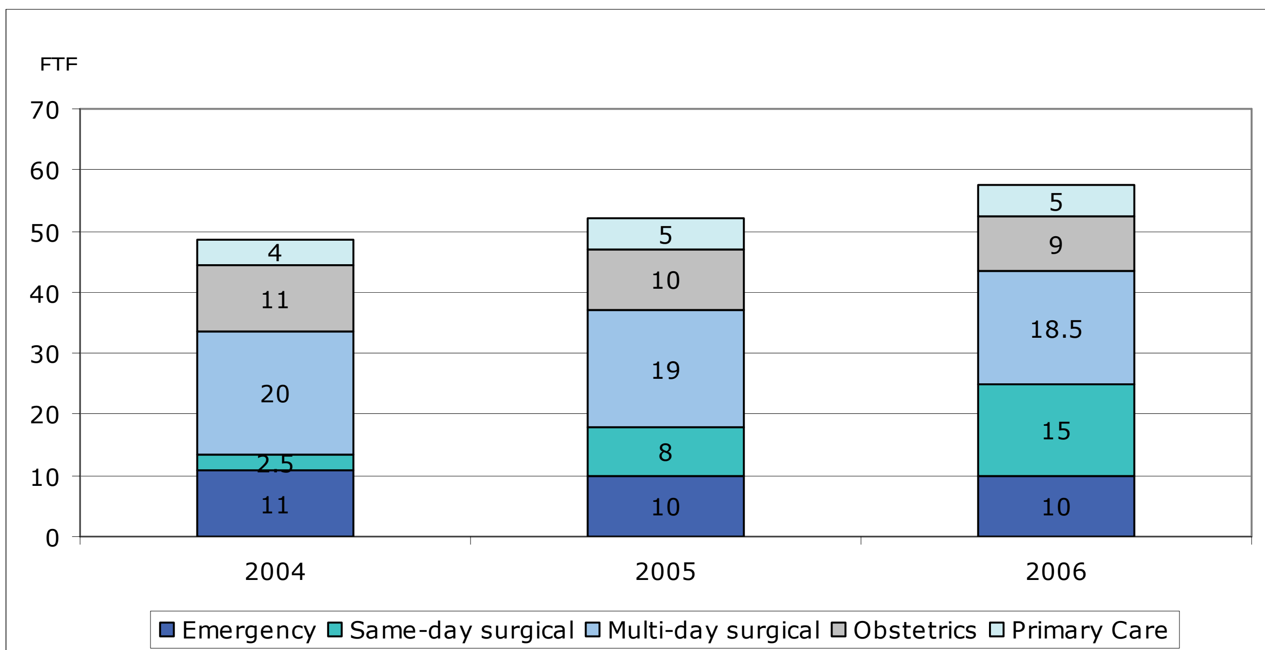


Chart 7: Healthy Life Health Service – trend FTE by occupational group

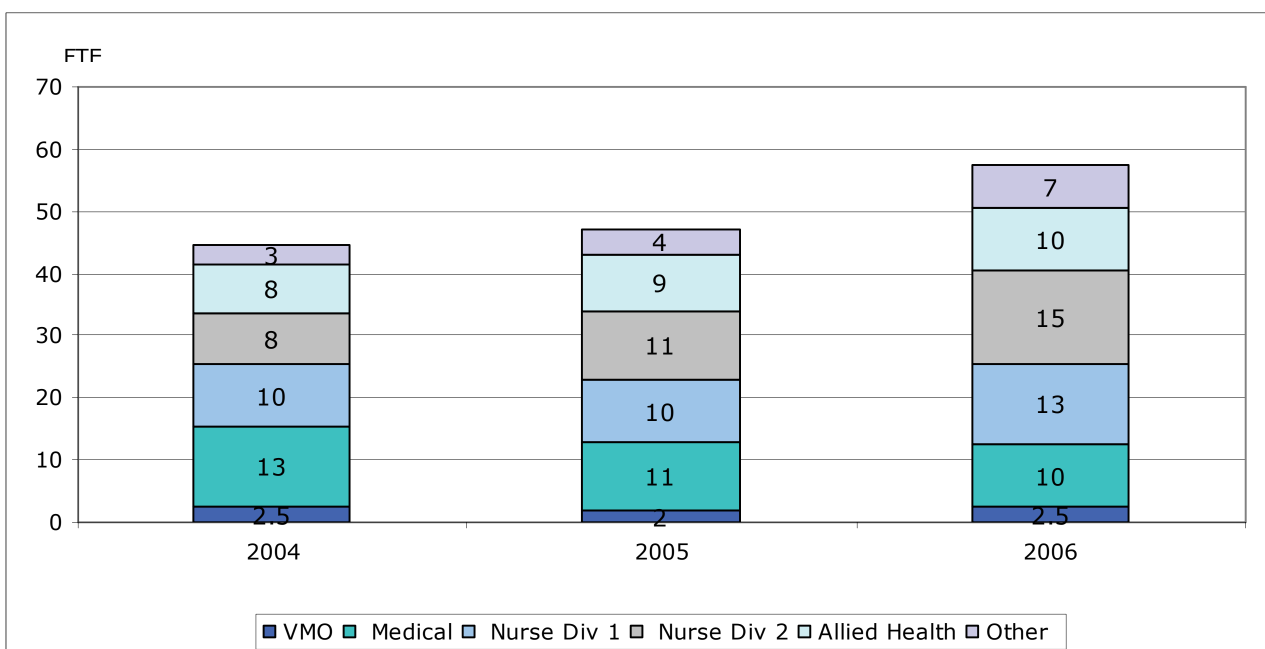
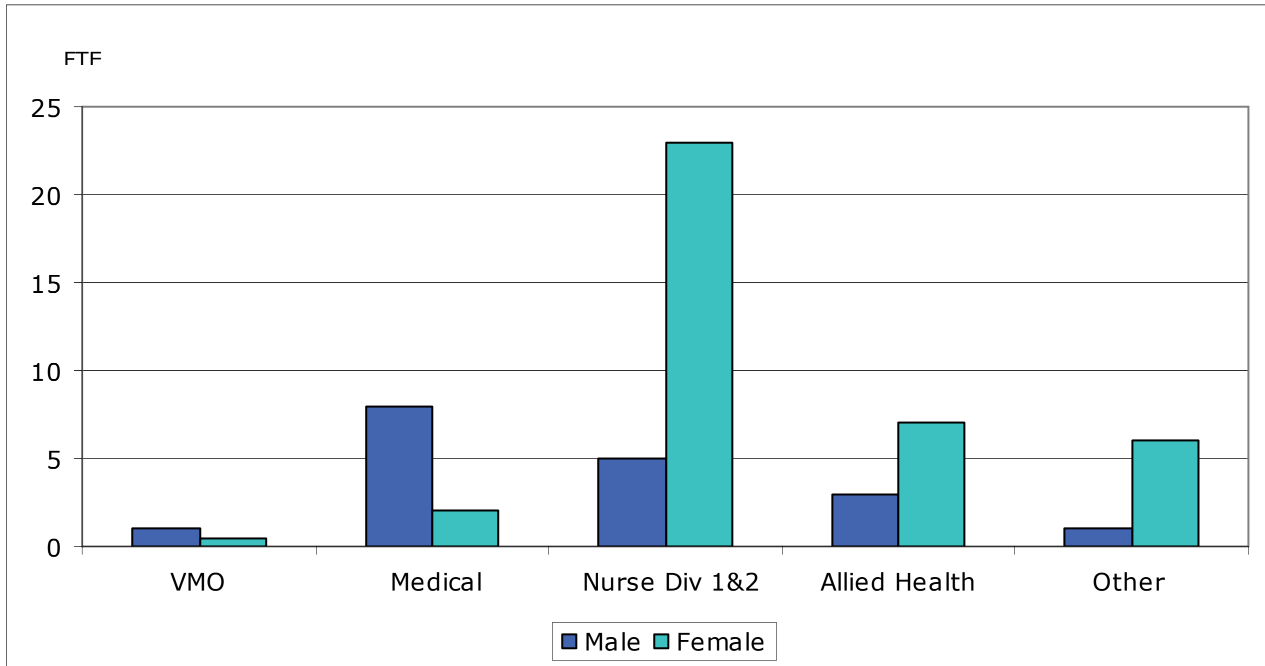


Chart 8 shows Healthy Life's gender profile by occupational group. Females comprise more than two-thirds of Healthy Life's workforce at the total level because of their higher representation in the nursing, allied health and other occupational groups. Males are dominant in the visiting medical officer and medical groups.

Chart 8: Healthy Life Health Service – gender profile by occupational group



Note: VMO – Visiting medical officer

Chart 9 shows Healthy Life's age profile. The relatively large number of employees in the 50–59 year age bracket is of concern given that many of these people may opt to retire in the next five to ten years.

Chart 9: Healthy Life Health Service – age profile

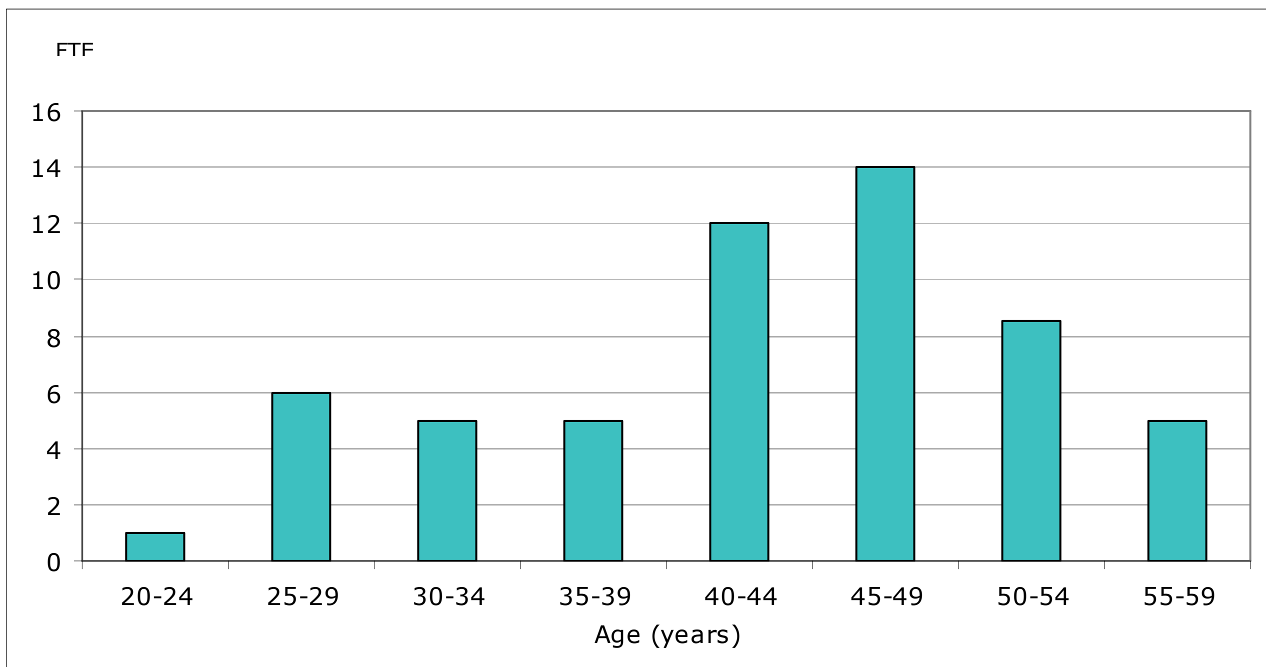


Chart 10 shows Healthy Life's tenure profile with a large number of people with ten or more years of service and a similarly large number with less than one year of service. It is likely that long-tenured staff are also in higher age brackets, and may be planning to retire soon. If many long-tenured staff leave, Healthy Life may experience issues in retention and dissemination of organisational knowledge.

The large number of people in the less than one year of tenure bracket is a result of the recent workforce growth; however, it is also significantly affected by high turnover and is placing considerable pressure on Healthy Life's service delivery, especially regarding recruiting and training new staff and covering vacancies.

Chart 10: Healthy Life Health Service – tenure profile

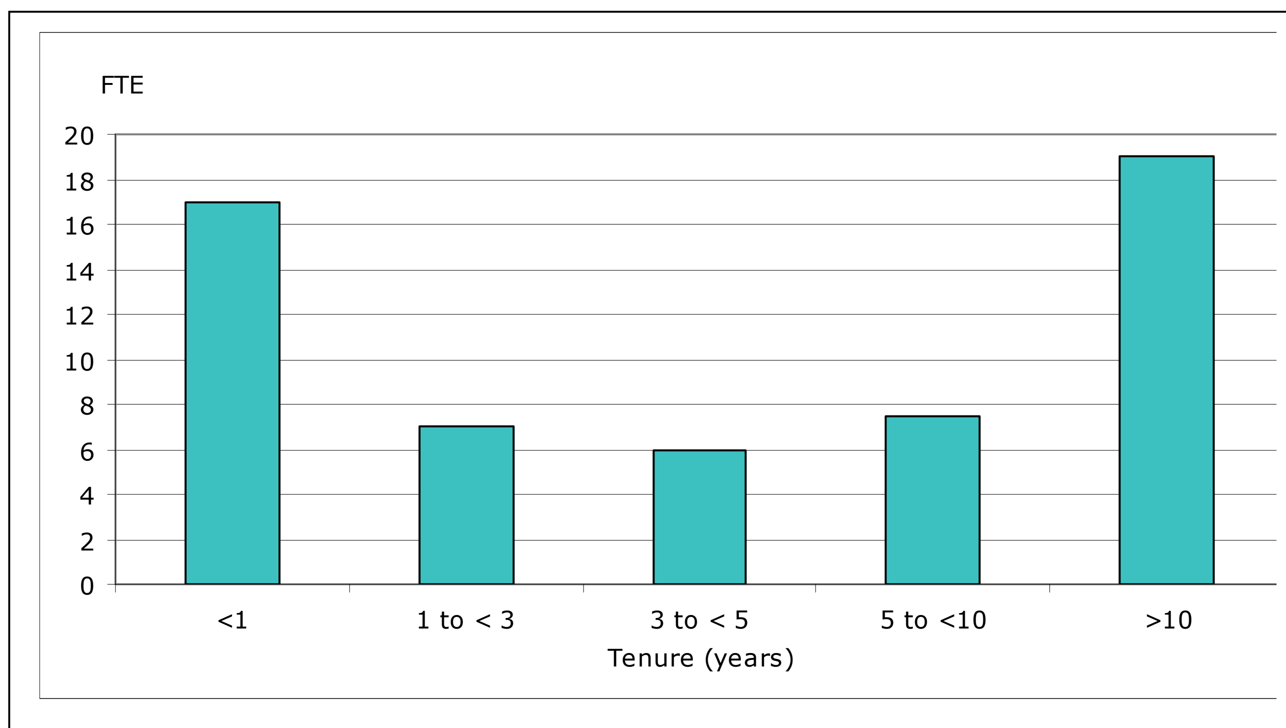
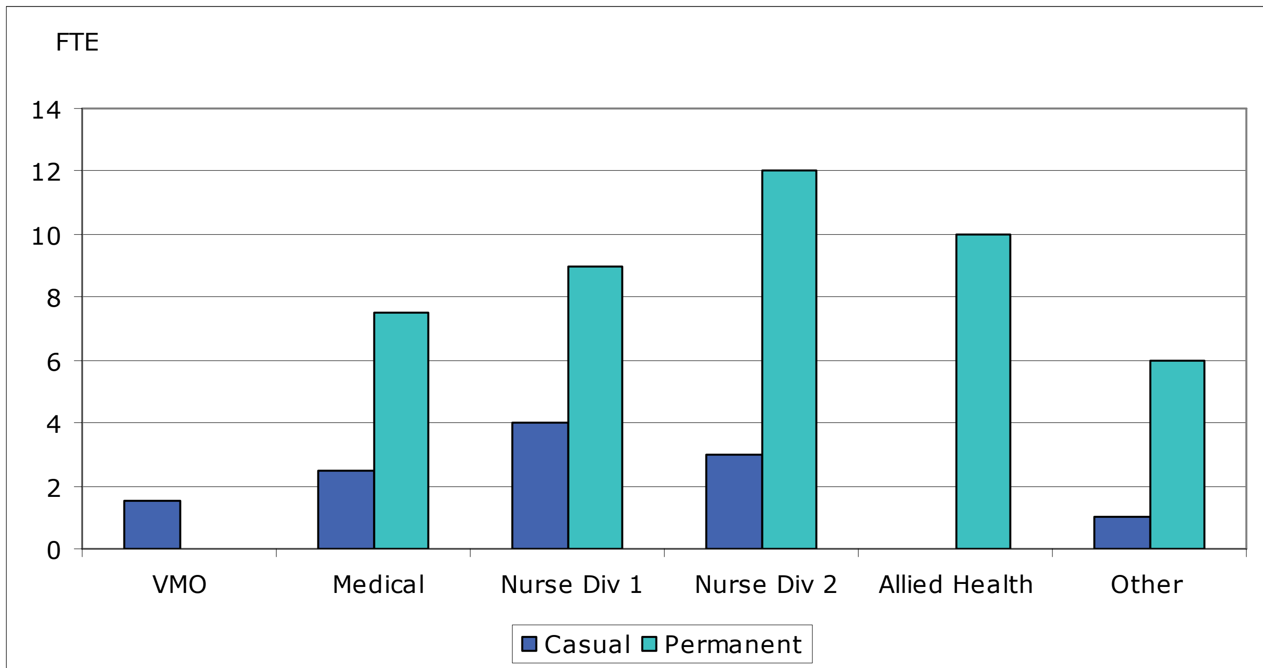


Chart 11 is Healthy Life's profile by employment status. This shows that the majority of staff at Healthy Life are employed on a permanent basis. This may restrict flexibility in work practices.

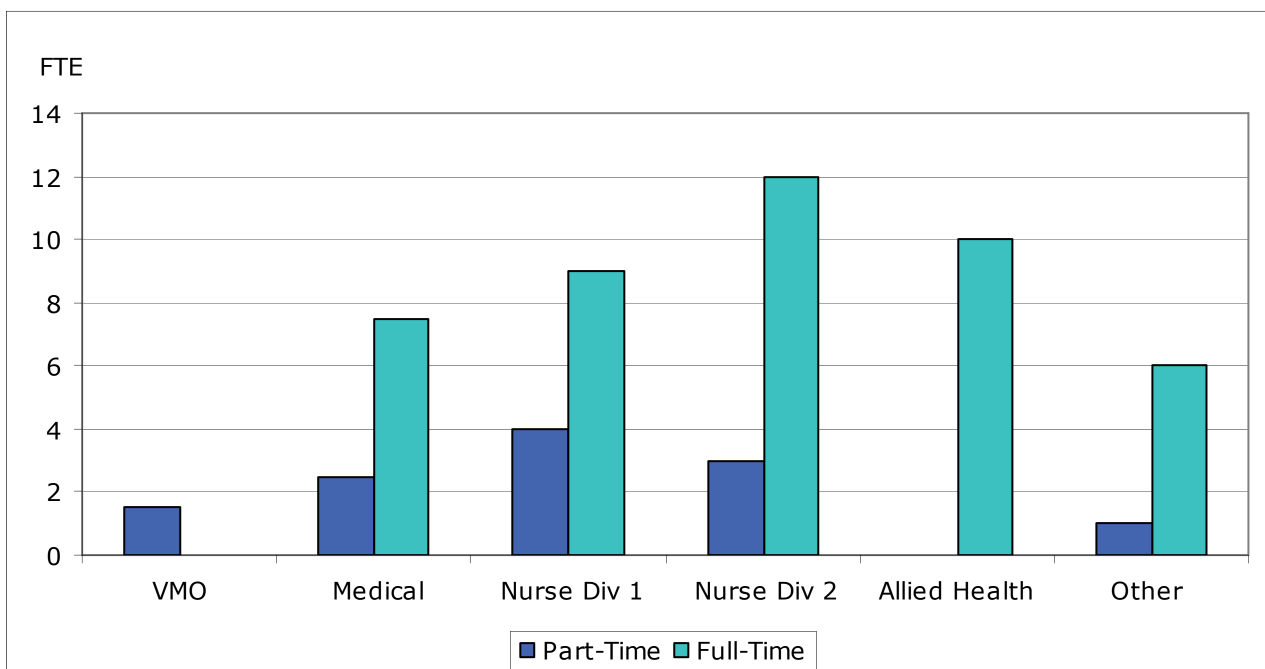
Chart 11: Healthy Life Health Service – employment type by occupational group



Note: VMO – Visiting medical officer

Chart 12 is Healthy Life's profile by attendance type. This shows that most staff at Healthy Life are full time, which, in combination with employment type, can restrict flexibility.

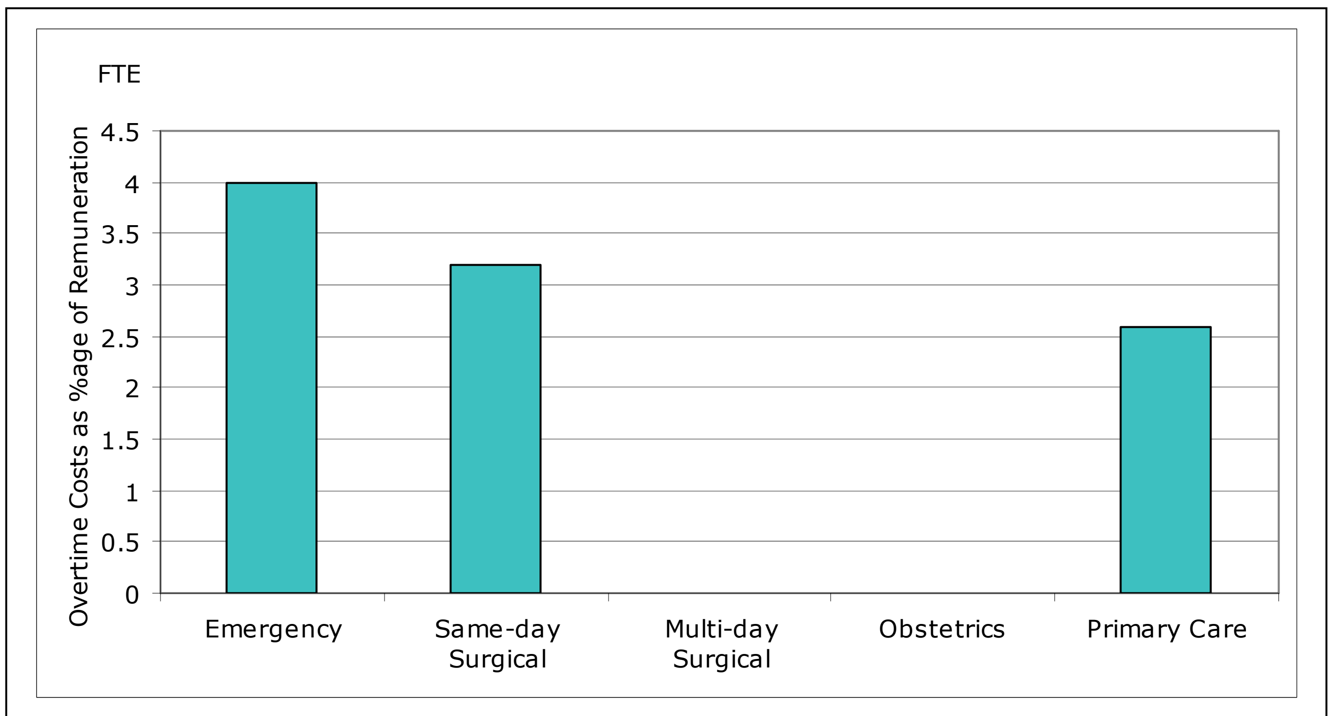
Chart 12: Healthy Life Health Service – attendance type by occupational group



Note: VMO – Visiting medical officer

Chart 13 shows Healthy Life's overtime rate (overtime costs as a percentage of award salary costs). It would be useful to consider this metric over time and in comparison with relevant external benchmarks; however, we do not currently have access to this information.

Chart 13: Healthy Life Health Service – overtime rate by service



Appendix 8: Template – demand forecasting spreadsheet

		Current Staffing Levels	Forecasting Staff Numbers		
Service Stream	**Job Role**	**Current FTE**	**1 Years (FTE)**	**3 Years (FTE)**	**5 Years (FTE)**
0					
	Total	**0**	**0**	**0**	**0**
0					
	Total	**0**	**0**	**0**	**0**
0					
	Total	**0**	**0**	**0**	**0**
0					
	Total	**0**	**0**	**0**	**0**
0					
	Total	**0**	**0**	**0**	**0**
0					
	Total	**0**	**0**	**0**	**0**
0					
	Total	**0**	**0**	**0**	**0**
PERMANENT TOTAL WORKFORCE		**0**	**0**	**0**	**0**
CONTRACTORS					
0			0	0	0
	Total	**0**	**0**	**0**	**0**
0			0	0	0
	Total	**0**	**0**	**0**	**0**
0			0	0	0
	Total	**0**	**0**	**0**	**0**
0			0	0	0
	Total	**0**	**0**	**0**	**0**
0			0	0	0
	Total	**0**	**0**	**0**	**0**
0			0	0	0
	Total	**0**	**0**	**0**	**0**
0			0	0	0
	Total	**0**	**0**	**0**	**0**
TOTAL CONTRACTORS		**0**	**0**	**0**	**0**

Appendix 9: Template – supply forecasting spreadsheet

Service Stream	Job Role	Current FTE	Term Rate (%)	Terminations			Retirements			Total Supply		
				1	3	5	1	3	5	1	3	5
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PERMANENT TOTAL WORKFORCE		**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
CONTRACTORS												
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0												
	Total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL CONTRACTORS		**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL WORKFORCE		**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Appendix 10: Template – gap analysis spreadsheet

Service Stream	Job Role	Current FTE	Net Demand			Net Supply			Gap		
			1	3	5	1	3	5	1	3	5
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PERMANENT TOTAL WORKFORCE		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
CONTRACTORS											
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0			0.0	0.0	0.0				0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL CONTRACTORS		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL WORKFORCE		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Appendix 11: Suggested strategies

As discussed in Chapter 6, there is a wide range of strategies you can consider to address your workforce planning 'gaps'. The appropriate strategies for your agency will vary depending on the nature of the gaps and your agency's context. The following pages provide some suggested strategies for consideration. Note that strategy development is an ongoing process because each agency needs to continue to be innovative and flexible in finding ways to address emerging issues.

Reduce demand for health services.

- Manage the community's expectation of the health service. Strengthen the community's understanding of the health service and its operation.
- Promote and market new services and models of care to the community. Communicate how the health service works and its resources to the community.
- Introduce or emphasis preventive health education. Increase the emphasis on primary health care initiatives (including prevention, detection and disease management) to minimise the need for more complex health care services.

Find innovative ways of providing health services.

- Equip and reward staff for being innovative and accountable in their delivery of quality care.
- Establish or participate in networks to share good employment practices, resources and expertise.
- Analyse certified agreements (within the health services industry and elsewhere) to establish flexibility and opportunities not yet explored.

Increase supply of health service workers.

Recruitment

- Work in collaboration with other health and non-health agencies in the region.
- Develop a marketing strategy to attract skilled workers to the region.
- Facilitate the attraction of couples or families to the area (for example, a nurse and teacher married couple).
- Develop an alumni program targeted at attracting skilled workers who grew up in the area but left for metropolitan centres to attend university or to pursue their early career.
- Consider career fairs, graduate recruitment programs, cadetships, apprenticeships.
- Consider an industry placement scholarship designed to identify career opportunities for school leavers.
- Effective recruitment, good induction and supportive management reduces turnover rates which saves money and prevents service disruption.

- Undertake research to determine what will attract skilled workers to your area or agency, then determine the cost-effectiveness of providing the service or benefit. This might include
  - flexible shift arrangements, child care, parking, wellness programs, career paths, availability of mentoring, challenging work, accommodation, and so on
  - international recruitment
  - career re-entry.
- Foster relationships with relevant educational institutions for teaching or practice interchanges.
- Consider making joint appointments with private or public agencies.
- Provide infrastructure for the use of visiting professionals, such as 'grey nomads' or academics on sabbatical.
- Target unrepresented sections of the community, such as Indigenous people.
- Consider the key imperatives impacting attraction and retention of skilled people in regional Australia[10]:
  - housing
  - infrastructure
  - perceptions of lifestyle and community
  - education and training
  - health
  - jobs and career opportunities
  - scholarships.

Retention

- Conduct exit surveys or interviews to determine why people leave.
- Conduct employee opinion surveys to determine level of engagement with the agency and what can be done to improve employee engagement, retention and productivity.
- Staff involvement, working in partnership, and good employee relations are particularly important during times of change. Research evidence suggests higher rates of staff involvement lead to lower absence rates, better agency results, higher commitment and trust (West and Borrill 2002a).
- Encourage staff to postpone retirement or to wind back their involvement slowly over an extended period of time.
- Provide proactive support to prevent burnout and stress-related issues.
- Celebrate agency and team successes.
- Frame different attraction and retention strategies for different groups, for example:

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[10] Standing Committee on Regional Development (2004)

- multiple careerists (health practitioners who had left their profession for other careers)
- mature age people entering the profession
- younger workers
- migrant workers
- those seeking career re-entry
- those working part time or casual as a career choice.

Develop collaborative partnerships

Develop collaborative arrangements with health and non-health services within the region to provide professional development, work–life balance and lifestyle services that will improve attraction and retention. Examples include learning and development opportunities, social activities, mentoring programs, sharing of vehicles to facilitate attendance at training, and child and aged care facilities.

Professional development and review

- Forecast the agency's future skills needs as an integral component of demand forecasting. Develop a planned approach to training based on a whole-of-agency training needs analysis.
- Consider use of a 'career/skills escalator'[11]. Medway Maritime National Health Service Trust used this approach to develop assistant and advanced radiographers. Results included: a 50 per cent increase in the capacity to take and read MRI scans; waiting times reduced from 48 weeks to 12 weeks.
- Strengthen arrangements to widen participation in learning, especially among unqualified staff and those who have had fewer opportunities to develop in the past:
    - mentoring
    - secondments, transfers, job rotations, project-based work and other multi-skilling initiatives
    - scholarships.
- Investigate opportunities for collaborative learning and development activities between health services within the region.
- Use information and communication technology and videoconferencing effectively to prevent professional isolation.

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[11] The National Health Service's strategy to deliver the challenging objective of growing and changing the workforce is called the Skills Escalator. The essence of this approach is that staff are encouraged through a strategy of lifelong learning to constantly renew and extend their skills and knowledge, enabling them to move up the escalator. Meanwhile, efficiencies and skill mix benefits are generated by delegating roles, work and responsibilities down the escalator where appropriate. See http://www.skillsforhealth.org.uk/careerframework and http://dh/gov/uk/PolicyAndGuidance/HumanresourcesAndTraining/ModelEmployee/fs/en for further information.

- Create and maintain an up-to-date register of people visiting communities, including academics and visiting practitioners, to enable a more coordinated approach to learning and development opportunities.
- Pursue effective managerial training and development.
- Regarding performance review, a recent study (West et al. 2002) demonstrated that staff performance appraisal has a strong association with lower patient mortality.
- Equip staff with skills to be innovative and accountable in their delivery of quality care.

Availability

- Promote staff health and manage sickness absence because this can significantly boost capacity and improve morale.
- Manage long service leave liability.

Agency or locum workers

Not all rural health services employ casual staff ('agency or locum workers') through a third party employer or agency. For those that do, the following guidelines are suggested:

- Maximise the use of your own staff by being more flexible about their deployment.
- Establish a pool or bank of relief employees.
- Work collaboratively with other employers; for instance, by sharing a 'casual pool' or 'workforce bank'.
- Know what is spent on agencies and have effective management controls in place to keep track of this; for instance, retain booking authorisations and audit trails for expenditure.
- Negotiate volume discounts with agencies.
- Capture and analyse workforce data to enable better planning and management of demand.

You should note that nurses who are permanently employed by a health service in Victoria must not be engaged to perform agency nursing services for the health service that permanently employs them. (This is in accordance with the Department of Human Services Secretary's directive dated March 2002.) This does not preclude part time employees being rostered for extra shifts on mutual agreement.

Volunteer workers

Support and grow the volunteer base of the health service. While volunteer workers cannot replace paid positions, they can assist paid workers to achieve service outcomes in accordance with a clear position description.

Review the service and role

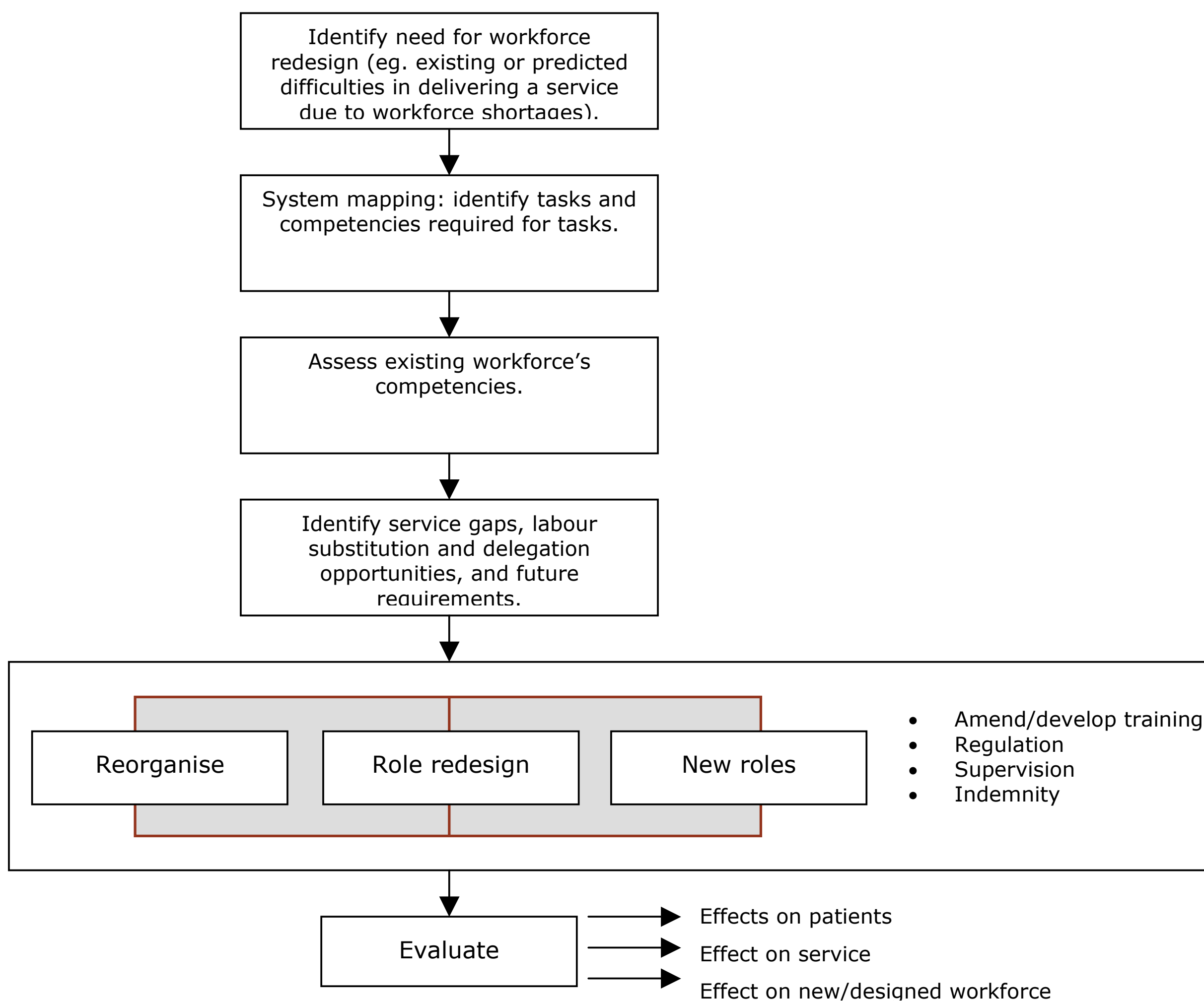
Involve staff, staff representatives, patients and other stakeholders in developing services and different ways of working. Examples include:

- encourage the emergence of the nurse practitioner role to supplement existing services (such as those currently provided by general practitioners, for example), and some primary care and emergency care provision
- introduce services not currently provided, such as wound management, continence clinics, and women's health clinics
- up-skill division 1 registered nurses to enable them to respond more appropriately when they are unable to get direct medical support
- expand the scope of practice for division 2 registered nurses via endorsement so they can administer prescribed medications under the supervision of the division 1 registered nurses
- increase the use of personal care workers, particularly in aged care, to perform functions that require lower skill levels than division 1 or 2 registered nurses
- for renal dialysis, use technicians who have more specific competencies in delivering renal dialysis rather than general nurses
- in rural settings where psychiatrists are not resident, enable authorised psychologists to prescribe medications
- look for opportunities for paramedics to supplement emergency care delivery in rural health services
- use allied health assistants to support or supplement the work of allied health professionals
- use community development professionals, rather than 'expert' health professionals, to partner with the community in health promotion
- create new para-clinical roles that can provide assistance to clinicians or undertake tasks previously fulfilled by clinical staff thereby creating additional capacity for clinicians to deal with patient needs and improving the cost-efficiency of services
- up-skill non-medical clinical staff, to reduce likelihood of admission and enable medical staff to focus on the more acute and urgent cases
- use to a greater extent non-clinical staff to reduce the non-clinical work done by clinicians
- relocate specific clinical groups to work in areas they have not previously been attached to (such as allied health within the emergency department)
- use allied health staff earlier in the clinical care process (such as in the emergency department and the intensive care unit)
- broaden the training of all staff to improve skills in the identification and management of patients with psychosocial or with complex care needs.

Figure 6 shows a methodology for workforce redesign developed by the Department of Human Services. It comprises the following steps:

1. Identify the need for change (existing or predicted difficulties).
2. Undertake 'systems mapping' whereby relevant stakeholders identify tasks and competencies required for the tasks. Tools to assist this step (including process mapping, redesigning roles, and managing the human dimensions of change) can be accessed on the Better Skills Best Care web site at http://www.health.vic.gov.au/workforce/skills.htm#tools.
3. Assess existing competencies and identify service gaps.
4. Develop strategies to address the gaps, such as service re-organisation, role redesign or introduction of new roles.

Figure 6: Methodology for workforce redesign[12]



[12] Sourced from Department of Human Services 2005c, *Workforce Design Strategy: better skills, best care*, DHS, Melbourne.

Corporate infrastructure

Develop shared service models and effective use of information technology. Shared service arrangements for areas such as payroll can achieve major efficiencies.

Influence training of future staff

- Establish working parties to plan for student and clinical placement issues.
- Ensure undergraduate training includes exposure to rural practice. This may mean establishing collaborative relationships or networks between local health services, educational institutions and larger health services.
- Use accelerated training: sponsor people with relevant experience to undertake an accelerated training program.

Develop partnerships

Develop partnerships with other health services, such as community services, aged care facilities and general practitioners, to find more effective ways of delivering health care outcomes.