Guide to
health workforce development
in post-conflict environments

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World Health Organization

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Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
COCOM	Donor Coordination Committee of the Ministry of Health, Cambodia
DHS	Division of Health Services, Timor-Leste
HIV	Human Immunodeficiency Virus
HRD	Human Resources Development
HRH	Human Resources for Health
IOM	International Organization for Migration
NGO	Nongovernmental Organization
NTCC	National Technical Coordination Committee, Afghanistan
NCHET	National Centre for Education and Training, Timor-Leste
UN/OCHA	United Nations Office for the Coordination of Humanitarian Affairs
RQA	Return of Qualified Afghans
RQN	Return of Qualified Nationals
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNBRO	United Nations Border Relief Operations
UNFPA	United Nations Populations Fund
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Emergency Children's Fund
WHO	World Health Organization

Glossary

de facto health authority

This refers to the ministry of health or, where the ministry of health has not been re-established, to the interim authority. Depending on the county situation, the de facto health authority may be an international arrangement, such as the United Nations Transitional Administration in East Timor (Timor-Leste) or the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) (West Bank and Gaza Strip) or, where other options do not exist, a group such as the Sudan Liberation Army's Relief and Rehabilitation Commission.

diaspora

This refers to former nationals of a country who have left the country and are dispersed and reside permanently in other countries. It includes refugees who were accepted for resettlement in third countries but excludes refugees located in refugee camps.

human resources development

This refers to all the elements required to ensure that health workers achieve optimum performance in delivering the required health services.

human resources for health, or the health workforce

This is the stock of all individuals engaged in the promotion, protection or improvement of population health.

Preface

Balancing population health needs with access to adequate services presents quite considerable challenges to national health administrations. An important enabling factor in the provision and performance of health services is properly skilled staff. Sound investment in planning, preparing and deploying the health workforce is vital, since it accounts for a large part of the recurrent costs of the health system. In times of stability and prosperity this already presents most countries with a considerable task.

Long-term conflict, civil war, internal displacements and refugee movements, or the silent erosion of health services capacity caused by a pandemic such as HIV/AIDS, pose a tremendous challenge to restoring or maintaining a sufficiently skilled health workforce. Some factors that make this even more difficult in these circumstances are, for example, the breakdown of the educational system, trained health workers leaving the public sector to start private practice at costs so high they are inaccessible to the poor, or the migration of highly trained health workers to urban areas or abroad, or to jobs with international humanitarian agencies.

This volume presents an overview of how countries emerging from years of conflict and disruption of the social fabric have tackled the sometimes thorny issues of rebuilding a health workforce. It presents strengths and pitfalls encountered. It highlights the challenges to newly emerging national authorities to bring together the still functioning elements of the national health system. It discusses the challenges to integrating a multitude of well-intentioned international agencies and contributors to post-conflict reconstruction and rehabilitation, and restoring population health.

Human beings and their skills lie at the heart of any health system. The lessons learnt and methods documented here to address human resource planning and management in crisis situations provide answers to questions of rebuilding a workforce after conflict settlement and for long-term development.

As learning from conflict resolution continues, the body of knowledge for rapid reconstruction of a health workforce grows. This is therefore also work in progress. It is hoped that comments and further examples will be provided by those involved in such processes so that methods and intervention strategies can be further refined.

David Nabarro
Representative of the Director-General
   for Health Action in Crises
World Health Organization
Geneva, Switzerland

Timothy Evans
Assistant Director-General
Evidence and Information for Policy
World Health Organization
Geneva, Switzerland

Acknowledgements

Introduction

There is increasing concern that the importance of human resources, in particular the impact of human resources on health reform, continues to be underestimated internationally (Martineau & Buchan, 2002; Dussault & Dubois, 2003). The need to consider human resources is especially vital when re-establishing health services in countries after conflict, where the workforce has been severely affected and the context in which reconstruction is taking place is one of political and economic instability.

In order to capitalize realistically on the unique opportunity to start afresh, it is crucial to make efforts to ensure understanding—both at the highest political level in-country and among donors—of the importance of human resources in achieving appropriate and effective health sector redevelopment. This understanding can contribute to a commitment to a strong strategic approach, thus avoiding repetition of ineffective strategies and waste of limited resources. Donors have a major part to play in influencing fragile transitional administrations to address this area, since the level of importance donors attach to a matter is demonstrated by the level and orientation of their funding.

Setting up a dedicated focal unit for human resources development, within the ministry of health, closely linked to policy and planning activities and headed by a senior-level manager, is of vital importance in laying the foundations for a comprehensive approach to human resources development. Developing the capacity of the staff of this focal unit in the areas of human resources policy, planning and management is important in terms of strengthening their ability to coordinate donor support to capacity building in the post-conflict period. The focal unit provides a mechanism for addressing the tasks that newly-elected governments face as they move into the development phase, such as drawing up human resources regulations, setting educational standards and establishing accreditation procedures. The focal unit will work closely with other departments in the ministry of health to address workforce coverage issues, including attrition, deployment, retention and replacement, which are key to effective service delivery.

Situational analysis that takes a historical perspective of the impact of conflict, not only on the workforce but also on the educational system, can provide a basis on which to develop more innovative and appropriate strategies for using time-limited

resources (including the diaspora) to lay the foundations upon which more effective human resources development can be built.

There is a dearth of information and user-friendly guidance available to staff in the human resources development focal unit to bridge the short-term gap between the point from which they start work in the immediate post-conflict period and the point at which they enter the long-term development phase, when they can use the excellent existing frameworks and tools that already exist. This document is an attempt to provide some information and guidance for use in the short-term post-conflict phase.

It is important for such guidance to draw on examples and lessons learnt (both successful and unsuccessful) from a variety of countries and regions. The examples in this guide are based mainly on three post-conflict countries.

In the immediate post-conflict period, members of interim administrations tend to reject the advice of aid workers who liken the situation to that in some other post-conflict country of which they have previous experience. Therefore, guidance on different aspects of human resources development also needs to include general and non-directive information that outlines questions and issues to address.

General guidance linked to examples and lessons learnt will provide a basis on which de facto health authorities and donors can start to discuss short-term strategies to ensure that short-term interventions in human resources development ultimately contribute to a well-structured and equitable foundation for human resources development. This in turn can contribute to more effective use of short-term financing and to reducing waste that arises because outcomes are inadequate.

BRIEF OVERVIEW OF HUMAN RESOURCES FOR HEALTH DURING POST-CONFLICT RECONSTRUCTION

Much has been written on different aspects of post-conflict reconstruction of health services in areas such as donor coordination (Macrae, 1995; Zwi & Macrae, 1994; WHO, 1998; Lanjouw, Macrae & Zwi, 1999; World Bank, 2002b, 2002c), but little attention has been given to the effects of conflict on the health workforce and its implications for post-conflict reconstruction of health services. In recent years, despite increasing recognition of the importance of human resources for health and participation of many agencies in the post-conflict reconstruction of countries, approaches and inputs in this area have rarely been documented. As a result, there has been virtually no use or dissemination of lessons learnt, leading to a perpetuation of ineffective approaches and missed opportunities to effect change.

Since the latter half of the 20th century there has been a rise in the number of countries experiencing conflict. Analysis of conflicts indicates that civil war is the most common form of conflict; 103 out of the 110 recorded conflicts between 1989 and 2000 were civil conflict (World Bank, 2002c). A number of these conflicts were protracted, with institutional collapse, violence directed towards civilians, and political manipulation of tribal, religious or ethnic groups, frequently resulting in complex political emergencies (Bornemisza & Sondorp, 2002). Poverty fuels conflict, and low-

income countries are thus at higher risk of conflict than medium- or high-income countries (Collier et al., 2003). It has been estimated that there were approximately 30 active conflicts in 2000, almost all of which were in less-developed countries (Bornemisza & Sondorp, 2002). The United Nations Office for the Coordination of Humanitarian Affairs (2002) estimated that it had been involved in more than 25 complex emergencies in 2002, and the United Nations Consolidated Appeal (2003) covered 18 complex emergencies.

Human resources are particularly affected by prolonged war and conflict, the extent depending upon the duration and type of conflict experienced (Pavignani, 2003). The health workforce can be severely diminished, as in the case of Rwanda and Cambodia[1] (Sileap & Smith, 1996). Poorly planned emergency efforts to replace lost health workers can lead to severe overproduction of particular categories of professionals, as in the case of Afghanistan and Cambodia (Ministry of Health, Cambodia, 1993; Reid, 1994; Smith, 2002; King, 2003). Destruction or deprivation of training institutions result in poor training. Combined with a lack of supervision, inappropriate use of institutions and competing concerns for survival, this results in a degradation of professional skills.

The scenario is further complicated by ad hoc training of health workers to meet immediate needs by a variety of nongovernmental organizations and donors—in-country, cross-border and in refugee camps. This can result in a plethora of categories of health workers; for example, in the case of Cambodia, there were 59 different categories.

As countries work towards reform of their health services, they continuously face common problems that have an impact on the distribution and quality of health services. The majority of these problems can be directly or indirectly attributed to health workforce issues. Human resources consume the highest proportion of the recurrent health budget in salaries (Green, 1999; Dussault & Dubois, 2003), and have the most direct impact on the success of strategic approaches to health service delivery, such as decentralization. This factor continues to be underestimated internationally (Dussault & Dubois, 2003; Martineau & Buchan, 2002). This has resulted in limited success in implementing planned, equitable, efficient, acceptable, accessible and cost-effective health systems, thus jeopardizing poverty alleviation and the attainment of the Millennium Development Goals (United Nations, 2000).

The post-conflict reconstruction period offers a unique opportunity to start afresh. In order to maximize the short window of opportunity during which there is substantial donor support, ministries of health require evidence to contribute to their understanding of the key issues of human resources development in order to develop a strategic approach to human resources development, thus avoiding costly ad hoc approaches that generally contribute little to the development of sustainable systems.

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1. Crude estimates indicate losses to the health workforce of 75%–80%.

PURPOSE OF THIS GUIDE

This guide is intended to stimulate interest, understanding, discussion and sharing of experiences, both successful and unsuccessful, of post-conflict situations. It is designed to act as a bridge between the post-conflict human resources development scenario and the more advanced workforce strategies and tools that can be used in the development phase.

In comparison with other sectors, little is available in the public domain in relation to experiences and lessons learnt pertaining to human resources development in post-conflict and disrupted environments. There is, however, a wealth of undocumented knowledge held by individual health professionals or in the records of organizations.

The aim of this guide is to take the first steps in documenting relevant evidence, tools and experience of countries that have experienced conflict and disrupted environments over prolonged periods.

The objectives of the guide are:

- to draw attention to the crucial importance of human resources development for re-establishing health systems following prolonged periods of conflict and disruption;

- to provide evidence and tools to de facto health authorities and other actors in the field of human resources to support them in their difficult task of post-conflict reconstruction;

- to encourage de facto health authorities, donors and nongovernmental organizations to share knowledge and experience (both of what works and does not work), which can be widely disseminated and shared with others who are or will be working in this field.

HOW THIS GUIDE IS ORGANIZED

The first part of the guide, comprising chapters 1 to 9, is intended to set the scene by introducing the reader to the importance and issues of human resources development in post-conflict country settings. It incorporates examples from a variety of countries, and is particularly useful for policy-makers, senior managers and donors.

The second part of the guide, comprising chapters 10 to 16, is designed for human resources personnel. It addresses the issue of how to start working towards achieving a balanced and comprehensive approach to human resources development within the context and constraints of post-conflict reconstruction. It covers the different components of human resources development, identifying the key steps and related questions that may need to be considered and addressed within the context of the individual country. It highlights opportunities and potential options, and gives examples of tools that have proved to be of use in different post-conflict situations. The guide concludes with a checklist that summarizes important steps and inquiries that readers can follow to get off to a quick start.

AN INVITATION

In order to help expand the guidance provided here, and adapt it to continuously changing approaches to post-conflict redevelopment, please provide comments on the guide and share your knowledge, by filling in the questionnaire at the end of the document.

Your help will be particularly valuable for those involved in human resources development during the post-conflict phase when, as Dr Gertrud Schmidt-Ehry has put it, human resources professionals are "sailing while building the boat" (personal communication).

Understanding human resources development in post-conflict countries

Considerations for policy-makers, senior managers and donors

1. Challenges to health workforce development in the post-conflict context

The key question in developing human resources for health continues to be how to produce, deploy and retain an appropriately trained health workforce of the appropriate skill mix who can deliver the appropriate, affordable and equitable packages of health services designed by ministries of health as the basis of their health service delivery. The problems related to this are common to all countries. In post-conflict situations, the loss or displacement of experienced personnel, the destruction or degradation of training systems, and the complexity of the context within which reconstruction takes place exacerbates the problems (Macrae, 1995; Smith, 2001, 2002). At the same time, such situations offer the opportunity to start afresh. In order to make a new start it is crucial to identify the key issues and to be addressed within the specific context of the country concerned.

The type and nature of conflict are individual to each country, particularly where there are prolonged periods of conflict, say for 20 years or more. There may be a combination of many types and elements of conflict, including local and foreign military bombardment, bloody civil strife, occupation by foreign forces, international political and economic isolation, and many years of "half peace and half war" that can include both guerrilla and frontline military activity. All these elements, regardless of their duration, result in massive population displacement (Curtis, 1994).

In the immediate post-conflict period, it is necessary to examine both the quantitative and qualitative impact of the conflict on the workforce. This is a difficult task in an unstable political environment, where large population movements have taken place, communications are poor or non-existent and records may have been destroyed.

There is also a political aspect to managing human resources. This may create difficulties in terms of reintegrating health workers from different political factions, tribes or sects, both within the country and among refugees returning from neighbouring countries. This situation may result in difficulty in obtaining information, in addition to the problem of recognition of qualifications and establishing a system of professional equivalences. The entire process is invariably overshadowed by the high priority given to patterns of disease burden and the vertical disease control

efforts that distort efforts and render almost impossible the attainment of strategic short-term goals. A major challenge for national and international policy-makers is to strike a balance between fragmented emergency approaches to human resources and the necessary short-term strategic approaches.

As countries emerge from prolonged periods of conflict and isolation and start post-conflict reconstruction efforts to rebuild governments and replace lost health professionals, it is crucial that the new health managers understand the wider context within which they are rebuilding their health services. While there is an opportunity to recreate and redevelop new health systems with related policies and plans, the severity of the human resources issues affecting the context within which health sector reform takes place is greater than that of stable countries. Examples from three post-conflict countries illustrate some of the issues (Box 1).

BOX 1   Impact of conflict on the health workforce

In **Timor-Leste** prior to 1999, the health workforce numbered approximately 3500, of whom 2632 were people of Timor-Leste. The majority of the senior health management, medical specialty and medical practitioner posts were held by Indonesians who left the country. There were only 31 qualified Timor-Leste doctors, including one specialist. Of the reported 85 Timor-Leste medical students, 23 were reported to be still studying in Indonesia and 23 wished to return to continue their studies. There was, however, an oversupply of other cadres (Smith, 2001).

In **Cambodia**, of the 487 doctors reported in 1975, only 43 remained in 1979. Emergency efforts to replace this loss resulted in, according to records, 986 doctors and 1810 medical assistants, with 1731 more students coming through the medical faculty in 1993, the majority of whom had been trained over a 13-year period in extremely poor conditions with no teaching resources and virtually no clinical practice. Many of those trained as doctors and medical assistants were nurses and midwives who had graduated prior to 1975. This strategy, while enabling already trained health professionals to upgrade in less time than it would have taken to train health professionals from scratch, effectively deprived the nursing and midwifery professions of their senior managers and jeopardized the future development of a management structure for those professions (Ministry of Health, Cambodia, 1993; Sileap & Smith, 1996).

In **Afghanistan** the majority of the experienced senior health managers and teachers had either left the country or were employed by donor agencies. Initial available data on the in-country workforce through a limited health information system were unreliable, with wide variations in the numbers (Smith, 2002). A survey of health facilities undertaken in the second half of 2002 revealed a total of 12 565 workers, of whom only 25% were female. This did not include health workers outside these facilities. There were only 199 midwives and 3181 nurses (of whom 29% were female). In a country with one of the highest maternal mortality rates in the world and an estimated 15% female literacy, the Ministry of Health is facing major challenges in redressing balances and, particularly, producing female health providers who can work outside the cities and reach the women in rural areas. The medical workforce is of major concern; there are approximately 3000 doctors who are mainly urban-based and 11 000 more who are currently being trained in a variety of schools lacking equipment, resources and qualified teachers. This situation of massive future oversupply will have serious consequences and requires urgent attention (King, 2003).

The lack of experienced senior health professionals, at every level of the health services, results in health workers' having to undertake posts or professional tasks for which they have not been trained, at a time when they are suffering from the effects of conflict, as well as being preoccupied with the security and survival of their families during the period of relative instability that occurs immediately post-conflict. It is within this scenario that many of these health workers, having no knowledge of international trends in health sector reform, must start redevelopment of the health services, together with the related policies and plans. At the same time, they must deal with an influx of multilateral and bilateral donors, as well as international organizations and nongovernmental organizations, all of which are eager to provide input.

These individuals are also under pressure to develop policy quickly so that it can be used as guidance for donor input in the immediate post-conflict period—a few years during which they are assured of substantial donor input and funding. The development of policy within this context is difficult. As a result, human resources policies are very general and include broad statements about ensuring the right skill mix at every level. They are not, however, sufficiently specific to give clear guidance in an area such as human resources development, where historically donors provide ad hoc and uncoordinated input. While efforts are made to develop coordination mechanisms, in the early days these mechanisms frequently act as information and advocacy forums. The real challenge is to find a way to move these forums towards constructively contributing to early policy development.

This urgency to start the policy development process frequently occurs during the transition period, before elections, when a temporary or transition authority is in charge. It is also a period when efforts are being made to involve senior health professionals from previously opposing factions in working together to reconstruct the health services.

The context of post-conflict redevelopment clearly demonstrates the urgent need for rapid capacity building in key areas such as planning and management, clinical skills and education. There is, however, a danger of continuing a "prescriptive" emergency approach to capacity building within what is essentially a development process (Lanjouw, Macrae & Zwi, 1999). This occurs because of the short opportunity period when a large amount of funding is available. It fosters the myth that health workers emerging from long periods of trauma can be trained to function at the same level as health workers in stable countries, but in less time. Perpetuating an emergency approach is a guarantee of poor results and waste of limited funding.

The first step in addressing the major challenges of post-conflict development of a health workforce is to ensure that a focal unit for human resources development is established. As far as possible, this unit should be structurally integrated into the de facto health authority to ensure that the development of human resources is embedded within the broader aspects of health services redevelopment, in particular through close linkages with policy development, planning, production, both personnel and performance management, and financing (see Figure 1 on page 17).

2. Re-establishing the de facto health authority structure

The first task usually undertaken in the post-conflict period is to re-establish the de facto health authority structure within the overall reconstruction of the government system. This is a complex process. For those who, having survived the years of conflict, undertake this task, there is a certain safety in recreating the system that existed before the conflict. In the case of Afghanistan and Cambodia, which had experienced more than 20 years of conflict, the memory was of a pre-Alma Ata style, hospital-based curative service with public health and curative services functioning separately, the role of human resources development limited to a training and personnel approach.

In beginning the process of reconstruction, senior health professionals experience difficulty in contemplating a departure from familiar traditional roles. First drafts of the de facto health authority structures tend to be fitted to the former roles of the survivors, rather than health service needs.[1] Seeing the opportunities for change, donors who support post-conflict redevelopment press for new and integrated approaches. In order to adopt these new approaches, it is important for senior de facto health authority officials to understand the evolution of health service delivery approaches from which they had been isolated.

During the process of developing de facto health authority structures, it is crucial that central and provincial/district structures are firmly and clearly linked. Because of the isolation of the de facto health authority from service delivery, which frequently occurs during prolonged periods of conflict, it may be necessary in some instances to re-centralize, through strengthening the de facto health authority and redefining its role in designing and managing the newly defined health system, in order subsequently to decentralize. This can be a sensitive area when dealing with major political or factional figures or warlords who control large areas of a country.

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1. This was the experience at the first workshop on redevelopment of the Ministry of Health structure in Afghanistan, held in Kabul in February 2002.

Placing health workforce development in the structure

The process of developing new ministry of health structures provides an opportunity for ensuring that human resources development is more realistically and comprehensively addressed. To do this there must be a clear understanding of the essential elements of human resources development, their components and their complexity.

Because of the human factor, human resources development is the most difficult area to manage within a health service, and it is this factor that influences the success or failure of service delivery (Dussault & Dubois, 2003). It is comparatively straightforward to identify the basic services to be delivered at each level of health services, the number of required health facilities and accompanying equipment, supplies and staffing levels. The difficulty occurs in implementation. Investment in infrastructure must be matched with comparative investment in human capacity development based on clearly defined human resources policies and strategies that incorporate all elements of human resources development. Only a balanced approach will guarantee improvement in health sector performance to deliver equitable, appropriate, accessible and acceptable health services to the community at every level of the health services.

Although the components of human resources development can be classified in many ways, they fall into five broad areas: policy, planning, production and procurement, management and finance (Table 1).

TABLE 1   **Components of human resources for health (HRH) development**

Component	Functions
HRH policy	Policies related to the mission and goals of the health services, which provide the basis for future development of the legislative framework
HRH planning	HRH assessment, information, database
	HRH plans as an integral component of health sector planning linked to HRH policies
HRH production and procurement	Training related to market needs
	Planned continuing education to strengthen capacity in clinical skills and leadership/management, with links to the educational sector
	Procurement of short/medium-term health professionals

HRH management (covers both HRH performance management and personnel management)	Performance:
	    job descriptions
	    supportive supervision
	    performance (planning and evaluation)
	    motivation

	Personnel:
	    job classification
	    recruitment
	    hiring, transfer and promotion
	    compensation, benefits and incentives
	    discipline, grievance procedures, termination
	    policy manuals
	    union and professional association relations
	    compliance with labour laws

HRH finance	Realistic financial planning to implement HRH plans and strategies

Source: Adapted from: Hornby & Forte, 2002; Management Sciences for Health, 2005; Martinez & Martineau, 1998; Dewdney, 2003

Certain elements of the main components are frequently undertaken within de facto health authorities, but in a fragmented fashion. For example, the personnel functions may be undertaken within the authority's administrative department or by public/civil service commissions; the training function may be dealt with by a training office or even the main training institutions; human resources planning may be undertaken by health planners who have no specialist knowledge of human resources for health; continuing clinical education may be dealt with by the different technical programmes; and human resources service management functions may be provided by the service delivery managers.

This piecemeal approach—without a clear focal point for coordination of functions and for collaboration with related departments and institutions of the de facto health authority—has yielded poor results in terms of developing clear human resources policies and plans. This was demonstrated in the Pacific island nations. Information on 21 Pacific island nations shows that only four countries had plans and policies for human resources development, while an additional seven countries had such plans but no policies. The four countries that had human resources development plans and policies were the only countries to have specific human resources development departments.[2] This evidence suggests that the fragmentation of human resources development functions and lack of a dedicated focal point for human resources development in ministries has a negative impact on the development of human resources policy and plans.

Despite efforts to encourage ministries of health internationally to incorporate new approaches (Egger & Adams, 1999) and to develop and implement human resources development policies (Egger, Lipson & Adams, 2000), there has been limited success in getting ministries to move beyond viewing human resources development as consisting only of training and personnel (Dussault & Dubois, 2003). Decision-makers, while appreciating the importance of human resources development, continue to have a limited understanding of *overall* human resources development issues.

As approaches to health service delivery and management change, the role of ministries of health has changed from being the centralized, direct providers of all health services to undertaking key functions of system performance. These functions have been described as stewardship (oversight), financing (collection, pooling and purchasing), creating resources (investment and training) and delivering services (provision) in order to deliver a fair and responsive health system, using systems such as contracting, and a mixture of public and private services (WHO, 2000). Additionally the international trend for health worker training institutions to be placed under the jurisdiction of ministries of education has further changed the role of ministries of health from direct production to consumer. These changes present the challenge of how to develop capacity within ministries in order to move from traditional roles and to undertake the new functions.

In view of the increasingly recognized importance of human resources development and the changed approaches, it is crucial for the de facto health authority to have a dedicated focal point, unit or department located within or closely linked to

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2. Personal communication, Human Resources Development Adviser, Office of the WHO Representative in the South Pacific.

the policy and planning unit, to ensure the realistic integration of human resources development within the overall policy and planning processes.

This focal point can provide linkages between the educational planning and management process and the service delivery process to ensure that production is appropriate to health service needs. The focal point can also provide feedback on health worker performance to training institutes to ensure that curricula are regularly adjusted and the necessary standards are maintained (Figure 1).

FIGURE 1   Role of a human resources development unit within the health policy and planning department in linking workforce production to health service needs

POLICY AND PLANNING DEPARTMENT
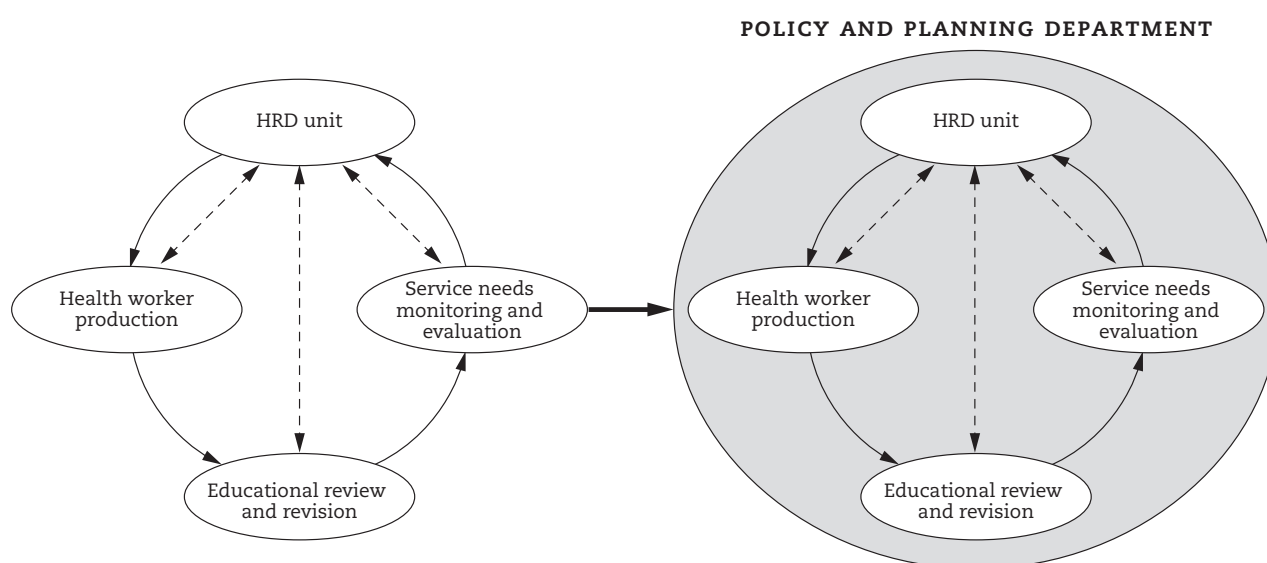
It is also important to ensure that the administrative/personnel function is linked to the policy and planning process through ensuring close working relationships with public/civil service commissions, particularly as these structures are being redeveloped (Smith, 2001; World Bank, 2002b; King, 2003). This pivotal role of a human resources development unit can ensure a coordinated approach within the de facto health authority to human resources development and avoid the problems engendered by the former fragmented approaches.

The human resources development unit, in working closely with planning and finance units, can identify the financial investment required to implement the requisite policies and plans, including mechanisms to ensure quality. In developing and least-developed countries, de facto health authorities have generally given low priority to funding health worker production because of the competing demands for funding of health services, but this has a negative impact on the quality of the workforce. At the same time, the salaries of the workforce consume the highest proportion of the recurrent health budget (Green, 1999; Dussault & Dubois, 2003). A dedicated unit in possession of extensive data on human resources can work closely with planning, finance and relevant service delivery departments within the de facto health authority to identify more cost-effective approaches to redressing imbalances in the work-

force. This is increasingly important in the face of two major threats to the health workforce: migration and AIDS.

Creation of a dedicated focal unit for human resources development is insufficient without endorsement of its role at the highest political level. While in most countries there is a need to raise awareness of the crucial importance of human resources for the success of health reforms (Martineau & Buchan, 2002; Dussault & Dubois, 2003), in the post-conflict situation newly formed health authorities are heavily influenced by donors' behaviour and funding priorities. Donors are now giving more attention to human resource issues in post-conflict countries, as demonstrated by reports from joint donor assessment missions to Timor-Leste in 1999 and Afghanistan in 2002.

3.   Assessing the workforce situation

When assessing the post-conflict workforce, it is important to identify the sources of health workers that will eventually contribute to the entire health workforce in the country. The human resources situation in a post-conflict context is complex and varies according to the conditions in the country concerned (Figure 2).

FIGURE 2   **Potential sources of health workers in a post-conflict scenario**
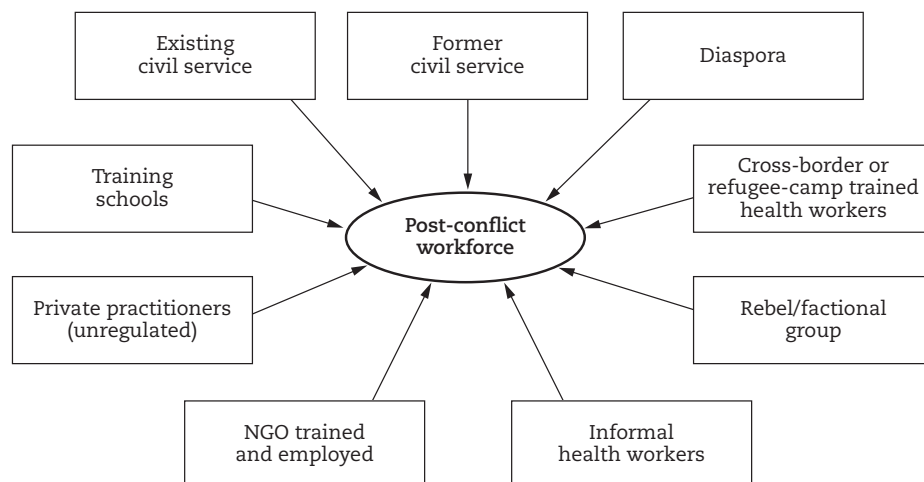
In general, the main sources of health workers are:

■ civil service health workers (if the civil service exists), comprising health workers who have returned to or remained at posts in government service, including health workers employed by other ministries, the military, the police, the education service, and so on;

■ former government health workers who have been displaced or who have not returned to their former posts;

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- current and future graduates from the existing training institutions (quality and competence may vary according to how the institutes were affected by the conflict)—in small countries this may also include students who have been sent overseas to undertake basic training in health sciences;

- health workers who have been trained cross-border or in refugee camps on the borders of neighbouring countries during the conflict period;

- the diaspora who have permanently settled in other countries;

- health workers belonging to rebel or factional groups, who provide care in territory under their control;

- trained and employed health workers, who work with nongovernmental organizations within government facilities alongside government-employed health workers, or who work in parallel private, non-profit, health systems;

- private practitioners (while most government health workers undertake some private practice, this refers to the health workers who work purely in the private, for-profit sector).

- informal health workers, such as traditional birth attendants, traditional healers, community health workers and health promoters, who have often been the main health providers in isolated and insecure areas—these workers are a resource that should be considered in relation to future workforce planning and to how they are, or could be, linked to a more formal health workforce.

There may also be other sources of health workers, though these may to some degree be covered under the categories listed above. It is important to take into account how the various phases of the conflict have affected health workers; this may begin to give a picture of the health workforce.

The end of conflict is a time of large population movements as people, including health workers, move across borders and from rural to urban areas, trying to return home or reunite with their families. These population movements create problems in assessing the size of the workforce.

Assessing the human resources situation is a time-consuming business. In the absence of reliable data, it is common for broad assumptions, directly relating quantity to quality, to be made quickly by aid organizations providing emergency relief in the early post-conflict period.

These assumptions are frequently inaccurate and misleading, but in the absence of hard data they may be latched on to, perpetuated and used to direct donors' approaches to human resources development, resulting in poor use of valuable financial resources (Box 2).

| BOX 2 | **Examples of misleading assumptions about human resources for health** |

In **Timor-Leste**, where approximately 80% of the infrastructure was destroyed as Indonesia withdrew, there was an assumption that equated the level of destruction of infrastructure with loss of human capacity. In fact, while there was a loss of senior Indonesian health professionals, there remained a large indigenous health workforce that had been trained in the Indonesian health system. This assumption coloured the approach of young, enthusiastic but inexperienced nongovernmental organization workers based in the districts, who assumed that they would have to train from scratch. This frequently was a source of frustration and friction for both the Timorese health professionals and the nongovernmental workers involved (Smith, 2000, 2001).

In **Cambodia**, there was a general assumption that a doctor or nurse trained in the immediate post-Pol Pot period was trained to a similar level as in other developing countries. Much of the continuing education did not address the gaps between the emergency training and the level of scientific and technical knowledge and skills required to effectively undertake the continuing education courses offered by the donor agencies.

Indeed, the impact on education of the disruption caused by the war and the subsequent destruction of educational systems by the Khmer Rouge was grossly underestimated by the donors. The resultant knowledge base of the health workers was severely overestimated by most agencies. Information and experience from implementing the first Diploma in Health Personnel Education Course, developed by the World Health Organization (WHO) in Cambodia in 1996 for teachers from all the health training institutions in the country, provided evidence to share with donors on the impact of the conflict and the isolation on the health professional education system (Kerr & Smith, 1998).

Initial assessment of quantity and quality

Initial assessments tend to be based purely on head counts from available quantitative data reported by nongovernmental organizations or agencies in the field. This information is limited, since it stems from secure areas only, and gives no indication of levels of training or capacity. A clear example of this was the reporting of numbers of health workers in Afghanistan in 2002. The health information system reports included broad categories of health workers, but reported numbers varied so widely (particularly for doctors) that they gave rise to concerns that many other categories of workers who had been trained both in and out of the country, and had not undergone the full seven-year medical training, were calling themselves doctors. The total number of midwives could refer either to a midwife who had trained for three years or an assistant midwife trained on the job for periods varying between three months and one year (Smith, 2002). More detailed information was obtained during a health facility survey (Transitional Islamic Government of Afghanistan, 2002).

It may often appear that there is no detailed information available on health workers in the chaotic post-conflict phase. Consequently, valuable sources of information are overlooked. In 1992 in Cambodia it was discovered that, as a basic health service had been set up in 1979 following the liberation from the Khmer Rouge, data on health workers were available from the Cambodia People's Party government payroll. The health services of the other political factions provided numbers and qualifications of their health workers who worked cross-border. The information provided by the United Nations Border Relief Operation (UNBRO) on 3143 returning health workers completed the picture; there was a large workforce of 22 000, consisting of 59 different categories of varying competences, all trained on an ad hoc basis by different agencies with differing curricula and for different lengths of time.[1] This information supported the development of processes to rationalize and reduce the number of categories from 59 to 21.[2]

In Timor-Leste it was discovered that the health personnel records had been rescued from the Department of Health as it was being burned. The saving of these manual records allowed the data to be transferred to a computerized database, which was used for verification of qualifications for future recruitment and as a tool for workforce and educational planning (Smith, 2000, 2001).

While it is important to gain as much information as possible on the health workers who have been trained abroad during the conflict period and who would be returning to their countries, the issue of recognition of qualifications and training can be highly political. Government training establishments may refuse to recognize the qualifications of health workers of other factions trained in refugee camps, even though government training schools are likely to have been severely affected or even destroyed during the years of conflict, and may have been functioning at a much lower level, lacking most basic training facilities, whereas training courses undertaken in refugee camps are frequently supported or conducted by donor agencies, and are better equipped and resourced. This was the case in Afghanistan and Cambodia.

Data on health workers trained in the Cambodian refugee camps in Thailand was accessed via the UNBRO, which had set up a system of qualifying examinations to enable all the health workers trained on an ad hoc basis by different nongovernmental organizations and agencies in the refugee camps to be classified into broad categories. It was hoped that the UNBRO model, which gave legitimacy to the training in the camps, would be replicated in other complex emergencies of long duration. This was not the case in the Afghan refugee camps, however (Smith, 2002).

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1. Survey of the health workforce undertaken by a human resources development working group in Cambodia during the first half of 1993, before the first elections.
2. This was undertaken by setting up a health worker equivalence committee, involving representatives of the health sections of all four political factions, supported by the World Health Organization and the Office of the United Nations High Commissioner for Refugees (UNHCR). The process of agreeing on categories and level of training was made easier by the UNBRO qualifying examinations, which were conducted in the refugee camps in Thailand.

Expanding the information

It is important that some form of registration of all health professionals is put in place as soon as possible. While this is undertaken by professional associations in many countries, the post-conflict situation precludes such an approach. The ministry of health is best placed to get detailed data not only on numbers but on the work experience and qualifications of health workers, including diaspora health workers, whose qualifications and skills can then be readily assessed or verified. This is especially valuable whenever there is a partner organization, such as the International Organization for Migration, specialized in creating databases for skilled potential returnees in a post-conflict situation.

The first stage in the registration process is the official clarification by the de facto health authority of the categories of health workers that will be officially recognized by the ministry of health. Where agreement has been reached on equivalences, health workers who have undergone training courses recognized under the equivalence processes can be registered as having attained the appropriate level for a particular category. This is important in order to work towards ensuring that health workers practise at the level for which they are have been registered. Entry of data from registration ensures that the de facto health authority has detailed information on all health workers in the country, and provides an important tool to support both workforce and educational planning. Information thus obtained on the quality of health workers working in the private sector can be of particular use in the new approach of contracting health services, as it will allow de facto health authorities to assess the capacity of the health staff implementing the contracted health services.

It takes time for de facto health authorities to appreciate the usefulness of this tool, particularly when there is a history of handling records manually and, because of the conflict, the country has been isolated from the boom in information technology. In Cambodia it took approximately three years to get the human resources development database set up, mainly owing to difficulties in understanding how such a database could be of use to all departments for planning purposes, and the process required to develop the database.

In Timor-Leste, while it was possible to set up a human resources development database within the first year before the permanent civil service recruitment process, it took time for staff of the de facto health authority to understand how the database could be used and the importance of maintaining it (Smith, 2001).

Using the information for policy, planning and implementation

Evidence demonstrates that one of the reasons why there are problems in achieving national capacity in developing and implementing human resources policies is the lack of good information (Dussault & Dubois, 2003; Egger, Lipson & Adams, 2000). Development of policy and plans in the post-conflict context is a difficult process, particularly where newly appointed staff of the de facto health authority has had no previous experience in working at senior management level or of policy development; it requires information that is as accurate as possible, given the situation of the individual country. Surveys of the workforce situation, such as those in Cambodia (Ministry of Health, Cambodia, 1993), and in Afghanistan within the health facilities survey (Transitional Islamic State of Afghanistan, 2002), if carried out as soon as possible, either confirm or negate assumptions and contribute more appropriately to the development of initial or interim policy and plans. The policy and plans can be refined later when more detailed human resources data are available for more advanced and long-term policy-making and planning.

Unsubstantiated assumptions about the workforce can lead to ineffective use of training and related finances, particularly where health workers receive per diem payments or stipends for training. In a situation where government salaries are insufficient for survival or health workers have not received salaries for a considerable time, continuing education courses are regarded as an important source of income. Attendance at training courses can be regarded as a favour bestowed by the senior administrators, and training opportunities are either shared among the health workers or are awarded to favoured friends and family. This results in health workers' attending courses unrelated to their work or at too high a level for their existing technical knowledge, or a few people attending many courses.

4. Building management capacity within the ministry of health

Once the organizational structure is developed, considerable work must be undertaken to clearly delineate the roles and functions of each department or unit outlined in the structure together with their interdependence to ensure firm linkages, lines of responsibility and authority. This is important particularly in a post-conflict setting where health workers with no previous experience in senior level health service management must undertake roles for which they are little prepared. The structures are the precursor to identification of staffing levels and development of comprehensive job descriptions.

While there is an urgent need to develop management capacity to manage health service delivery, the post-conflict period is also an opportunity for interdependent departments working together to take a problem-based approach to management that also addresses the typical vertical health intervention programmes in a more integrated manner. This is a way of avoiding the perpetuation of the cost-ineffective or unsustainable vertical approaches that affect health delivery systems worldwide.

Strategies to strengthen management capacity incorporate more than training alone. Mentoring and support are required to help newly appointed and inexperienced managers move from crisis-management practices to more proactive, systematic, participatory management practices. This requires good role modelling in collaborative approaches from the various advisers seconded to the ministry of health and provincial/district health offices by a variety of donors. It also requires exposing new managers to good systems in other countries, which they can relate to when discussing new approaches with colleagues within the ministry.

Strategies such as study tours, short training both overseas and in-country, and fellowships to study for diplomas and master's degrees overseas have been used. These experiences are costly and tend to benefit only the individual, because of the absence of mechanisms to share experiences with peers and thus feed into the development of the health and related educational systems.

Appropriate selection of candidates for study tours and training, while crucial, is difficult to manage in an unstable political and economic environment. There are generally many opportunities, offered by a large number of agencies, for senior health professionals to attend meetings or training courses overseas, the majority of which require proficiency in a second language. While the objective is capacity building, the small number of senior health professionals with a good command of a second language spend such a large proportion of their working time attending these meetings or training courses that they are hardly in the country long enough to implement what they have learnt and use it to develop the capacity of others in the de facto health authority. Additionally, it may be difficult for the small number of senior health professionals responsible for major areas of health service redevelopment to ensure regular attendance at in-country training.

The experience in Timor-Leste (Box 3) illustrates how the use of opportunities for capacity building, at a time when the newly formed de facto health authority is under pressure, may reduce the achievement of objectives and the outcome of considerable financial investment in logically planned interventions. This situation is not exclusive to Timor-Leste. It is common in small countries where the number of health staff is small and also in countries where there are a limited number of senior health personnel with a sufficient level of second language to act as counterparts to advisers or to go overseas to attend technical meetings or undertake training.

Dramatic changes in approaches to health service delivery and the corresponding role of the de facto health authority increase the importance of building capacity in the de facto health authority. Capacity development takes time to achieve. In countries that have not been disrupted by prolonged conflict and complex emergencies, the adaptation to new approaches and the corresponding capacity development have been evolutionary. In countries emerging from prolonged conflict with the resultant problems for human resources development, the gaps to be bridged are very great; the capacity to adapt to the new approaches, such as contracting of services and the required management styles and skills, cannot be put into place by a few short emergency training courses. This is particularly relevant when modern management methodology conflicts with the traditional patronage systems that are the basis of decision-making in many countries, and where issues of supportive supervision and staff motivation are considered unimportant.

The approach of contracting of health services is being undertaken in key districts in Cambodia and has yielded good results[1] (HealthNet International, 2002; Soeters & Griffiths, 2003), but this initiative took place in 1998 after seven years of intensive capacity building in the de facto health authority. This model is now being introduced to Afghanistan at a time when capacity building in the de facto health authority is only beginning, and there is difficulty in enticing back former experienced health service managers who are currently employed by nongovernmental organizations and donor agencies and are reluctant or unable to return to low-paid government posts. The speed, timing and scale of introducing contracting of health services are of great concern, in view of the immense management implications for the de facto

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1. Evidence presented by B. Loevinsohn, World Bank, during the first Joint Donor Mission on the Health, Nutrition and Population Sector to Afghanistan, March 2002.

health authority at a time when capacity, systems and practices are not in place (Simmonds, 2003; Daly, 2003).

BOX 3   Experience of strengthening management capacity in Timor-Leste

A management training course was provided for the first 15 senior health managers recruited through the new public service recruitment process in 2001. They were put through an in-country training course in health service management that covered the essentials of management, planning and evaluation, human resources, financing and health information systems. The model of training used was one that had been successfully used in other developing countries. The training was conducted, using interpreters, by the team from an overseas university that had initially developed the training course. It was adapted to Timor-Leste and used examples of common scenarios with which the Ministry of Health was dealing. All materials were translated. The training was conducted in the afternoons, which allowed the participants to work in the Ministry of Health in the mornings.

A second training session was conducted for the remaining senior health managers once they were appointed, this time using some of the first trainees as resource persons, working with the original training team. Potential trainers were identified from among the participants of the two training courses and they travelled overseas to work with the original training team in their university department to adapt and translate training materials for use by district health managers, and to observe methods of management training. On return, supported by one of their original trainers, they began training courses for district health management teams.

Achievements

The training course provided an understanding of basic principles of management as applied to the situation in Timor-Leste. It allowed senior health managers from all departments in the Ministry of Health to use a participatory approach to problem solving and management. The course provided a foundation on which to build more advanced management training.

Constraints

Language problems: The trainer with the best second-language ability was unable to travel; the other trainers had poor second-language ability, which diminished what could be achieved during the attachment.

Availability of trainers and resource persons: The sporadic availability of the main local trainer and resource persons because of other commitments and overseas trips during the training of district health managers made it necessary for an expatriate trainer (who had been intended to provide only support) to take a more direct and active role.

Source: Smith, 2001.

The language issue in capacity building

The language issue in post-conflict countries is much overlooked with regard to its impact on capacity building. Where the national language has been supplanted by the language of a colonizing country, upon attaining independence there is a move to reinstate the traditional language. Problems occur if the natural development of the traditional language has been retarded in relation to the absorption of modern managerial, technical and scientific terminology that is needed for use at professional level (Box 4). This makes it difficult to translate technical training materials available in European languages into the traditional language.

BOX 4   The language issue in Timor-Leste and Cambodia

Timor-Leste has been colonized twice: first by Portugal, then by Indonesia. At the time of independence it was evident that the traditional language was insufficiently developed for use as the national language. The entire younger population had been educated through the medium of the Indonesian language, and the whole population spoke it. Portuguese was made the official language, but only about 8% of the population—and mainly those over 40 years of age—were conversant in Portuguese at that time (Smith, 2001).

In **Cambodia**, schooling was disrupted because of the war, and development of the national language was retarded during the Khmer Rouge regime, when all education ceased and books were destroyed. As a result of the targeting for genocide of the educated classes, only a very basic level of Khmer was spoken. After liberation from the Khmer Rouge in 1979, while education was restarted it was in very limited conditions. The country remained isolated until the time of the Paris Peace Accord, in 1991. This retardation of natural development of the language had major implications for the translation of technical materials. Unless there was common agreement on "descriptions", there were real problems during training, as trainees had difficulty in understanding the translated materials. The use of descriptions, rather than technical terms, also increased the amount of reading for health workers, an unwanted outcome for people who had lost the reading habit.

In addition to the language difficulties, there are particular problems for health professionals—who culturally use analogies—in interpreting conceptual frameworks with which they are unfamiliar. These difficulties arise from prolonged social and professional isolation that health professionals may have experienced within the country. It takes time for health professionals to accept the notion of conceptual thinking within a climate of political uncertainty. The first step in conceptual thinking is to ensure that there is an understanding of the terminology being used. The

next step is to be acquainted with the essential elements of the subject area, thereby providing a firm linkage to the wider context.[2]

The majority of scientific and technical materials are available in European languages and use conceptual presentations. Donor support to tertiary professional education frequently involves provision of expatriate educators to teach in faculties. This requires translation of materials, with its attendant problems. Students are put through language courses, but it takes considerable time before students can achieve a sufficient level of a second language to undertake professional studies through the medium of that language, and time devoted to language training is time away from technical studies (Box 5).

BOX 5   The impact of language difficulties on the first Masters in Public Health course in Cambodia

In 1992, shortly after the Paris Peace Accord, an nongovernmental organization linked to an overseas university proposed to run a Master's in Public Health course in the country. Potential candidates to undertake the course were put through six months of language training before the start of the course. The course was to be conducted part-time by a series of experts coming from different countries to teach two-week modules on differing subjects. It was intended that the students would undertake projects (unsupervised), in between the taught modules. In the absence of any libraries, lecturers would bring technical reference materials with them. It had not been planned to have an on-site coordinator to provide ongoing support and mentoring for the students during the course.

The course was halted after a short while because none of the students had attained the level of language required to study at postgraduate level and it became apparent that they had difficulty in understanding the lectures. The students were put through further language training. During this period the implementation of the course was reviewed and two training coordinators were appointed, one expatriate and one Khmer doctor who had undertaken a Master's in Public Health overseas, to prepare students for the subject before the arrival of the overseas lecturers and to supervise the students in undertaking projects.

The course was eventually completed successfully, but the experience raised a number of points:

■ The impact of the conflict on the pace of learning had been underestimated.

■ The students had little exposure to researching subjects, a basic aspect of Master's level education.

■ The students experienced distress at the lack of success of the implementation of the initial course.

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2. The issues of language, reading habits and dealing with conceptual thinking posed major problems during the implementation of the first Diploma in Health Personnel Education, conducted in Cambodia in 1996 by WHO for teachers from all the training and technical institutes in the country. The course was originally projected to last 10 months, but was extended to 13 months. Subsequent courses were 15 months long.

There are frequently offers of support to a training institute from universities in many countries, both within and outside the region. This may result in teachers from different training systems with different languages converging on a faculty, a situation that can cause difficulties and confusion for the faculty.

Role of the diaspora in capacity building

The diaspora is an important source of technical support if that support is carefully planned and channelled. There is a strong wish among members of the diaspora to contribute to the reconstruction of their country. Many of them are senior health professionals who have either trained abroad or who have continued their studies in other countries. In general, language is not a barrier; therefore they can be of great use in working with faculty members to update the clinical and technical skills of teachers, and in translating technical training materials into the local language. Where textbooks were developed in the local language before the conflict, members of the diaspora can work with faculty members to update these books. Members of the diaspora who are involved in research and teaching within institutions abroad can help in forging links between their institutions and those of their place of origin, through mechanisms such as twinning of medical teaching institutions, telemedicine links, sharing of updated research and health standards, reciprocal professional exchange to benefit from work in either country, and transfer of medical equipment and supplies. An example of such interventions is that of input to mental health capacity-building programmes in Cambodia.

There are some constraints in relation to the diaspora. Members of the diaspora may in some cases be viewed with suspicion as returning for political motives. They may also be perceived as having lived in safety and comfort overseas or as not able to understand the hardships endured by the health workers who remained in the country throughout the conflict. This phenomenon was observed in April 2003 in Iraq during the initial meetings to develop an interim authority.

The majority of the diaspora can provide only short-term input, as they cannot afford to give up lucrative salaries, which support families overseas, to return and live on a meagre salary that could be in the range of USD 20–100 per month. It is important that this potential short-term input is harnessed and well directed, otherwise ad hoc interventions—such as donating short-life drugs and secondhand equipment, or building a clinic in a diaspora member's home village—may jeopardize attempts by the health authority to develop planned and equitable health systems, and result in wastage of effort and resources.

There are various ways in which members of the diaspora seek to return to contribute to their country. These vary from working with nongovernmental and international organizations to registering with the International Organization for Migration (IOM), which has a system of registering professionals from all sectors who wish to return to work for a limited period on allowances that are be considerably higher than

government salary levels.[3] Members of the diaspora may also return independently through informal local and regional networks. In the United Kingdom, Afghan doctors have been involved in working with professional associations and organizations to form the UK Afghan Health Network.[4]

There are, however, currently no clear mechanisms that can be used to harness this considerable body of expertise in a structured way that will maximize its contribution to realistic and appropriate capacity-building to support ministries of health in reconstructing and redeveloping health services. More is required to raise donors' awareness of possible sources of information on the wealth of experience available through the diaspora through raising the profile of systems such as the IOM databases on Return of Qualified Nationals (RQN).

3. An example is the IOM Return of Qualified Afghans (RQA) Programme.
4. The UK Afghan Health Network evolved from meetings held at the London School of Hygiene and Tropical Medicine to discuss support for the reconstruction of the health system in Afghanistan. The first meeting was held in January 2002 and the second in April 2003.

5. Linking education to health service delivery

One of the biggest problems in the post-conflict situation is to ensure linkages between health services and education (Egger & Adams, 1999). Both the ministry of health and the training institutions are struggling to assess the damage and start again. While training institutions in the capital can communicate with the ministry of health, they are isolated from training institutions in the regions and provinces. This was exemplified in Afghanistan in 2002 (Smith, 2002).

The overproduction of doctors of reduced quality (Box 6) was not exclusive to Afghanistan. In a desperate attempt to replace lost health professionals, Cambodia also achieved an overproduction of doctors of reduced quality trained in a curative medical care approach. However, use of medical workforce projections indicated the impact for the health system and encouraged the Ministry of Health and the Ministry of Education to drastically reduce subsequent intakes for training (Reid, 1994).

BOX 6   Medical education in Afghanistan

Before 1979, there were two medical schools in Afghanistan. By 2002 there were reported to be seven medical schools in the country, plus the Afghan University in Peshawar, that were training medical students. The extra five schools were set up on an ad hoc basis by different political groups or warlords to meet immediate needs in areas under their control, as access to the two original medical schools was cut off. All these medical schools suffered from disruption to studies and lack of qualified teachers, equipment and training resources as a result of the war, and worked in isolation from each other. It is estimated that there are approximately 11 000 medical students (King, 2003). This future gross oversupply of doctors of reduced quality, trained in a curative medical care approach, will not be affordable by the population. It was described as a "time bomb" at a workshop on reconstruction of the health system in Afghanistan, dealing with capacity-building in primary health care and public health, held in London in April 2003 (Sondorp, 2003).

De facto health authorities, struggling with the reality of post-conflict reconstruction and re-establishment of health care services, have little time to pay attention to the plight of the training institutions or to query the quality of the production. As a result, there is a perpetuation of outdated training that is not appropriate for the new health system, thus necessitating higher costs for continuing education for graduates of training institutes. Attention is largely confined to the debate as to whether training institutes are "owned" by health or education authorities. Where training had been under the authority of the health department before the conflict, there is a reluctance to "relinquish the function".[1] There is a need to help de facto health authorities understand that, as consumers of the product of training, they have a different role: to define the required product and to ensure that students have sufficient opportunity to gain the appropriate clinical practice within the health system.

Re-establishing educational standards

In countries that have experienced prolonged periods of war and conflict, one of the major issues to emerge from the disruption and damage to the training institutions is the diminution of former educational standards. As government systems break down, previous entry qualifications are reduced. Where there is a loss of qualified teachers, they are replaced by less-qualified personnel who have no experience in maintaining educational standards. Where payment is required for entry to training, an expectation arises of automatic pass. Teachers who attempt to maintain standards come under threat.

Loss of large numbers of trained health professionals results in emergency training of large numbers of students of lower academic standard. The urgency to get these health workers into the health services as soon as possible compounds the demise of academic and clinical standards. Reversing this situation is a difficult and even dangerous process in the unstable political environment that is the post-conflict period (Box 7).

BOX 7   Early initiatives in raising academic standards in Cambodia in 1994

Students from the Faculty of Medicine, Dentistry and Pharmacy in Phnom Penh reacted strongly to efforts to change the examination format to the use of multiple-choice questions and to the raising of the pass rates. They marched on the Ministry of Health, which had to be guarded by the police and army for two days. The impasse was resolved after a compromise was reached regarding the pass levels.

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1. In Afghanistan in 2002, senior health professionals reacted strongly to the proposal to transfer medical training to the Ministry of Higher Education, indicating that if this came about they would take no part in clinical teaching of students. They expressed the view that the Ministry of Education should build its own teaching hospital to ensure clinical practice for students.

It is impossible to change the situation quickly. The first steps are to strengthen the educational capacity of the teachers, redevelop the curricula and set clear standards for the new level of training. Use of detailed data on human resources can contribute to the difficult and sensitive process of reduction in size of intakes to manageable numbers. Reducing the number of trainees also introduces a process of competing for places, resulting in entry of the top students. This was achieved in Cambodia (Reid, 1994).

The issue of maintaining standards in post-basic training can also be addressed if post-basic training courses are developed in collaboration between the donors and the de facto health authority with external linkages, to be clearly competence-based, and with acceptance of failure rates. Where the use of an objective evaluation methodology provides clear evidence of failure to achieve the desired standards, it becomes easier for the ministry of health to accept and defend failure rates. This was the case in the Basic Eye Doctor and Basic Eye Nurse training and the Diploma in Health Personnel Education course in Cambodia in 1997.[2]

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2. Use of competence-based curricula, objective evaluation methodology and external examiners provided clear evidence to the Ministry of Health that some trainees had not achieved the minimum acceptable level of professional competence required to practise.

6. Coordinating donor input to capacity building

Although ministries of health begin to set up donor coordination mechanisms early in the post-conflict period, the large number of donors may pose a challenge. Donors making an input to health can number from 60 to 100. Furthermore, not all such donors work directly with the de facto health authority. They may work with other ministries on health-related projects. This process of coordination is perhaps the most difficult task for a fledgling ministry of health in the early days of post-conflict reconstruction (Pavignani & Durao, 1997).

Most aid agencies undertake capacity building to some degree or other, which may take the form of on-the-job training, ad hoc short training courses, and formal training courses either in-country or abroad. Generally, training costs are linked to short-term funding and are determined before the human resources development situation and training needs are assessed (Lanjouw, Macrae & Zwi, 1999). Most training carried out in the emergency and early post-conflict period is by health professionals who have had no experience in teaching and who undertake short assignments—from one to six months—with a resulting lack of consistency, recording or institutional memory (Box 8).

B O X 8   **Survey of training undertaken by nongovernmental organizations in Timor-Leste**

An analysis of training undertaken by nongovernmental organizations in Timor-Leste in April 2000 showed that only one training course had any curriculum; most had just a list of topics covered. Most of the training undertaken by nongovernmental organizations was in fact ad hoc, on-the-job training. Little of the training had been carried out by trained or experienced educators. There was no documentation or evidence to show who had achieved what level of competence or to allow for accreditation.

A strategy employed in Timor-Leste was for the de facto health authority to set standards for competence-based training, which were circulated to all nongovernmental and international organizations as well as other donor agencies. The strategy was in the form of guidelines on the expected level of competence-based training, together with checklists on the training process and a reporting form to be returned to the Ministry of Health, giving details of who had been trained and their results. The information on trainees and results could then be entered into the human resources development database (Smith, 2001).

This strategy was designed both to help coordinate and to provide information on the capacity-building activities of donors. While this tool was workable in a small country such as Timor-Leste, it would be much more difficult to implement in a large country where infrastructure and communications had been severely damaged.

The job of coordinating donor input to human resources development falls to the newly established human resources development department, where staff are learning on the job. This is indeed a daunting task when staff are still unsure of their new role. Staff experience particular difficulties in having to face up to forceful and persuasive donors wishing to implement predetermined short-term approaches to capacity building (Lanjouw, Macrae & Zwi, 1999). As the de facto health authority develops its new health system and identifies a minimum package of services to be delivered at both primary and secondary level, it must work closely with donors to coordinate input to support the functioning of these services at these levels through appropriate capacity-building.

In specialist clinical areas, training is frequently targeted to developing or replacing tertiary-level specialists in the capital without ensuring linkages to primary and secondary (first referral) levels. Table 2 gives an example from Cambodia demonstrating results of approaches to capacity building in three specialty areas (mental health, ophthalmology and anaesthesiology) and their outcomes in relation to implementation of the Ministry of Health's plans for health coverage. Although all three specialties were coordinated by technical subcommittees of the Ministry of Health Coordinating Committee, the results were quite different.

Mental health was covered by a number of agencies whose training programmes had been planned before arrival in Cambodia. The agencies were brought together through the Ministry of Health coordinating subcommittee on mental health, which was established in 1992. They worked separately and did not succeed in developing a national plan. While there was sufficient information on tertiary-level and primary-level training to indicate the level of competence achieved, the agency training doctors at secondary level, despite repeated requests from the Human Resources Development Department, did not produce a curriculum. Consequently the de facto health authority could not assess whether these doctors had been trained sufficiently to receive referrals from primary level. Lack of a development plan for the specialty affected the planning for the selection of candidates for training, making it difficult to ensure appropriate selection to achieve an equitable distribution of specialty skills.

TABLE 2   **Development of specialist health services in Cambodia 1993–1998**

	Mental health	Ophthalmology	Anaesthesiology
STRATEGY			
Coordinating mechanism	Yes, established in 1992.*	Yes, established in 1994.*	Yes, established in 1996.*
National plan linked to new health system	No formal national plan was developed.	Five-year development plan was developed in 1995, linked to Ministry of Health's development of health systems.	No formal national plan was developed.
Training linked to national plans	Informally.	Yes.	No.
OUTCOMES			
Tertiary-level specialists	Training for nine psychiatrists from central level. High-level training conducted by a European university.	Existing capacity strengthened through overseas courses and scholarships.	Training of medical anaesthesiologists initially in country, followed by overseas training. Linked to a European university.
Secondary-level specialization	Training for doctors, not linked to Ministry of Health's health coverage plan. No curriculum or evidence to indicate level of competence achieved and whether at sufficient level to accept referrals.	In-country training of teams comprising a basic eye doctor and basic eye nurse. Selection and posting linked to Ministry of Health's health coverage plan. Each team provided with equipped eye unit.	In-country training of anaesthetic nurses linked to a European university. Selection and posting not linked to Ministry of Health's health coverage plan.
Primary-level training	Training of community-based mental health workers. Curriculum developed together with technical manual.	Training for health centre staff in basic eye care. Support and supervision provided from nearest secondary eye unit.	Not applicable.

* Lanjouw, Macrae & Zwi (1999)

The training in anaesthesiology had already been under way for some years before being addressed in a technical subcommittee that was convened in 1996 to plan and coordinate surgical training for referral hospitals. Until that time, selection of trainees was not linked to the de facto health authority health coverage plans. While the graduates had a high level of competence, they were not equitably distributed throughout the health service.

The prevention of blindness technical subcommittee was formed in 1994. Ophthalmology was the only specialty to develop a five-year plan, linked to Ministry of Health systems development. Nongovernmental organizations and donors worked together collaboratively with the de facto health authority to ensure that capacity development was based on the five-year plan, reflected the human resources development policies and plans of the de facto health authority and ensured an appropriate distribution of trained eye teams.

National plans for the prevention of blindness were developed before training started. While the donor agencies put forward proposals for training and offered funding to undertake training, the training itself was tailored to the national plans. Curricula were adapted, adjusted and piloted following sound educational and technical processes, and training standards were rigorously adhered to.

The prevention of blindness subcommittee and the donors worked closely with the Human Resources Development Department. This process provided excellent experience and insights for the department staff in setting standards of training. By 2001, all the targets for capacity building outlined in the five-year plan had been achieved.

The experience in Cambodia demonstrates the difference in outcomes between training that is begun on an emergency basis and training that is developed in a planned and coordinated fashion in a partnership between donors and the de facto health authority. It shows how the emergency approach to human resources development—at a time when funding is available but the de facto health authority is not yet sufficiently developed to take charge of coordination—proves difficult to coordinate and link to national planning, as must occur later on.

7. Financing human resources development

The financing of human resources development in the immediate post-conflict period is usually undertaken by an interim authority using money available through trust funds set up by donor countries and administered by a designated body, such as the United Nations or the World Bank, that supports the interim authority in re-establishing the government structure.

An example of such a fund is the Trust Fund for East Timor. Such trust funds cover recurrent costs, including salaries and capital costs during the early years of reconstruction. Setting the target size of the initial workforce is based on the amount of funding available and the priority accorded to getting basic health services re-established (Smith, 2000, 2001).

Payment of health workers in individual health facilities may be covered by various sources, including nongovernmental or international organizations or other donors. Information on sources of salary of health workers in Afghanistan showed 196 sources other than the de facto health authority (King, 2003).

Differing rates of pay by different sources and agencies, which are frequently higher than government rates, create problems of sustainability of the workforce after the departure of the funding agencies. The Ministry of Health in Afghanistan moved quickly to address this problem, asking donors to align salaries and subsidies.[1]

The interim authority is under severe public pressure to reduce the massive unemployment that exists and to rehire all former employees. It is also usually under strong pressure from donors to "go slow" on reinstating former publicly provided health services, which have generally been "ineffective, inefficient and inequitable", in favour of introducing new approaches that have been proved to be more cost-

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1. In April 2002, the Ministry of Health asked a nongovernmental organization working group to compile details of the levels and types of salaries and subsidies provided in health facilities at all levels of health service, for staff employed both by government and by nongovernmental organizations. This information was used as a basis for decision-making with a view to working towards the standardization of subsidies.

effective (World Bank, 2002a). Also, uncertainty as to the future income of a newly elected government and the budget to be allocated to health makes it difficult to plan human resources development realistically, on the basis of what will be affordable in the future.

The financing of health personnel education is costly, and the ministry of health will have difficulty in balancing expenditure between services and training. In the presence of donors, there is a tendency to concentrate on funding salaries and service provision, and to depend upon donor input for support to basic training and capacity building. This input, however, is time-limited; the ministry of health will ultimately have to assume responsibility for funding the training for which it is responsible.

Insufficient funding to ensure sustainability of the training activities required for the major task of post-conflict capacity building will affect quality of education and subsequently the quality of service delivery. It can have a negative effect on investment in delivery of services, since services provided by inadequately prepared or poor-quality human resources are less efficient and hence relatively more costly. It is therefore of concern to donors to ensure qualitative as well as quantitative outcomes of their investment in capacity building.

The success of health service delivery depends on the availability, competence and motivation of the workforce (Dussault & Dubois, 2003). In the absence of strong political commitment by governments, and unless donors recognize the importance of addressing human resources development in a comprehensive manner, virtually no attention is given to financing human resources development, apart from personnel costs. Strong support is needed to identify the required investment in strategic approaches to human resources production and management in order to develop and retain the required capacities. This work is particularly vital in view of the additional constraint of loss of health workers through migration and HIV/AIDS.

8. Crosscutting issues: migration and HIV/AIDS

Two major cross-cutting issues can seriously affect health workforces: migration and HIV/AIDS. Although their impact varies according to the particular circumstances of the country concerned, they must always be given serious consideration in relation to their impact on the health workforce and its ability to deliver health services.

Migration

The migration of skilled health professionals is of increasing concern internationally—rural to urban migration, overseas migration (Commonwealth Secretariat, 1997; Connell, 2002; Tjadens, 2002; Stilwell, 2003), migration from the public to the private sector, and from the health sector to other sectors (Dussault & Dubois, 2003). The movement of human capital is increasing. This is of particular concern to the health sector, as it affects the most highly trained professions, in whom the government has invested heavily through training and professional development.

The reasons why doctors and nurses leave the health sector appear to be similar in both the Pacific island nations and the European Union. They include low remuneration, inflexible hours along with many extra duties, lack of continuing educational opportunities, limited training facilities and opportunities for career development, poor working environment, shortages of supplies and equipment, and demanding patients (Tjadens, 2002). These causative factors are greatly exacerbated in post-conflict countries.

As high-income countries experience ageing populations, falling birth rates and difficulties in retaining health workers, they are faced with such choices as lowering the quality of health care, rationing health care, or importing health workers. Of these options, the importation of health workers is currently favoured. Developing countries and small island nations with low populations are particularly affected, since the loss of any of their limited number of senior professionals is seriously

detrimental to the health services[1] even though it does bring substantial income to the country through remittances (IOM, 2003). It has been estimated that the total value of remittances to developing countries in 2002 was double the aid provided by rich countries.[2] Some countries, such as the Philippines, are deliberately training nurses for export—and have an infrastructure to ensure financial compensation for the training (Tjadens, 2002)—while continuing to address the issue of meeting their own health workforce needs.

Post-conflict countries such as Rwanda, Sierra Leone or Sudan, while having massive human resources requirements, can benefit not only from the remittances sent by their overseas workers, but also from appropriate contributions to the health sector—in terms of skills and advocacy—by overseas health workers and the diaspora.

Rural-to-urban migration is the main problem in the post-conflict period. Refugees returned to rural areas frequently drift towards the cities, where there are more opportunities for employment. This happens particularly if there are few educational facilities and health services in the areas where they are resettled, and if they have difficulty in re-establishing a livelihood. Health workers eligible for resettlement in a third country generally avail themselves of the opportunity to emigrate during the conflict. The impact of years of conflict on the education of health personnel frequently results in overproduction of reduced-quality professionals, such as in the overproduction of doctors in Cambodia and Afghanistan. This reduces the possibility of exporting surplus expertise.

HIV/AIDS

The consequences of the HIV/AIDS epidemic on the health workforce has not been fully assessed, but the literature suggests an underestimation of the scope and scale of the impact on human capital (Whiteside, 2002). There is evidence that in the worst-affected countries the HIV/AIDS epidemic is eroding the human capital required for development across all sectors, with highest losses among the skilled professional and managerial groups, whose higher incomes make them more likely to pursue high-risk behaviour (Cohen, 2002). The workforce in all sectors is affected through mortality and through loss of productivity as a result of sickness. The loss of teachers from training institutes and those who provide on-the-job training interrupts the flow of production and undermines the substantial investment—by both the public and private sector, as well as by donors—in the development of human capital (Kelly, 2000; Cohen, 2002).

Moreover, health workers are exposed not only to social risks of HIV/AIDS but also to occupational risks. In countries with inadequate health budgets, they may be placed at additional risk because of a lack of basic supplies required to observe universal precautions. For example, in the case of Zambia, a study revealed that safety

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1. The *Sydney Morning Herald,* 2 and 3 August 2000, describes the impact of the loss of Indian Fijian doctors, and the problems and costs of in finding replacements from abroad.
2. Reported in *World Bank Press Review:* headlines for 22 April 2003.

standards were practised by only 67% of health service providers, disinfectants were available only in 51% of cases, and gloves were available in only 56% of cases.[3] Health workers are at even higher risk of both transmitting and contracting HIV/AIDS during the conflict and post-conflict period because of the breakdown of health systems, together with the lack of supplies or even the knowledge to observe basic nosocomial (hospital) infection procedures (Box 9).

BOX 9   Infection control practices in Cambodia in 1992

One of the first projects set up by WHO in the immediate post-conflict period in Cambodia, in 1992, was a hospital infection control project to develop infection control procedures appropriate for Cambodia at that time, as well as associated training.

During this project it was found that health workers, trained to use pressure cookers to sterilize needles and syringes for immunization, did not apply the basic principles of sterilization to sterilizing other instruments, and continued to use flaming (the only method available during the Khmer Rouge period) for other instruments, including those that would be in contact with blood.

This lack of transfer of principles stemmed from the experience of only obeying orders, as a survival strategy. It necessitated adapting the teaching methodology to ensure a wider application of principles.

The impact of HIV/AIDS during a conflict varies from country to country. In cases where a country is isolated for a considerable period, the risks of transmission within the country may be low. In the post-conflict phase, the reopening of borders and normalizing of relations with neighbouring countries can lead to increased potential risk of transmission. In countries where there have been movements of armies across borders, the risk of HIV/AIDS becomes higher. The Joint United Nations Programme on HIV/AIDS (UNAIDS, 2003) has developed an initiative on HIV/AIDS and security that addresses the risks of transmission during conflicts and peacekeeping operations.

A controversial proposal by universities in Thailand to test for HIV/AIDS students who had achieved entry level to medicine and other health-related fields sparked a heated debate. While the proposal was defended as intending to minimize risks of the spread of HIV/AIDS from doctors, dentists and nurses, it was attacked on the grounds of violating students' human rights, even though it respected patients' rights.[4]

It is becoming increasingly important, for planning and economic reasons, to gather and analyse more data on the impact of mortality and loss of productivity in order confront the situation more realistically and to identify more appropriate strategies to deal with or overcome the constraints.

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3. Data presented by B.U. Chirwa et al. at an international conference on AIDS in Amsterdam in 1992.
4. Reported by Prangthip Daorueng for InterPress News Service, 30 December 1997.

9. Using current frameworks and tools for human resources development

A window of opportunity for a fresh start occurs in post-conflict countries. In order to use that opportunity effectively, it is necessary to examine modern approaches and frameworks for human resources development, and their evolution. This will give a picture of how the field of human resources development has changed, during the period of the conflict, in relation to new approaches to health care delivery in an increasingly complex environment.

Egger & Adams (1999) have outlined the changes and concerns in human resources development in relation to production, management, policy and planning over the latter half of the 20th century. They note that the main emphasis up until the mid-1970s was on a *training approach*, based on a hospital-based curative model. This approach continued, although efforts were made to change curricula in line with the incorporation of primary health care in health service delivery.

In the 1980s, there was a move to encourage countries to integrate workforce planning into health systems, which gave rise to a *planning approach*. This led to the development of workforce planning models, such as those developed by Hornby, Hall, Dewdney and Shipp (WHO, 2001b).

The initial approach was to concentrate on developing formulae such as health professional-to-population and doctor-to-nurse ratios. This gave rise to the danger of considering a ratio of that type to be the "magic formula" for optimum planning. These ratios were frequently arbitrarily defined or copied from other countries or based on international averages (Zurn et al., 2002).

This approach is simplistic and ineffective, as it fails to take due account of factors that are specific to each country, such as geographical location, population density, communications, available budget, disease patterns and disease burden, and workloads. The key to using this approach is a good source of reliable data. Such data are not always available in many countries, because of the difficulty of collecting

information and transmitting them regularly from isolated districts and provinces to regional or central level.

There was also a move to develop and deploy new types of health care providers in developing countries. This approach faced a number of constraints. First, it was used by health planners based in planning units that were isolated from the other human resources development functions, particularly training. Second, there was strong resistance from professional associations to the development of new types of health care providers, who were perceived as undermining the roles of existing professionals, particularly of doctors.

A *policy approach* emerged in the 1990s, aiming to achieve health sector reforms. The policy perspective signalled the beginning of advocacy for an integrated approach to human resources development. The aim of the integrated approach was to ensure that training institutes became involved in national policy and planning processes, so that training would be more appropriately adapted to health service needs. However, the health sector—like other sectors, such as education—has concentrated more on generating policies and less on implementation (Bowe, Ball & Gold, 1992; Egger, Lipson & Adams, 2000).

Despite major efforts to encourage countries to use an integrated policy approach, a study on 15 countries, undertaken in 1998 by the World Health Organization (WHO), found that in six countries there was some implementation of policies but no impact, in five countries there was substantial implementation but only minor impact, while in four countries there was substantial progress in implementation and a notable impact. Of these four countries, two had notably higher gross domestic product per capita relative to the other countries (Egger, Lipson & Adams, 2000). In the case of the Pacific island nations, evidence suggests that the fragmentation of human resources development functions and lack of a dedicated focal point for human resources development in ministries has a negative impact on the development of human resources policy.

Despite efforts to encourage governments to undertake more comprehensive approaches to human resources development, they continue to maintain a view of human resources development as personnel administration (Dussault & Dubois, 2003) or training (Martinez & Collini, 1999). Dussault & Dubois (2003) directly attribute the human resources problems experienced by many countries—imbalances, mismatch, qualitative disparity and unequal distribution—to lack of human resources policies. Several authors have highlighted the importance of human resources in the successes and failures of health sector reform (Martineau & Martinez, 1997; Martinez & Collini, 1999; Buchan, 2000).

The field of human resources development is itself complex, and its context within health service delivery has also become increasingly complex. Efforts to promote a *strategic approach* in order to raise the profile and enhance understanding of human resources development have led to the development of conceptual frameworks, such as those of Hornby (WHO, 2001b) and Martineau & Martinez (1997). These frameworks have generally focused on human resources development within the national context.

More recently, through a series of high-level international meetings, held in Annecy in 2000, Ottawa in 2002 and Geneva in 2002, a new human resources development framework has been designed to highlight the role of human resources in achieving the health systems functions of financing, stewardship and health planning, and resource generation, within the wider context of national and global sociodemographic, geographical, political and economic concerns (WHO 2000, 2001a, 2002a, 2002b). While this framework is more appropriate for analysis of human resources development within the complexity of the broader post-conflict context, the simpler frameworks that focus on the national context can be used at a more practical level within de facto health authorities when establishing human resources development focal units in the early post-conflict phase.

There are many human resources development tools to assist de facto health authorities in developing capacity in all aspects of human resources development. Examples of such tools include the WHO human resources toolkit and the Management Sciences for Health human resources management instruments. Despite this, many countries cling to outdated approaches. The post-conflict period is an opportunity to start again. Nevertheless, while these tools can be invaluable in the development phase, they are too sophisticated for use in the immediate post-conflict reconstruction phase. There is a need to create a bridge between the point where de facto health authorities start work, in the early days of reconstruction, and the point where they can effectively and confidently use these strategic frameworks and tools.

Achieving balanced human resources development during reconstruction

Key steps and questions for human resources personnel

10. Establishing a focal unit for human resources development in a de facto health authority

Human resources are the key to successfully implementing national health policies and strategies. Despite consuming 60%–80% of the recurrent health budget (Green, 1999), human resources development commands little attention. To reflect their importance, the functions of human resources development must be specifically addressed within a de facto health authority.

In re-establishing the de facto health authority, attention must be given to the situation of the health professionals who become the senior health service managers and who will shape the future health service, together with the necessary policies and plans. The majority of these professionals will have been affected by the conflict and are preoccupied with the security and survival of their families. However willing they may be, only a few of them can afford to dedicate full-time attention to the work of rebuilding the health system in the early days. In the absence of knowledge about trends in health service delivery, there is a natural tendency to revert to former familiar systems, where human resources development was accorded little importance and human resources functions were scattered throughout the ministry. In such systems, approaches were generally ineffective, concentrating on individual components of human resources development but failing to address all components in a balanced manner.

Evidence indicates that the lack of a dedicated focal point in human resources development in the de facto health authority jeopardizes the development and implementation of human resources policy and plans. The process of redeveloping a health authority in a post-conflict environment provides a unique opportunity to prevent repetition of past mistakes and to undertake a more strategic approach to the area that consumes the highest proportion of the recurrent health budget.

Impact of conflict

The impact of conflict on the workforce varies from country to country. In many cases there may be a lack of senior health managers, many of whom have either left the country, been killed, or are employed by donor agencies and because of family obligations are unable or unwilling to leave a stable, well-paid job to work for an extremely low government salary. Lack of senior personnel may result in the appointment of relatively junior or inexperienced staff members to posts in human resources development, particularly if that area is not regarded as important. Donors also can signal the perceived level of importance of human resources development by the extent to which they are willing to invest in this area. Ministries of health are under pressure to appoint their brightest and best staff to the areas flagged as of major importance by donors.

In post-conflict countries, the structure of the public or civil service may have been either destroyed or severely affected and there may well be a preoccupation with rebuilding capability. In order to ensure a close linkage between health service delivery and the civil service authorities, careful consideration should be given as to how and where the personnel function is carried out. This raises the question of whether the personnel function should be located within the human resources development focal unit with clear lines of communication to the administrative focal unit or vice versa.

Key issues

The key issue is how to achieve high-level political recognition of the importance of human resources development. This would permit the formation of a dedicated human resources development unit that is appropriately placed in the de facto health authority to find the most cost-effective methods of producing, deploying and retaining an appropriately trained health workforce of the appropriate skill mix to deliver an appropriate, affordable and equitable package of health services.

Role and functions of the human resources development unit

The role and functions of the human resources development focal unit within the de facto health authority relates directly to addressing the essential elements of human resources development. These elements can be classified in five main categories: policy, planning, production and procurement, management and finance (Table 3).

TABLE 3   The five essential functions of a focal unit for human resources for health

Component	Functions
HRH policy	Policies related to the mission and goals of the health services, which provide the basis for future development of the legislative framework
HRH planning	HRH assessment, information, database
	HRH plans as an integral component of health sector planning linked to HRH policies
HRH production and procurement	Training related to market needs
	Planned continuing education to strengthen capacity in clinical skills and leadership/ management, with links to the educational sector
	Procurement of short/medium-term health professionals
HRH management (covers both HRH performance management and personnel management)	Performance: job descriptions supportive supervision performance (planning and evaluation) motivation
	Personnel: job classification recruitment hiring, transfer and promotion compensation, benefits and incentives discipline, grievance procedures, termination policy manuals union and professional association relations compliance with labour laws
HRH finance	Realistic financial planning to implement HRH plans and strategies

Source: Adapted from: Hornby & Forte, 2002; Management Sciences for Health, 2005; Martinez & Martineau, 1998; Dewdney, 2003

The five essential elements, when in balance, contribute to a coordinated approach to human resources development. Where emphasis is given only to some of the elements, the outcome will be less than successful (see Figure 3 on page 50).

For example, in an unbalanced approach, health staff may not be successfully produced. Planning and management cannot ensure that staff is well-trained to implement policies and plans if there exist no health workforce policy, production and finance. Production of staff will also not achieve desired outcomes if policies and plans are absent.

The key to the success of the human resources development focal unit lies in ensuring that the unit does not function in isolation, but works in close collaboration with other departments and sectors. The linkages must be clearly delineated.

FIGURE 3   **Comparison between a balanced and an unbalanced approach to human resources development (HRD)**
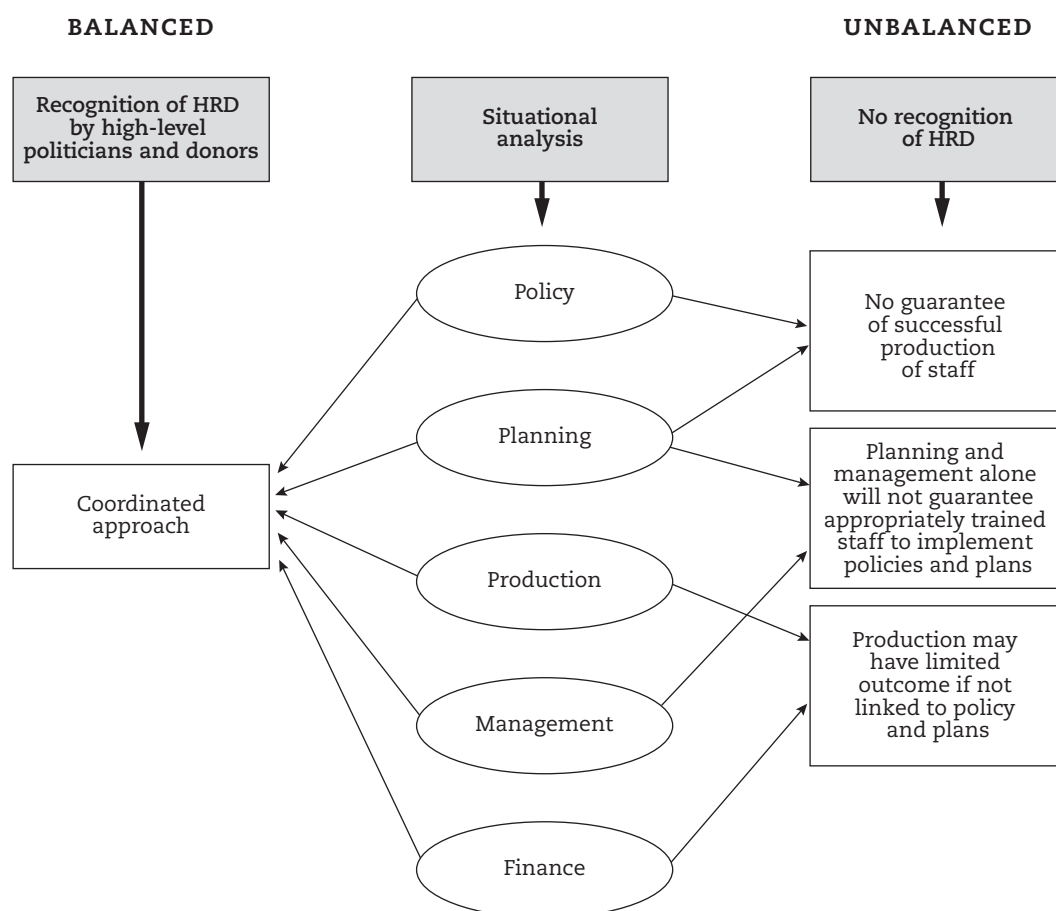
What information is required?

When establishing a dedicated focal unit for human resources development within the structure of a de facto health authority, it is useful to have examples of organizational structures of ministries of health or de facto health authorities, as well as examples of the structure of individual human resources development units. These examples should be drawn from other countries, including post-conflict countries as well as neighbouring countries. A comparison of the advantages and disadvantages of different structures can serve as a basis for discussion. While this information may not be immediately to hand, United Nations agencies such as WHO may have access to this information and share it with the senior health professionals engaged in redevelopment of the structure of the de facto health authority.

It is also important to be informed of the trends in the organization of health services, which will have an impact on human resources issues such as production and management. In general, there has been a move from the classic split between public health and curative care, along with vertical programmes, towards a more integrated approach to health service delivery.

The placing and structure of the human resources development unit will depend on whether a completely new structure for the de facto health authority is being developed, or a new unit is being developed to be placed within an existing health authority structure, or existing human resources functions are being consolidated, redeveloped and expanded within an existing health authority structure. Whatever the situation, attention should be given to the structure and functions of the unit and its staffing.

Who should be involved?

It is important to enlist as much high-level support as possible to ensure that the human resources development focal unit is appropriately placed. This support can come from within the government, at high political level. There may also be a need for some external support and input at this time.

What are the opportunities?

Post-conflict reconstruction offers some unique opportunities:

- the opportunity to start afresh;

- the possibility of obtaining high-level technical assistance to support the new ministry of health in taking new approaches, and particularly in overcoming local resistance to change;

- the potential for increasing recognition among the donor community of the importance of human resources development for health services delivery. The de facto health authority of the ministry of health should take the initiative in signalling to donors the importance of human resources development.

TABLE 4   Potential linkages of the human resources for health (HRH) development functions

Component	Functions	Potential linkages
HRH policy	Develops and implements HRH policies related to health service mission and goals	Planning, health service delivery, training institutions
HRH planning	Establishes and manages HRH information system through use of human resources database	Planning, health information systems, international relations, health service delivery, training institutions, ministry of planning
	Develops HRH plans for both basic and continuing education, which are an integral component of health sector planning and are linked to HRH policies	
HRH production	Ensures that basic training is related to market needs of health service	Ministry of education, planning unit, training institutes, monitoring and evaluation of health service delivery, international relations
	Ensures that planning continuing education strengthens capacity in clinical skills and management	
	Forges close working relations with educational sector to set and maintain educational standards	

HRH management	Performance management:
	    Develops and provides ongoing review and revision of job descriptions
	    Ensures capacity development in supportive supervision in all areas of health service
	    Develops systems for planning and evaluating performance
	    Develops and monitors strategies for staff motivation
		Health service delivery, planning, finance

	Personnel management:
	    Ensures that posts are appropriately classified
	    Organizes recruitment and selection
	    Deals with issues related to hiring, transfer and promotion
	    Administers discipline, grievance procedures and termination
	    Ensures compilation and updating of employment policy manuals
	    Maintains relations with unions and professional standards
	    Ensures compliance with labour laws
		Civil service authority, health service delivery, ministry of labour, professional associations

HRH finance	Identifies realistic funding to implement HRH plans	Planning unit, finance unit, international relations, ministry of planning, ministry of finance

TABLE 5   Policy options and their implications

Policy options	Implications
Do nothing.	Human resources functions remain dispersed and unlinked.
Repeat former approaches.	Repeat previous mistakes within the context of developing a new and differently organized and managed system.
Develop a comprehensive approach to human resources development.	Initially difficult to convince politicians, senior health service managers and donors. Potential benefits of more realistic support for human resources development policies and strategies.

TABLE 6   Suggested key steps in establishing an effective human resources development focal unit

Key steps	Related questions
Achieve recognition at the highest level in the de facto health authority of the importance of human resources development within their strategy for redevelopment of the health sector.	Who needs to be convinced?
	What evidence can be used to support the case?
	What external influences can be harnessed to support the case?
Appropriately place of a human resources development focal unit within a de facto health authority to effectively implement a comprehensive approach to human resources development to support implementation of the health authority's vision of the future health services.	Bearing in mind the overall human resources functions, and the structure of the individual de facto health authority, where would be the most appropriate and effective placement of the human resources development focal unit?
Establish clear roles and functions of the human resources development focal unit and its linkages with other departments and units.	What are the roles and functions of the various departments or units of the de facto health authority?
	How do their roles and functions relate to human resources development?
	What are the advantages of defining roles and linkages?
	What strategies can be used to ensure close linkages and working relations between the human resources development unit and the other units to develop a comprehensive approach to human resources development?
Appoint high-level professional staff to the focal unit.	What are the qualities and skills required of the staff of a human resources development focal unit?
	How can senior-level, high-calibre staff be attracted to work in human resources development?
Appropriately prepare and support these staff to undertake their role and functions.	What experience of any or all aspects of human resources development have staff had before being appointed to the human resources development focal unit?
	What skills do they need to undertake their new roles and functions?
	What strategy options can be considered to develop capacity while facilitating the work?

Further reading

Management Sciences for Health (2005). *Human resource management rapid assessment tool for public- and private-sector health organizations.* Cambridge, MA, Management Sciences for Health. (http://erc.msh.org/mainpage.cfm?file=7.40.htm&module=Toolkit&language=English, accessed 16 November 2005).

Although this is designed as an assessment tool, which is not easily used in the post-conflict period, it gives an excellent outline of the components of human resources development. It also provides an example of what should be aimed for, even though that goal will not be attained easily or within a short time. It could be useful in informing politicians and senior government staff of the importance of human resources development that extends beyond the personnel and training approach.

Martineau T, Buchan J (2002). Human resources and the success of health sector reform. *Human Resources Development Journal,* 4(3) Sept–Dec 2002.

Martineau T, Martinez J (1997). *Human resources in the health sector: guidelines for appraisal and strategic development.* Brussels, European Commission (Health Development Series Working Paper No. 1).

Martinez J, Collini L (1999). *Review of human resource issues in the health sector: briefing paper.* London, Department for International Development, Health Systems Resource Centre.

SUMMARY OF KEY POINTS

- Importance of human resources development previously unrecognized.

- Human resources consume 60%–80% of recurrent budget in salaries.

- Poor recognition leads to lack of deployment of high-level professionals to human resources development.

- Human resources development functions are frequently scattered throughout the de facto health authority.

- Need to achieve high-level political recognition of the importance of human resources development.

- Need for donors to recognize the importance of human resources development.

- Evidence shows that where there is a dedicated human resources development focal unit, then human resources policies and planning are more appropriate.

- The structure of a human resources development focal unit should be designed to address the essential elements of human resources development, namely policy, planning, production, management and finance.

- Linkages between the human resources development focal unit and other departments, units and sectors must be clearly delineated.

Examples

The following examples highlight issues encountered in placing human resources development in the structure of the ministry of health in three countries recovering from internal conflict.

Afghanistan

In Afghanistan, initial drafts of the Ministry of Health structure, drawn up in February 2002, attempted greater integration but had difficulty in moving away from the outdated curative–preventive split in health service delivery. As the planning and policy processes were still in their infancy, the human resources focal unit was placed under the policy and planning section, while the personnel function remained with the administration section. During a structural revision in February 2003, human resources remained in the policy and planning department, under the Deputy Minister (Technical). Personnel matters remained in the administration department, under the Deputy Minister (Administration). The human resources department consisted only of a director.

In 2004 following further revisions, the human resources focal unit was transferred to administration. The human resources focal unit now addressed all essential elements of human resources. The Deputy Minister (Administration) and the Director General of Administration and Management understood human resources, so that human resources would not be viewed as only personnel management.

The General Directorate of Policy and Planning is still concerned how human resources planning can be undertaken. Training is planned for the staff of the human resources department on all essential elements of human resources development, with emphasis on close working relations between the human resources department and the General Directorate of Policy and Planning. It will be of interest to follow the successes and constraints of this comprehensive approach to human resources development in order to see how far it enables a human resources development department to work cooperatively with all other Ministry of Health departments.

F I G U R E   4   **Organizational structure of the human resources development department of the Ministry of Health, Afghanistan 2004**
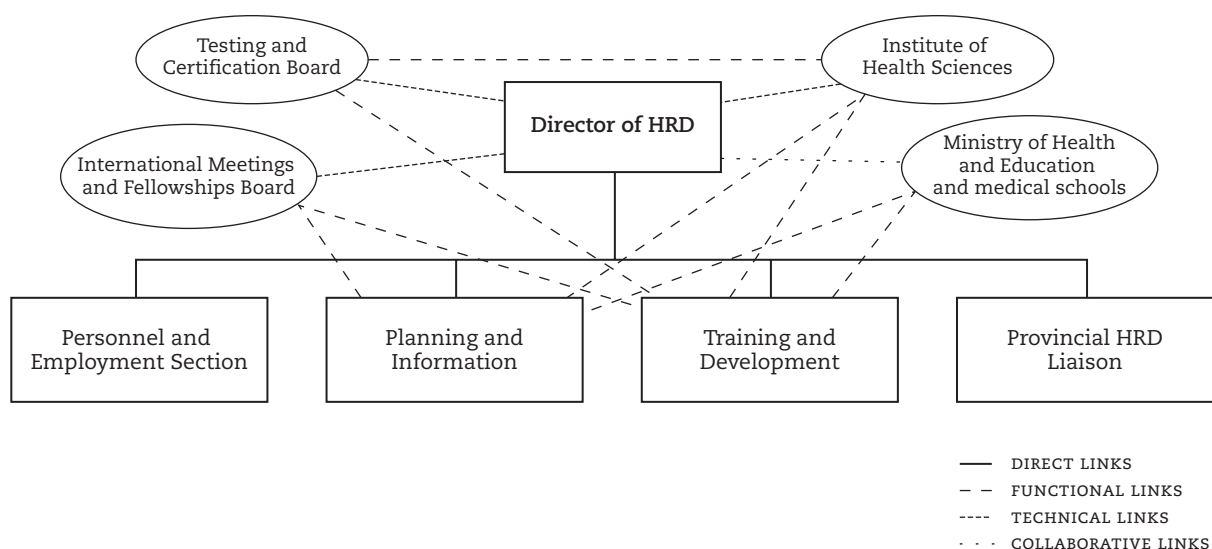
EXAMPLE 2

Cambodia

In Cambodia, in 1992, the human resources function was divided between two offices: one dealing with training and the other dealing with personnel. The two offices operated quite separately from one another.

Efforts were made to involve the personnel department in human resources activities, particularly in conducting the first surveys of the health workforce, undertaken in 1993, on which staff from both training and personnel sections worked together.

Many efforts to develop a new organizational structure of the entire Ministry of Health were undertaken between 1993 and 1997. Because of prevailing political considerations, however, an organizational structure was not officially agreed by government until 1997. During the period when efforts were being made to work towards new structures, the administrative arrangements were as follows: The personnel section continued to work according to the previous administrative system, while the training section, now termed the human resources department, worked closely with policy and planning to address the human resources needs of the newly defined health service delivery system.

Efforts were made to encourage closer working relations between the human resources and the personnel departments by physically placing them adjacent to each other within the Ministry of Health, but there continued to be some difficulties in defining areas of responsibility.

An example of this occurred in the setting up of the human resources database. This was held up considerably because the departments acted unilaterally and collected their own data, instead of collaborating. This, in turn, resulted in both gaps and duplication in data, and consequently in inefficient use of scarce donor funds. The outcome was a delay of more than a year in developing an effective human resources database.

EXAMPLE 3

Timor-Leste

Timor-Leste, having formerly been a district of Indonesia, had to develop a national government. The organizational structure of the Ministry of Health followed an integrated approach to health service delivery, moving away from the traditional curative–preventive split and working towards a comprehensive approach to delivering health services.

Within the development of the Ministry of Health organizational structure, human resources was placed within the policy and planning section. At that time, health policy had not yet been developed. Therefore, placing the human resources focal unit within the policy and planning department ensured that human resources were well represented within the overall future development of national health policies and plans. The small size of the country and the resultant workforce, together with good relations with administration departments, allowed for close working relations between the human resources focal unit and the administration section.

11. Developing health workforce policy

Policy can be described as a principle of action adopted or proposed by a government, party, organization or individual. Such principles guide the direction of actions that have been decided upon. Development of policy early in the post-conflict period serves to provide direction to the redevelopment process and the implementation of new or reformed health care delivery systems. Health workforce policy development should be an integral part of overall health policy development, to ensure that the health workforce is developed appropriately for the defined health care system.

Policies developed during the interim period (before elections and the institution of an elected government) mainly address priority issues and act as a foundation that can be built upon to develop more comprehensive and detailed policies at a later date.

Impact of conflict

The development of health policy in the post-conflict period can be difficult for a variety of reasons, including:

- absence of the prerequisite conditions for normal policy development, such as constitutional and legislative frameworks, detailed demographic data, estimates of future economic trends;

- surviving health professionals suffering from the effects of the conflict, and preoccupied with issues of family survival and security;

- lack of experienced senior-level staff with experience at policy and planning level;

- lack of local knowledge of current international trends in health service reforms;

- pressure to re-establish health services as soon as possible;

- influx of a large number of aid organizations wishing to provide input in the short time within which funding is available;

- complexity of reintegration of differing factions within the interim government structure.

Each post-conflict country may be affected differently. The pressure to concentrate on re-establishing service delivery frequently diverts attention from development of interim policies. This results in the establishment of uncoordinated and piecemeal services that, while meeting immediate emergency needs, are frequently non-sustainable and difficult to assimilate into a future equitable health service delivery system delivered by a trained skill-mix of health professionals. It is therefore urgent that a process of development of health policies is begun as soon as possible to act as a guide to donors to ensure that their input, while meeting immediate needs, can contribute to the development of secure foundations for an appropriate health system.

Key issues

When developing health policy, one of the key issues central to the process is *how to ensure that the available scarce funding can yield the best results*. This underlines the importance of ensuring that human resources, which consume the highest proportion of the recurrent budget in salaries (60%–80%) and directly affect the success of health service delivery, are appropriately addressed. Human resources policy cannot be separate from overall health policy development. Within the context of overall health policy development, it is important to ensure that human resources policies address all the essential elements of human resources development.

Depending upon the situation in the individual country, it may be necessary to develop interim policies during the period when an interim authority is in control, before the installation of an elected government. This interim period can last for a number of years, during which time the direction of the health service delivery system is determined. It is also part of the window of opportunity when major funding is available from donors. Consequently, it is important to ensure that policies are developed that give coherence and direction to health service reconstruction. Interim or early policy development generally addresses priority areas and becomes the foundation on which future detailed health policy development is built after the interim period.

Focus on the development of policies without consideration of how they can be implemented can result in lack of success in implementation.

What information is required?

Development of policies should be based on as detailed information as possible. Such information may not easily be available. Potential sources to be explored are:

PREVIOUS HEALTH POLICIES

- When were they developed?

- How relevant are they to current health systems development?

- What policies relate directly to human resources development?

- Which are the most relevant to be included in the development of new health policy?

DETAILED HUMAN RESOURCES DEVELOPMENT DATA

- What are the potential sources of information on the current and future workforce?

- How reliable is available information? If unreliable, what are the opportunities to collect and collate reliable data?

DEMOGRAPHIC DATA

- What demographic data are available?

- How reliable are the available data? What are the opportunities to obtain reliable data?

ECONOMIC DATA

- What funding is available or is pledged by donor agencies?

- What are the possibilities of funding to sustain services after the immediate post-conflict period?

EXAMPLES OF HUMAN RESOURCES DEVELOPMENT POLICIES FROM OTHER COUNTRIES

- What are the opportunities to obtain examples of health policies generally, and human resources development policies specifically, from other countries (e.g. neighbouring countries, other post-conflict countries, or countries that have reformed their health systems)?

- How can these examples be obtained (e.g. via agencies such as WHO)?

- How can examples of policies from other countries be used to stimulate discussion and ideas for policy development in your own country?

Who should be involved in developing policy for human resources development?

Development of human resources development policy in the early post-conflict period is difficult because many of the institutions and agencies that normally would have input to policy development may not exist or are struggling to re-establish themselves. Such bodies include public or civil service commissions and professional associations. External stakeholders, such as community and local interest groups, are in disarray or do not exist. They may be supplanted by external donors who seek to strongly influence policy development to reflect or support their inputs, as well as agencies who have had input to health services during the period of conflict and are frequently the main providers of health services outside the capital cities.

There may also be differing political factions that are being reintegrated into the post-conflict interim authority or will be reintegrated into the government after elections. Frequently these factions or groups will have their own health workers. It is important to set up mechanisms to ensure their involvement, either through direct participation in the process or enablement of their indirect participation through creation of an opportunity to feed in comments and suggestions to the policy process via a mutually trusted intermediary or other channel.

BOX 10   Possible stakeholders in human resources policy development

Local	External
Senior officials of the de facto health facility	Multilateral agencies (WHO, World Bank, etc.)
Representatives of factional health services	Bilateral agencies

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In order to ensure that the policy development process is practicable and manageable, while at the same time involving as many relevant interested parties as possible, it is useful to identify all the relevant actors and how they can be involved in the process either directly, as a regular member of the policy working group, or indirectly, through a formal mechanism to permit forwarding of proposals for policy, relevant information, and feedback on draft policy documents.

What are the opportunities?

Because many of the prerequisites for policy development may not be in place as the policy development process begins, interim health authorities can seek the support and partnership of multilateral and bilateral agencies, particularly to address the lack of information. Such agencies working in-country have the funds, transport and

communications systems to aid the health authorities to gather information both in-country and from other relevant countries. Examples of this include:

■ WHO assistance to the Ministry of Health in Cambodia, in 1992, to survey the national health workforce, including that of the political factions and the returning refugee health workers, to provide baseline information for use in policy development;

■ USAID/Management Sciences for Health support to the Ministry of Health in Afghanistan, in 2002, to conduct a health facility survey, including health workers;

■ HealthNet International/WHO support to the interim health authority in Timor-Leste, to transfer surviving manual personnel records to a computerized database and in the development of a human resources policy question framework;

■ WHO capability to provide relevant examples of health policies from other countries.

Where there is little experience within the interim health authority, key multilateral and bilateral agencies can provide technical assistance to support the interim health authority in policy development.

International and nongovernmental organizations that are or have been involved in direct service provision can also play a role by bringing to the attention of the policy working group issues relating to particular aspects of service delivery and matters that may require policy decisions.

TABLE 7   **Suggested key steps in developing human resources policy**

Key steps	Related questions
Identify the policy development process.	Who should be involved directly? indirectly? Who can be involved directly? indirectly? How can the process be organized? What is the timeframe for the policy development process?
Identify what assistance is required.	What assistance is available? Who can provide assistance? How to use this assistance?
Identify the key human resources areas to be addressed for policy development.	What process is needed to identify the key policy areas? What support or assistance is required for this process?
Prioritize the key areas.	What process can be used to prioritize the key areas?
Collect required information.	What information is required to support the human resources policy-making process? How can it be collected?
Develop key human resources policies.	How to ensure that human resources policies are complementary and linked to other health policy development?

TABLE 8   **Policy tools**

Policy tools used	Where and when	Result
Initial survey of the health workforce.	Cambodia, 1993.	Data on workforce allow for identification of key policy areas.
Human resources policy question framework.	Timor-Leste, 2001.	Allowed identification and prioritization of key policy areas to be addressed.

Use of tools such as workforce surveys and policy question frameworks allows identification of key policy questions to be addressed. The process of policy development can be very time-consuming and protracted, particularly when there are many stakeholders with differing agendas.

In order to kickstart the process it is first necessary to identify—under each of the essential elements—the key issues that require priority policy decisions. Use of question frameworks (see Example 4 on page 65) provides support to clarifying the questions to be addressed.

In developing human resources policy, priority should be accorded to the role of the ministry of health in defining health worker categories, their roles and functions, and the standardization of required professional training, both basic and continuing. This immediately provides the basis upon which to start rationalizing the plethora of health worker categories and to standardize training courses, and gives legitimacy to health professional testing and certification processes. This also supports health service development in terms of identification of what packages of health services can be delivered at each level of services by which categories of health workers.

Policy question frameworks can then be used to rank other human resources policy questions, which should be addressed in order of priority, according to the situation of the individual country.

Further reading

Regional Office for the Western Pacific. Health policy development: a handbook for Pacific island practitioners, draft. Manila, World Health Organization.

Bornemisza O, Sondorp E (2002). *Health policy formulation in complex political emergencies and post-conflict countries: a literature review.* London, London School of Hygiene and Tropical Medicine, Conflict and Health Unit, Health Policy Unit.

This literature review gives an overview of the current body of knowledge about health policy formulation in post-conflict countries and complex political emergencies. It contains an extensive bibliography of relevant documents, many of which can be located via the Internet.

Dussault G, Dubois C (2003). Human resources for health policies: a critical component in health politics. *Human Resources for Health,* 1:1 (http://www.human-resources-health.com/content/1/1/1, accessed 16 November 2005).

Egger D, Lipson D, Adams O (2000). *Achieving the right balance: the role of policy-making processes in managing human resources for health problems.* Geneva, World Health Organization (Issues in health services delivery. Discussion Paper No. 2).

Egger D, Adams O (1999). Imbalances in human resources for health: can policy formulation and planning make a difference? *Human Resources Development Journal,* 3(1), January–April 1999.

Tulloch J, et al. (2003). *Initial steps in rebuilding the health sector in East Timor.* Washington, DC, National Academy Press, pp. 18–21 (http://books.nap.edu/openbook/0309089018/html, accessed 16 November 2005).

SUMMARY OF KEY POINTS

- Post-conflict policy development generally occurs in an environment lacking the normal prerequisites for policy development.

- Pressure to restore health services to meet emergency needs frequently diverts attention from policy development.

- Re-establishment of services without policy direction can result in unsustainability of services.

- Early development of interim policies provides direction to building strong foundations for health service development.

- Human resources policy development should be an integral part of overall health policy development.

- It is important to develop a timeframe for the policy development process and to stick to it.

- When developing policies it is necessary to consider the practicalities of how they can be implemented.

- Identify the actors and stakeholders who can be involved in the policy development process, both directly and indirectly, and make it clear to all how each can interact with the policy development process.

- Policy development should be based on as detailed information as it is possible to gather, given the situation.

- Build in a consultative process before finalization of the interim policy.

Examples

The following examples highlight the processes used in human resources policy development in three countries recovering from internal conflict.

Question framework for human resources policy development, adapted from policy tool used in Timor-Leste in 2001

The example of a question framework, given below, covers the specific areas requiring policy development:

- human resources development planning/workforce planning

- management of human resources development

- human resources development training:

  □ training institutions

  □ basic training

  □ postgraduate training

  □ continuing education for high-quality health services

  □ coordination and quality enhancement of training

- financing human resources development.

It is necessary to bear in mind that, in the post-conflict reconstruction of health services, the development of simple, clear health policies provides guidance to donors and also indicates a culture of standards and quality.

Questions have been framed for each area that will require policy decisions. These questions can be used to facilitate the work of the policy development group. Comments or suggestions have been added in italics to aid discussion or to clarify some questions.

For each area it would be useful to develop one or two overall policy statements and then outline the key strategies required to support implementation of this policy. The key strategies would then be linked to overall human resources development work plans. It may also be possible to develop some policies that encompass questions in several areas.

Consideration should be given to the stage of development of the country. Policies should address high-priority decisions, leaving less urgent matters to be addressed later. The column on the left indicates a priority ranking from 1 to 3. In view of the number of questions that require policy decisions in relation to human resources development, it would be helpful for the policy group first to decide and mark which questions are the highest priority, which are second priority and which are third priority. This will help the group to work in a focused way.

T A B L E 9   Question framework for human resources policy development

Priority ranking	Policy questions
Human resources development planning/workforce planning	
1 2 3	Who will have the main responsibility for all aspects of national workforce planning, including monitoring and evaluating the ability of the workforce to meet the specific health service needs (including public and private)? *May wish to consider role of de facto health authority in relation to civil service commission/national planning agency.*
1 2 3	Who makes decisions on staffing levels, and mix and level of health workers, at each level of health services?
1 2 3	What are the criteria to ensure a safe level of practice of all health professionals in both public and private health services? *e.g. setting minimum standards of practice, fully qualified health professionals*
1 2 3	Who makes decisions on regulations for training, recruitment and deployment of health staff? *De facto health authority/education authority/national planning agencies/university?*
1 2 3	How can the human resources database in the de facto health authority link with civil service databases for national workforce planning purposes?
1 2 3	What changes need to be made to the core functions of some categories to extend professional roles to meet service needs? *e.g. nurses at health centre level to nurse practitioner level*
1 2 3	What approaches can the de facto health authority take regarding the utilization of medical students who have been unable to maintain the academic level required to graduate as doctors, while maintaining standards of patient safety?
1 2 3	What system of health professional registration and certification of all health workers should be put in place and who should manage this process?
1 2 3	How can human resources development and the health information system work together to support health workforce planning? *e.g. human resources planning is not done in isolation but is related to providing adequate numbers and quality of health workers to meet service needs*
Management of human resources development	
1 2 3	How to establish clear roles and career structures in all areas of health services?
1 2 3	How to ensure that all health workers are provided with clear job descriptions, based on national health policies and plans, that clearly define their place within the health services structure?
1 2 3	How to ensure that health workers are aware of possibilities for career advancement?
1 2 3	How to develop incentives to motivate and retain competent health workers? *e.g. credits for successful completion of national continuing education training modules counting towards upgrading from assistant level to registered level, or credits plus staff appraisal counting towards promotion or salary increments (See questions on continuing education.)*
1 2 3	What system of disciplinary measures is required? Do civil service commission regulations need to be adapted for the health service situation? *e.g. it is more serious if a nurse or doctor does not come to work, than if a secretary or driver does not come*
1 2 3	How can supervisors and managers provide effective supportive supervision as part of capacity building and management of health services?
1 2 3	How to ensure that all health workers have access to regular continuing education to maintain levels of competence?
Human resources development training	
1 2 3	Need for overall policy that ensures that all health workers will be provided with training and updating to maintain minimum levels of professional competence as recognized by the de facto health authority? *(Private and public workers?)*
1 2 3	Training to be linked to or based on national training plans?
1 2 3	Should there be a bonding period to ensure that health workers who undergo basic or postgraduate training work for the de facto health authority, if required, on completion of training?
Training institutions	
1 2 3	What will be the role of the national training institution?
1 2 3	How will it relate to the university?

Priority ranking: 1= highest priority; 3 = lowest priority.

TABLE 9   Question framework for human resources policy development (cont.)

Priority ranking	Policy questions

Basic training

1 2 3	Will future basic training needs be linked to workforce plans and projections?
1 2 3	Will medical students continue to train in-country or overseas? How will selection of students take place? Who will fund basic training?
1 2 3	What happens if students do not meet the required academic and competence levels during training? *e.g. not allowed to continue training after initial probationary period?*

Postgraduate training

1 2 3	How will postgraduate training needs be identified? Will they be donor-driven or service-driven needs? Will postgraduate training be related to national workforce and training plans?
1 2 3	How will decisions be made on overseas versus local training to ensure cost-effectiveness while maintaining standards?
1 2 3	What are the processes and criteria for selecting candidates to study overseas or to undertake postgraduate training?
1 2 3	Will there be a process of bonding, to serve the de facto health authority, for health workers in receipt of overseas scholarships for health training?
1 2 3	How will health workers be utilized after completion of postgraduate training?
1 2 3	Should health workers who complete a postgraduate degree course receive a small allowance for academic qualifications, regardless of the posts they hold? *Frequently staff with degrees but in a post of a certain level will demand that the civil service post be upgraded. Civil service levels are designed according to service needs, not around an individual's qualifications.*

Continuing education for high-quality health services

1 2 3	Will all continuing education be based on health service needs, be competence-based and follow de facto health authority guidelines on development, implementation and evaluation of training programmes, to ensure measurable achievement of competence and future accreditation?
1 2 3	What happens if a health worker fails to achieve the level of competence required during the training course? *e.g. laboratory technicians who may be colourblind or midwives who fail after a repeat training in safe delivery*
1 2 3	Is certification of training courses based on successful achievement of the required competence level and not on attendance?
1 2 3	Should standardized continuing education courses *(e.g. IMCI, safe delivery)* be accredited? Should credits for successful completion count towards upgrading? *(Refer to questions on management of human resources development.)*
1 2 3	How will supportive supervision be provided after training to develop the capacity of health workers?
1 2 3	How can linkage be made between national training institutions and district health services monitoring and evaluation, to assess the impact of training on service delivery?

Coordination and quality enhancement of training

1 2 3	Who has overall responsibility for coordinating, monitoring and evaluating health worker training?
1 2 3	Who sets the minimum standards for training of health professionals in the country?
1 2 3	Who provides accreditation and certification for all basic and continuing education? *The de facto health authority may wish to collaborate with the university in the future.*
1 2 3	How to ensure that the capacity of national training institutions is maintained and strengthened?
1 2 3	How to ensure sufficient funding of training to ensure sustainability of courses and their quality?
1 2 3	Who registers and licenses all health professionals practising in the country? What institutions or organizations can collaborate with this registration and licensing? *e.g. professional associations*

Financing human resources development

1 2 3	What financial envelope is likely to be available for funding all the essential elements of human resources?
1 2 3	What are the requirements for capital investment in human resources?
1 2 3	What are the requirements for the recurrent human resources budget, apart from salaries? *e.g. incentives, benefits, supervision supplies, etc.*

Priority ranking: 1= highest priority; 3 = lowest priority. See other sections for financial implications.

EXAMPLE 5

Process of policy and strategy development in Cambodia, 1993–2000

1992

The health policy and strategy development process began in Cambodia in 1992, when the *State of Cambodia health policy and strategy guidelines 1992–1993* outlined the following topics:

Training institutions (central and regional)

- identification of resources to upgrade facilities and training standards
- numbers for student entry being based on country needs
- post-basic training requirements.

Human resources planning and management

- roles and functions of different categories of technical staff
- numbers of each category
- reintegration of returning health workers from border refugee camps and military service
- validation of training received outside Cambodia
- salaries and conditions
- health planning to be undertaken by a human resources development technical subcommittee of the Ministry of Health donor coordination committee.

Policy issues requiring clarification

- the future role of the assistant level of all professionals (e.g. medical assistant, pharmacy assistant)
- the future role and function of primary nurses and midwives
- distribution of health staff
- promotion mechanisms and career development
- admission mechanisms for training.

While these guidelines attempted to address key issues, there was at that time insufficient information upon which to base policy and planning. The human resources development technical subcommittee was mainly donor-driven, with limited participation from Ministry of Health staff. Efforts to collect data were uncoordinated and yielded incomplete and unreliable information.

1993

A survey of health workers in the country was undertaken by a working group, comprising two members of the human resources development subcommittee and one member from the Personnel Office and the Training Office of the Ministry of Health, the Faculty of Medicine and the Nursing and Allied Health Training School. The working group was supported by a WHO human resources adviser. Data were available from Ministry of Health payrolls, and were collected by teams drawn from the Training and Personnel offices in the Ministry of Health. Visits were made to all provinces to explain to provincial health directors the type of information required.

Information was also collected from the factional health services, other ministries and institutions, and industry, as well as from the United Nations Border Relief Organization (UNBRO), which registered and tested health workers before their return to Cambodia. Information was also collected on numbers and categories of students currently undergoing basic health professional training.

Information was collected on health worker category, age, sex and place of work. This information provided a more complete picture than previously available, and hence a more accurate basis for developing more appropriate and comprehensive human resources policies. These policies were included in *Health policy and strategies 1994–1996,* drawn up by the Ministry of Health and covering human resources planning, human resources training and development, human resources management, and more specific issues related to central and regional training institutions.

1996

The health policy and strategy document for 1996–2000 was geared more towards support of the national health coverage plan, and gave little attention to human resources issues.

1999

The human resources department worked on the development of specific human resources policies, which were adjusted to the changing needs of the health service and which comprehensively addressed the essentials of human resources development. For each policy, strategies were recommended.

EXAMPLE 6

Process of human resources policy development in Afghanistan

2002

The first initiatives in health policy development were undertaken in 2002 by the Ministry of Health with the assistance of WHO consultants, and in consultation with other relevant agencies. The resultant health policy document included a section on human resources development.

Given the situation in Afghanistan at that time—so early in the establishment of an interim government, together with the need to identify the future systems of health service delivery and the basic package of health services—the human resources policies developed could cover only the broad principles of human resources development.

Use of a modified policy question tool revealed that there was little understanding of comprehensive human resources development issues within the Ministry of Health.

2003

Once the basic package of health services was developed, a human resources development policy document was drawn up supporting the implementation of the basic package. The policy document dealt with human resources development issues in more detail, based on the situation at that time.

The policy document outlined the 17 categories of health workers that are trained and recognized by the Ministry of Health. Within these categories, the assistant-level health worker was omitted. The only categories of nurses and midwives recognized are the three-year trained, registered level.

2004

As the redevelopment of health services progressed and evolved, it became apparent that the existing human resources development policy document required major change to accommodate the changing situation.

An example of a topic requiring revision is that of nurses and midwives. There are insufficient registered nurses and midwives to meet the staffing levels required to implement the basic package of health services. The majority of health care, particularly in rural areas, is delivered by health workers trained for shorter periods or on-the-job under long-term clinical supervision. It is now recognized that human resources policies need to reflect the existence of these health workers, as well as ensuring that they have the possibility to upgrade to registered level.

Another topic requiring revision concerns changes in basic training courses, which are occurring as training institutions are redeveloped, and curricula and training methodologies are modernized.

Work is being undertaken to identify areas requiring revision and to ensure that future human resources policy addresses the whole health service, and not just the basic package of health services.

12. Human resources planning

Human resources planning in the post-conflict period is complex. It poses many challenges, both because of the quantative and qualitative impact of conflict on the health workforce, and because of the political uncertainties prevailing in the post-conflict period.

The civil service is initially established on the basis of what can be afforded. It is generally funded by donors through trust funds, set up as a means to channel donor funding pledges, which are administered by agencies such as the United Nations and the World Bank. In re-establishing the civil service in the post-conflict period, interim authorities are under extreme political pressure to provide much-needed employment at a time of widespread unemployment and poverty. While this contributes to the stabilization of the country, it poses a danger of recreating former outmoded and ineffective systems of governance, with an overinflated civil service that is poorly paid and inefficient and where there is an expectation of lifetime employment.

Interim health authorities are faced with the problem of assessing the size, composition and quality of the health workforce in-country, identifying potential returnees and assimilating the various groups and factions. They are also placed in a dilemma: on one hand, by extreme political pressure both to re-hire a large number of former health workers and to re-establish health services; and on the other hand, by simultaneous pressure from the donor community to reform the health services by using more up-to-date and cost-effective delivery systems.

Because of the pressure to restore health services, little attention is given to the impact of the conflict on the qualitative aspects of the workforce. Consequently, unfounded assumptions are made as to the capacity and skills base of human resources. The status of health training institutions has frequently not been regarded as relevant by planners in the early post-conflict period. Consequently these training institutions are ill-prepared and ill-equipped to implement training plans, thereby perpetuating problems occurring as a result of conflict. It is necessary to ensure that both workforce (quantity) and capacity development (quality) planning are inextricably linked and are not treated as two separate entities, and that they are both an integral component of health services planning.

Undertaking detailed planning for the future workforce requires knowledge of the currently available workforce and the current and future labour markets. Such information is difficult to obtain, or will not be available for some considerable time. Given the constraints, it is important to use the post-conflict period to focus on building firm foundations for future planning by establishing a sound health personnel information sytem, identifying minimum staffing levels for the newly-defined health system and determining priority training strategies and their related costs.

Impact of conflict

Conflict has a direct impact on the health workforce through death, displacement, physical and professional isolation, and disruption or destruction of training institutions.

- Health workers, particularly at senior level, may be targeted as intellectuals or leaders and are more likely to become internally displaced or to move to refugee camps or other countries.

- Both basic and continuing education may be disrupted or stopped, leading to emergency training's being conducted by less-qualified teachers, working with few or no training resources, resulting in a reduction in training capacity and subsequent poor quality production.

- Dispersal and displacement of health workers in-country, together with the return of health workers trained in refugee camps and a plethora of different categories trained to meet the needs of the emergency, results in a confused, disparate and maldistributed workforce.

- There may be particular problems in reintegrating health workers from formerly warring factional or tribal groups.

- Efforts to replace lost health workers can lead to unplanned overproduction of poorly trained professionals.

- There is likely to be an imbalance in the workforce, both geographically and in relation to qualifications, as qualified health workers tend to be concentrated in urban and capital settings. There may also be an overproduction of a particular category of health workers, such as doctors or nurses.

- Many highly qualified health workers may have left the country, may work in the private sector, or do jobs for which they get higher salaries, such as work as drivers or translators for the United Nations.

- Breakdown of health systems and the impact of that breakdown on health facilities, in the form of lack of essential supplies and equipment, can put health workers at higher risk than normal of contracting HIV/AIDS. While the effects of HIV/AIDS on the workforce may not be apparent in the immediate post-conflict period, it must be borne in mind in the short and medium term.

The extent of the effects of conflict must be taken into account when recommencing both workforce planning and planning for future capacity development.

Key issues

The key issues in human resources development planning are related to how to ensure that human resources development planning is an integral part of overall health service planning. Uppermost are the issues of:

- how to ensure collaboration between the ministry of health and donor partners on collecting data for planning purposes;

- how to promote use of tools such as computerized databases to facilitate appropriate planning.

What information is required?

The basis of planned change is to gather as much comprehensive information as possible through a detailed assessment of the entire former and existing health services, including all resources—health facilities, training facilities and health workers. While health planners are concerned with assessing the number, location and condition of all health facilities as well as crude numbers of general categories of health workers, human resources development planners are concerned with assessing the quantity and quality of the existing health workforce as well as of health workers from other sources. They also require detailed information on the state of the training establishments, along with their teaching staff and training capacity.

In the chaotic situations that invariably exist in the immediate post-conflict period, it may appear that no reliable data are available. There may be a proliferation of information from many sources, much of which is not standardized and some of which may be unreliable or misleading.

In undertaking any planning as an integral part of overall human resources development, it is important to identify exactly what information is required and why. Once all actors are aware of this, it is possible to identify how the data can be accessed and in what format data will be collected so as to facilitate storage, retrieval and analysis.

The main type of information required for planning purposes follows.

PERSONAL INFORMATION

Name. In order to ensure identification it will be necessary when setting up a human resources database to assign a unique reference number to each health worker, since numbers used in other systems (such as civil service registration or voter registration) will not cover all health workers. In some situations, particularly when col-

lecting information before the formal reintegration of formerly opposing factions, it may be necessary to maintain confidentiality with regard to the use of names.

Age. Information on age structure of the workforce is important for overall workforce planning, particularly with regard to establishing retirement age and for planning for future training intakes.

Sex. The sex of the workforce is of particular importance where there are high maternal mortality rates, where, for cultural reasons, women's health care can be delivered only by female health workers and where female literacy rates are low.

Address and contact details. It is important to know the location of health workers, particularly at a time of population movements.

Marital status/family/dependents. Although this information is not essential, it can be useful in considering the distribution of the workforce, the posting of staff (for instance, health workers may be more likely to accept postings to a rural area where they have family roots, but they may be unlikely to accept postings to an area where there are no schools for their children), or the allocation of incentives such as housing.

PROFESSIONAL INFORMATION

Professional category. It is important to know the professional category, such as doctor, nurse or laboratory technician. This can then be cross-checked through equivalency processes or through matching with length of training.

Specialization. Specialist qualifications (if any) need to be known in order to help identify the number of specialists and to provide a basis for decisions on the rationalization of the number of types of specialization (in some countries there may be as many as 50 types of narrow medical specialization, as opposed to the approximately 17 types of broader specialization recognized in most countries). The information on specialization will permit identification of priority specialist categories and the mapping of numbers of specialists, and will allow for appropriate planning of production and equitable distribution of specialist medical resources.

PERSONNEL INFORMATION

Promotion. This information refers to former staffing grade or salary band that is linked to educational level.

Basic education. This includes primary, secondary and tertiary education, with dates and details of schools and qualifications obtained. Linking this information to the history of the effects of the conflict on schooling can provide useful information as to gaps in education and their impact on entrants to health professional training.

Basic professional training. Because of the impact of conflict on health worker training—and the confusion that reigns in relation to training and qualifications—it

is useful to ensure that details of professional training include dates and duration of courses, and places where trained (training school, country, if organized by a non-governmental or international organization, and so on).

It should be borne in mind that in countries where there has been a long period of conflict with a major loss of higher level professionals, health workers—in order to meet emergency needs—may have transferred from one profession to another, such as from nurse to medical assistant to doctor.

Continuing education (formal). This should cover all continuing education training courses undertaken, and include information on title or subject, length of course, where conducted, and by which institution or organization. Because of the proliferation of ad hoc training courses, it is important to be able to cross-check which courses are of a recognized standard.

Non-formal training. This covers non-certified on-the-job training. For example, a doctor may have undergone on-the-job training over a number of years with surgeons from organizations such as the International Committee of the Red Cross or Médecins Sans Frontières and, while functioning competently, may hold no certification.

Training institutions. It is important to understand the history of the organization and standards of basic training courses before the start of the conflict, the impact of the conflict on these, and what the current situation is in the post-conflict period. The type of information required is outlined in Example 8 on page 84.

A decision should be taken on whether to gather data from all health workers in the country, regardless of whether or not they work for the de facto health authority.

The collection of data can, if necessary, be used as a registration process enabling the ministry of health to assess the total numbers of health workers in a country, including those working in the private sector. While this is a more difficult task than simply collecting information, it does give the ministry of health a better basis for regulating standards in the private sector in the future, and also for undertaking more informed human resources planning.

How to get the information?

Given the logistical and potential security problems in carrying out detailed assessment of all aspects of health services, it is essential that there be a cooperative and coordinated approach so that as much comprehensive information as possible is gathered in one assessment visit, which can then be used for all aspects of planning for health services.

When collecting information on health workers, it is important to identify potential sources of health workers (see Figure 2 on page 17) that may not be captured by the survey and to find a way to obtain the necessary information. Collection of informa-

tion from some sources, such as factional or rebel groups, may be difficult and it may be necessary to use an intermediary, such as a United Nations agency or another international organization, to act as a broker in supporting the transfer of information. It should be borne in mind that this may yield limited information. Nevertheless, use of a clear list of required information, together with an explanation of why this information is needed for future planning purposes, will allow negotiation on what information can be made available.

Information on health workers trained in refugee camps may be available through United Nations agencies and other international organizations, such as the Office of the United Nations High Commissioner for Refugees and the International Organization for Migration, as well as through nongovernmental organizations that have been involved in training health workers.

Depending on the individual country situation, there may be other potential sources of information, such as government personnel records, payroll lists, other ministries or professional organizations.

The possibility of validating certification is important, as cases of forged certificates arise from time to time. Consequently it is important that as much information as possible is gathered that can be used to verify qualifications.

Organizing and safeguarding the information

Setting up a computerized database on human resources provides a method of organized storage and easy retrieval of the collected information. In developing the database, it is necessary to identify the information fields and the information that may be required (Box 11).

BOX 11 Examples of types of information that can be obtained from a human resources database

Personnel file of individual health worker

Age and sex breakdown of each category of health workers

Category by age, by sex, by district/province/institution/facility

Total staff by category, by district/province/institution/facility

Continuing education or training in particular subject module by category, by district

Number and category of workers trained in a particular module or modules

Number and category of health workers by district, by training

Number and category of health workers by district, by employer (government or nongovernmental organization)

It is essential that a qualified database expert designs the database, trains staff and oversees the process of setting up the database, data entry, and linking to computer networks in the ministry of health. This will ensure that the chosen computerized database programme is compatible with civil service databases that may be in the process of being set up, as well as with the health information system that is being set up or already exists in the ministry of health, and with any other relevant ministry of health databases (such as a database of donor input).

Personnel information must be treated as confidential, so it is important when designing the database to clarify who can be allowed access to which sections of the database.

A decision should be taken on where the database will be located. Preferably, the database will be in the human resources development unit, on a dedicated computer with facility for daily back-up of data entered. Once the database is set up, it is important that dedicated clerical staff are responsible for continuously updating the database and for generating reports. Where a database is being set up from the very beginning, the process of data entry is time-consuming, and is particularly difficult when ministry of health staff has a limited understanding of the uses of powerful information technology. It is important to put a system in place to ensure that the human resources data are backed up on a regular basis to protect against computer failure or accidental loss of data.

Using the information

In order for human resources information to be used effectively, it is important that senior policy-makers and managers in the ministry of health understand how to retrieve and use this information.

In countries that have been isolated from the developments in information technology, it is important to emphasize the following.

■ All ministry of health staff should be given an orientation explaining how computers can be used as tools, beyond word processing and game playing.

■ Defined information must be accessible by all relevant departments and units via computer networks, regardless of where the main database is maintained, so that it is not a case of one unit or department owning all the information.

■ Senior ministry of health policy-makers, planners and managers should be given clear examples of how the database can be an invaluable tool that greatly facilitates their work.

■ In order to ensure that the database continues to be a useful tool, it must be continuously updated with new information, such as staff movements, promotions, new postings, or training courses completed. It is not enough to collect the information and set up the database.

BOX 12   **Examples of uses of the human resources development database for planning purposes**

The minister of health, when approached by donor agencies with proposals for support to capacity development, can request a briefing from the human resources development unit based on relevant data and reports generated from the database. This information will make it easier to decide whether to accept or modify the proposed inputs.

Human resources development data can indicate the quantitative and qualitative gaps in the health workforce, both in individual health facilities and at each level of service (e.g. district, provincial, central).

A human resources database will facilitate comparison between existing and desired staffing patterns and skill mixes.

Detailed quantitative and qualitative data on human resources complement information from a health information system, thus permitting more detailed health services planning.

A human resources database can be a precursor to a full-scale health-professional registration system. In some cases it may be possible to combine the health-professional registration system with the comprehensive data collection process, which then can be extended to cover returning health workers and health workers being reintegrated.

Starting the planning process

In the initial phase of the post-conflict period, the workforce is based upon what can be immediately afforded. After an interim authority is established, which heralds the beginning of the development phase, it is possible to start more strategic workforce planning. At this stage it is necessary to assemble further information:

- What system of health services delivery is being planned (contracting, public/private mix, etc.)?

- How will the health services be financed?

- What different categories of professionals and mixes of skills are possible?

- What are the characteristics of current and future labour markets?

- What resources are currently available?

In the initial planning stages, it is important to take into consideration that what is affordable under an interim authority with donor funding may not be affordable by the future government. Care should thus be taken when setting the initial health worker establishment (Pavignani, 2003).

Where there is an overly large workforce, great care should be taken in devising strategies to reduce it. Arbitrary decisions such as lowering the retirement age or

phasing out particular professional categories may well work in some countries. But in countries that have experienced long-term conflict and where the workforce has been seriously affected, these tactics may cause other problems.

BOX 13   Examples of problems encountered in efforts to reduce the workforce

In **Cambodia** in 1993, the survey of the workforce indicated that only 0.5% of the workforce was over the age of 60 years. Despite this, the retirement age was lowered, with the subsequent loss of a high proportion of the small number of surviving senior and experienced health professionals and managers.

Again in **Cambodia**, the arbritrary decision to train only one level of nurse—the three-year diploma level nurse—resulted in the abolition of the training of assistant nurses. This caused major problems, particularly for the isolated and underserved north-eastern provinces, inhabited mainly by indigenous tribes, where assistant nurses provided a high proportion of the health care. The national objective was to recruit students for health professional training from underserved areas, with the intention of them returning to work in those areas. That objective was not attained because of the lack of school leavers with a sufficient educational level to enter the diploma-level training. There was difficulty in posting health professionals from other areas to the North East.

Early workforce planning can be facilitated by using workforce planning tools such as the Dewdney workforce planning tools (2001), which use simple spreadsheets. When health facilities are well-functioning, workload indicators such as Shipp's workload indicators for staffing needs (1998) can be used to establish staffing levels.

When the country has stabilized and has moved well into the development phase, it may be possible to move on to more long-term workforce planning and the use of more advanced workforce planning tools that cannot be used in the short and medium term in post-conflict countries.

What are the opportunities and benefits?

The major opportunity of human resources planning lies in encouraging a joint approach to collecting data. This will bring together all actors involved in data collection to gather standardized, comprehensive data that can be used by all. This will avoid an ad hoc approach, which frequently results in both duplication of data collecting activities and gaps in information when each unit or department, supported by an individual donor, collects data for its own particular needs.

Combining forces for a one-time national comprehensive assessment process has many benefits, including cost-effectiveness and a unified approach to planning that offers more realistic inclusion of human resources development in the national health service planning process.

TABLE 10 Suggested key steps in starting the process of human resources planning

Key steps	Related questions
Identify the possible partners with whom to work on systematic, comprehensive collection of health services information.	Which agencies are planning to gather information on the health system? What resources are available? Who in the ministry of health will be involved in information collection?
Identify the information required.	What information is required for human resources development planning? How can this information be used by other departments in the ministry of health for overall planning purposes?
Identify what knowledge exists in the ministry of health on the use of computerized databases and networks.	What is the existing knowledge on the use of computerized databases? How can staff be oriented to the use of computerized databases for planning purposes?
Work with partners on a structured uniform system of data collection.	How to promote the advantages of a collaborative approach to data collection? How to ensure a partnership between the ministry of health and donors so that they join in collaborative national data collection?
Appoint or contract a database expert to design the database, train staff and oversee the data entry process.	How to ensure that the database is compatible with other national databases? Where will the database be located and how can it be accessed?
Enter data.	How many computers and data entry staff are required for the initial data entry? How many data entry staff will be required to maintain and update the database after the initial data entry?
Analyse the data.	How can senior health managers access data? How to generate reports for planning purposes?
Use the data for planning purposes.	What other workforce planning tools can be used?

Further reading

Green A (1999). *An introduction to health planning in developing countries,* 2nd ed. Oxford, Oxford University Press, Chapter 13 (Planning human resources).

This provides a very readable overview of human resources planning.

WHO (2001b). Human resources for health: a toolkit for planning, training and management, draft. Geneva, World Health Organization.

This contains a large number of models and tools, some of which are applicable for the post-conflict period. For example, the Dewdney workforce planning model is a good simple basic model that has been tried and tested in the post-conflict context (Cambodia).

Where health services have been re-established and are functioning, workforce planning can be strengthened by the use of workload indicators such as Shipp's workload indicators for staffing needs (WISN).

WHO (n.d.). *Analysing disrupted health sectors: a toolkit.* Geneva, World Health Organization (http://www.who.int/hac/techguidance/tools/disrupted_sectors/en/index. html, accessed 16 November 2005).

Tulloch J et al. (2003). I*nitial steps in rebuilding the health sector in East Timor.* Washington, DC. National Academy Press, pp. 18-21 (http://books.nap.edu/openbook/0309089018/html, accessed 16 November 2005).

SUMMARY OF KEY POINTS

- Workforce and capacity development planning are inextricably linked.

- Initial planning of the size of the post-conflict workforce is frequently determined by what can be afforded in the post-conflict period.

- Data on the immediately available workforce are frequently ad hoc, lack standardization and may be inaccurate.

- It is important to clarify as early as possible exactly what information is required and why. Once all actors are aware of this, it is possible to identify how the data can be obtained.

- It is more efficient and cost-effective to combine efforts to gather information that can be used for planning all aspects of health services.

- In some cases it may be necessary to use a neutral agent to collect information from factional or opposition groups.

- Care should be taken in deciding on methods to reduce the size of the workforce, so as not to create future problems that could have been avoided.

Examples

The following examples illustrate the types of question frameworks that can be used to contribute to more effective human resources planning.

EXAMPLE 7

Question framework: human resources planning

Information required	Workforce	Training	Possible action
Different sources of health workers (See Figure 2 on p. 17)	What are the sources of health workers who will be available in the future? What are the numbers and qualifications of each source of health worker?	For each category of health worker: ■ Where were they trained? ■ By whom? ■ What was the length of training and the curriculum content? ■ What were the existing conditions under which they were trained? ■ Has any system of equivalencies been established?	Identify who can facilitate attracting health workers from the different sources: ■ Direct contact? ■ Contact via a neutral broker, e.g. a United Nations agency or other international organization. Contact the different sources. Identify possible methods of collecting the relevant information. Establish a computerized database on human resources.
Future health delivery system	What are the minimum packages of services to be delivered at each level of service? What skill mixes are required to deliver these services? What system is being planned for the future, e.g. contracting, public/private mix? How many health workers will be needed to implement the services? What can be afforded?	Have the previous health worker training systems prepared health workers adequately to deliver these packages of services? If not, what are the gaps? What continuing education programmes are required to fill the gaps? What changes need to be made to basic training programmes? What impact will future workforce requirements have on training intakes?	Collection of information from all possible sources on both basic and continuing education courses. Comparison of different training systems or curricula. Review of numbers and condition of training institutions. Review of teaching capacity. Review of student recruitment processes. Development of projections for future intakes.

EXAMPLE 8

Information required for each training institution

TRAINING INSTITUTION INFORMATION		
Name of training institution:		
Location:		
Year established:		
Established by whom (e.g., government, private sector):		
ADDITIONAL INFORMATION	**PRE-CONFLICT**	**POST-CONFLICT**
Sources of funding for the training institute		
System of appointment of teaching staff		
Details of teaching posts		
Details of non-teaching staff		
Design, size and condition of buildings		
Other resources available (e.g. transport)		
Teaching equipment		
Who defined the product of training?		
Curriculum		
Entry requirements for students		
Selection criteria for students		
Student failure rates		
Events that have affected implementation of the curriculum *(e.g. during the Taliban regime in Afghanistan, much time was diverted from clinical to religious studies)*		
Difference, if any, in the academic level of the entrants pre-conflict and post-conflict		

13. Educational approaches and standards

The result of a comprehensive survey of the health workforce gives a general picture of the current workforce situation. Added to that, however, must be a history of the conflict and of the impact of the conflict on the health training institutes, as well as on primary and secondary schooling. This historical perspective permits pinpointing of when, why and how standards of health personnel education have been affected, and of the gaps that must be filled through continuing education. It also indicates the degree of input required to develop new approaches and standards for basic health professional training, taking into account the future health care delivery approach and the possible educational gaps—particularly in the sciences—of secondary school leavers entering tertiary health professional training.

The ad hoc and emergency approaches to training both by government and donors during prolonged periods of conflict raise many problems that must be addressed when re-establishing quality standards in post-conflict reconstruction.

It is also important to try to get a historical perspective on what other sources of training existed, such as training provided by international agencies both in-country and in refugee camps in neighbouring countries, and where possible to obtain as much information as possible on curricula, training records, and numbers, along with details of who was trained. This information is frequently difficult to obtain, as courses may have been run only for a single cycle or a limited number of cycles, and staff involved in training may no longer be with the agency involved. Many agencies have no system for maintaining records over a long period, making it difficult to obtain information many years after the conflict.

A common problem at the end of a conflict is that large numbers of students are trained in government training institutions that have suffered severe degradation, including loss of qualified teachers. The resulting level of professional training is thus extremely low. These students face little or no prospect of employment, and will require extensive continuing education to fill the gaps in their training. Investment in early redevelopment of the required training institutions, and the refocusing of training curricula can reduce the amount of financing required to provide extensive continuing education for the products of out-dated training.

Impact of conflict

Prolonged periods of conflict can have a profound impact on standards of health personnel education. Furthermore, prolonged periods of conflict severely affect primary and secondary schooling. In countries such as Afghanistan, Cambodia and Sudan, which have experienced more than two decades of war, the result has been that many people in their teens and early twenties have low literacy and numeracy levels. This poses problems if they want to enter health professional training courses.

BASIC TRAINING

The degree to which training institutions have been affected varies from country to country, depending on the length and type of conflict. In a typical worst-case scenario, the conditions will be as follows.

Physical facilities. Some or perhaps all of the training institutions will have been destroyed, damaged or looted, or relocated to emergency premises with loss of all teaching resources, including laboratories, libraries and so on. Training frequently continues in emergency circumstances in basic classrooms devoid of everything except a blackboard. In some cases, training institutions may have been closed, then reopened to meet emergency needs to replace large numbers of lost health workers. Other new training institutes may have been opened by factional groups in areas under their control. These institutions frequently are set up in emergency circumstances and lack the requisite physical facilities for professional training.

Teaching staff. There is invariably a loss of highly qualified and experienced teaching staff, who are replaced by less experienced staff recruited to fill the gaps. This leads to a reduction in effectiveness of teaching, and in extreme cases results in the training becoming based on "what the teacher knows" rather than "what the student is required to know to do the job".

Financing of the training institution. Isolation of training institutions from the capital, together with the breakdown of government, generally result in the loss or non-receipt of regular funding and salaries. As a result, the teachers resort to seeking alternative sources of finance, which frequently involve students paying fees, buying lecture notes, etc. This, in turn, can lead to entry to professional training being based on ability to pay, rather than on academic level.

Educational and professional standards. All the circumstances of conflict conspire to gradually degrade health professional educational standards in countries. Families looking to future security make every effort to fund a family member to study for a profession, such as medicine, which they anticipate will bring in a good income on graduation. Having made great sacrifices to pay for training, they become unwilling to accept failure rates. Teachers who struggle to maintain educational standards in the face of all these difficulties frequently come under threat.

As training continues in difficult and unsatisfactory circumstances, training institutes may also experience problems in ensuring sufficient clinical practice for students. This can result in professional training gradually deteriorating to mainly theoretical training.

CAPACITY DEVELOPMENT FOR EXISTING TRAINED HEALTH PROFESSIONALS

The isolation of health workers because of conflict results in lack of supplies and equipment, lack of supervision and clinical or professional updating, and non-receipt of salaries. These factors contribute to a lowering of morale and a deterioration in professional performance. Where health workers have been trained in difficult and reduced circumstances, there are many gaps in professional knowledge and practice that must be filled. In the emergency phase, nongovernmental and aid organizations address capacity building on an ad hoc basis, providing on-the-job training tailored to the individual situation and based on the particular interest and motivation of the aid workers. This training can vary from guidance on how to use new equipment and drugs, to continuing on-the-job training in skills such as basic surgical procedures. Details of such training are generally undocumented and unrecorded, thus posing problems with regard to accreditation.

As the situation stabilizes, short training courses on particular topics related to work are frequently provided. These courses generally vary from half a day to several weeks. The length of the training depends on the aid organization or individual organizing the course. Consequently, training on a particular topic (e.g. reproductive health) may vary from 1 to 10 days. Many training courses have no documented structure or curriculum, and consequently are difficult to accredit.

Opportunities, such as the provision of scholarships for overseas studies, may allow health workers to attend academic courses or workshops or meetings. In the absence of strategic human resources plans and objective selection processes, many of these costly opportunities for capacity building are frequently improperly used. The result is that such opportunities have little or no impact on ensuring that the capacity developed contributes to the redevelopment of health services.

Key issues

The main issues in the post-conflict phase revolve around how to develop a workforce that is competent to deliver the package of services defined by the de facto health authority, and how to re-establish the linkages between education and health services.

The ministry of health, in defining the roles and functions of health workers at each level of the health service, must develop clear job descriptions. These job descriptions provide a blueprint for both basic training and continuing education. The ministry of health must also specify the minimum acceptable level of competence for each category of health worker at each level. This raises the question of how competence is

measured and certified, an issue of particular relevance when attempting to assimilate and integrate all the different types of health workers trained on an ad hoc basis, both in and out of country, during the conflict. In countries experiencing prolonged conflict (e.g. 10–20 years), little documentation of either basic or continuing education training courses may remain or be accessible to provide evidence of content of training or how training needs were initially assessed.

The use of the term "training" is often misleading; in order to avoid misunderstanding, there is a need to be specific in categorizing and describing the different types of training.

The question is how to assess training institutions and provide them with adequate support to enable them to ensure that all future graduates are equipped with the required competences to deliver the defined package of health services. Furthermore, appropriate strategies must be developed to address the problem of the students who have not completed training.

What do we mean by training?

The term training is so generally used that it is frequently misinterpreted. It can cover anything from occasional on-the-job training to a three-year basic training course. To avoid confusion, it is important to clearly identify the different types of training and to be specific in the use of terminology. For the purpose of this guidance, the different training courses are generally categorized in Table 11.

What information is required?

As much detailed information as possible must be collected, as soon as possible, on all aspects of health worker training, including training institutions. Preferrably this data collection should be incorporated in the national data collection process, thereby facilitating access to parts of the country where transport or security pose problems. Undertaking a separate assessment of training institutions can be costly and difficult, and is consequently more likely to be delayed or postponed unless it is linked with the national data collection process.

What are the opportunities and benefits?

There is a real opportunity to start afresh in redeveloping approaches to health personnel education that are appropriate to the needs of the future health services delivery system.

Reform of training programmes early on reduces the burden of continuing education; there is less need to incur extra costs to fill gaps in the knowledge and skills of graduates that arise from perpetuating outdated and inappropriate basic training programmes. There is also an opportunity to begin working towards realigning educational standards with those of neighbouring countries and the region.

TABLE 11   **General categories of health professions training**

Category	Definition
Basic training	This refers to the foundation training of a prescribed length that is required to be undertaken in order to become registered as a health professional *(e.g. 3 years to become a registered nurse, 7 years to become a physician)*.
In-service or on-the-job training	This refers to training that is given to health workers in the work setting as they go about their daily work. It implies mentorship and is generally informal and neither certified nor accredited. It can refer to anything from a one-off teaching session to a longer term apprenticeship, such as training a doctor to undertake basic surgery over a number of years or the practical training of a midwife. This is a method frequently used of necessity during the emergency or conflict period. There is generally no defined common standard of practice and there is no guarantee of the standard achieved.
	In the post-conflict period, assessment and equivalency can be achieved through systematized assessment of competence.
Continuing education (short courses)	This refers to training courses provided for already trained health workers, which are relevant to particular aspects of work. Some may have a standardized curriculum and evaluation process, while others are less structured and are certified based on attendance, giving no indication of knowledge or competence gained.
	Examples of structured short continuing education courses are the WHO/United Nations Children's Fund/United Nations Population Fund modules on safe motherhood and integrated management of childhood illness, which are locally adapted.
	Where an agency or nongovernmental organization uses a training package that was developed and implemented in another country, it is important that the training package is adapted to the local situation and incorporates national treatment protocols. Where possible, the training package should be approved by the ministry of health and the results of training should be fed back to the human resources development unit in the ministry of health.
Postgraduate certificate, diploma or degree courses	These are structured postgraduate training courses linked to a university or tertiary training institution. Health workers will either be sent out of the country for training or an external donor will set up a course in-country. The setting of educational standards and accreditation can be achieved through formal links with external regional or international training institutions, as well as with a national university.

TABLE 12   **Suggested key steps in re-establishing educational and professional standards**

Key steps	Related questions
Basic training	
Assess condition of training institutions.	How to carry out the assessment of institutions as part of a combined data gathering process?
	Assess training institutions separately?
	How to fund the assessment process?
Assess the teaching/learning process in training establishments.	What support is required to carry out this assessment?
	Against what standards will the processes be measured?
Identify priority problems and gaps to be addressed.	What are the major problems?
	What are the gaps in basic education that will have to be addressed for health professionals already trained through a degraded system?
Identify possible strategy options for rationalization and upgrading of training institutions.	How many training institutions are required?
	What facilities and equipment are required?
	How can teaching capacity be upgraded?
Identify funding required for upgrading of training institutions.	How to cost the different strategy options?
	How to identify the most cost-effective strategies?
Identify and coordinate donors to support upgrading of training institutions.	How to seek financial and technical support for the upgrading process?
	How to coordinate donor support?
Set educational standards for all basic training courses.	What are the educational standards for the various basic professional training courses: ■ in neighbouring countries, ■ regionally, ■ internationally? What standards are most appropriate to be adopted nationally?
Ensure that basic training courses prepare health workers for their future roles and functions.	What are the new roles and functions of health workers in delivering the defined packages of services?
	What changes are needed to the basic curricula?
	What capacity is there in the training institutions to review/revise/redevelop curricula?
Establish processes for setting size of student intakes and for selection.	Who establishes the size of intakes for basic training courses?
	How to establish a fair and objective student selection process?
Decide on the roles of both the ministry of health and the ministry of education in relation to the training institutions.	What are the roles of the ministry of health and the ministry of education in relation to the technical content and educational standards of the training institutions?
How will training institutions be funded in the future?	What are options for the future funding of training institutions: ■ government funding, ■ private funding—fee paying, ■ combination, ■ other?
In-service training	
Accredit in-service training.	What are the different types and lengths of in-service training?
	What are the methods to assess competencies that can be accredited?
	Who can be involved to ensure objective assessment?
Continuing education	
Analyse continuing education training courses.	Who is doing what? Where?
	How to equate and accredit the various training courses?
Set standards for continuing education.	How to standardize the continuing education training programmes?
Plan and coordinate continuing education.	What are the continuing education requirements?
	Who is involved in providing continuing education?
	What mechanisms can be used to coordinate efforts of all actors involved in continuing education?
	What processes can ensure that opportunities for overseas studies and travel are used to support health service development?

Further reading

Abbatt FR (1992). *Teaching for better learning: a guide for teachers of primary health care staff,* 2nd ed. Geneva, World Health Organization.

Guilbert J-J (1998). *Educational handbook for health personnel,* 6th ed. Geneva, World Health Organization (WHO Offset Publication No. 35).

SUMMARY OF KEY POINTS

- Conflict can seriously affect training institutions, leading to severely reduced training capacity and degradation of both technical and educational standards.

- There is an urgent need to include health training institutions in the comprehensive situational assessment process.

- Obtaining a historical perspective on training provides vital information on all sources of health personnel education, both in and out of the country.

- There must be a rationalization of the future required health training institutions.

- Both future basic and continuing education must be directly related to national job descriptions.

- Attention must be given to clarifying the minimum competences required for each category of health worker as a basis for equivalency and certification.

- Strategies must be developed to ensure that training institutions are adequately redeveloped and supported to produce graduates of the required levels of knowledge and competence.

- Continuing education is costly and must be carefully planned, coordinated, implemented and evaluated.

Examples

The following examples illustrate strategies that have been used, with varying results.

EXAMPLE 9

Development of training guidelines in Timor-Leste

Initial steps in developing guidelines were undertaken by WHO. The evaluation section in the guidelines was developed during the training of trainers for the tuberculosis programme.

The initial guidelines (see the following training guidelines) were designed as a tool for the ministry of health with which to guide nongovernmental organizations and international donors so as to ensure that training courses met with ministry of health standards and provided the ministry of health with detailed information that could be entered into the human resources database and could feed into human resources planning processes.

The evaluation process developed to assess results of training was adapted to be used as a standard reporting form to provide the ministry of health with detailed information on the results of training (see the following training evaluation report form).

TRAINING GUIDELINES

Training proposal

All agencies wishing to develop and/or conduct training of government health workers must submit a proposal to the Division of Health Services (DHS). If the training proposal is accepted the training should

- be developed according to the DHS training guidelines

OR

- follow DHS approved standard curricula.

Training curriculum development

- All training is *competence based*, with a clear description of the competences to be achieved during the training.

- All training must have a clear competence-based *curriculum*. This will include the following:

  - clear learning objectives

  - teaching methodologies required to teach the expected required knowledge and skills

  - length of time required to achieve the objectives

  - methods of evaluating achievement of objectives.

- The curriculum should be *supported by* relevant training materials and manuals that accurately reflect the DHS national protocols.

- The *evaluation criteria* should be clearly set, indicating what are acceptable levels for both theory and practice. All *students should be informed* of these criteria before commencing the training.

- The training curriculum should be *piloted, reviewed* and *revised* before national implementation. The results should be communicated formally to the Head of DHS, copied to the National Centre for Education and Training (NCHET) and to the Human Resources Section of the National DHS and the relevant technical section at the DHS, by means of the attached evaluation and attendance forms.

Selection of trainers

- Selection of trainers will be made in consultation with both NCHET, the Human Resources Section and the relevant technical section of the DHS. Recommendations will be sent to Head of DHS for formalization.

- The DHS will establish the criteria for selection of trainers, which include:

  - technical competence

  - more than 3 years' experience working in the designated clinical field

  - previous experience as a trainer

  - proven interest in training

  - willingness to sign an agreement to work as a trainer for 3 years (renewable)

  - willingness to travel to field practice areas anywhere in the country

  - willingness to travel to assess performance of trainees after training and to assess impact of training.

Training of trainers

- All clinical trainers from all professions will undertake a relevant training of trainers course. Training skills will be further augmented by other courses in adult teaching methodology.

- Ongoing supportive supervision should be provided following training as clinical trainers.

Selection of trainees

- Selection of health staff to be trained will be undertaken in consultation with the:

  □ Head, District Health Services

  □ relevant DHS technical section

  □ DHS Human Resources Section

  and be based on agreed clearly defined criteria.

Training reports

- A training report should be completed after each training course and sent to the NCHET and DHS Human Resources Section for entry into the human resources development database (see training evaluation report form and attendance record form).

Additional training guidance can be found in the "Internal guidelines for planning, budgeting and financial procedures of training courses at the Division of Health Services", dated 20 July 2001.

A training checklist will assist agencies in following the guidelines.

TRAINING CHECKLIST		
1. Training proposal submitted to DHS	YES/NO	Date:
2. Acceptance of training proposal	YES/NO	Date:
3. Standardized national curriculum exists	YES/NO (If YES proceed to No. 9)	
4. Development of competence-based curriculum following DHS guidelines	YES/NO	Date:
5. Draft curriculum submitted to DHS (Human Resources Section and NCHET) for approval	YES/NO	Date:
6. Piloting of approved draft curriculum	YES/NO	Date:
7. Review and revision of curriculum	YES/NO	Date:
8. Details of piloting process and finalized curriculum submitted to DHS (Human Resources Section and NCHET)	YES/NO	Date:
9. Selection and preparation of trainers by DHS	YES/NO	Date:
10. Selection of trainees by DHS and Head of District Health Services	YES/NO	Date:
11. Implementation of training with continuous assessment	YES/NO	Date:
12. Submission of training reports following DHS format	YES/NO	Date:

DHS=Division of Health Services; NCHET=National Centre for Education and Training

TRAINING EVALUATION REPORT FORM

Date of course:			Training course title:					Venue:			
	Name	District	Current post	Age	Sex	Number of previous courses followed in this subject	Number of years of experience*	Pre-test %	Post-test %	Practical %	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
						Average ( )	Average ( )	Average ( )	Average ( )	Average ( )	
* Working in the field covered by the training course											

ATTENDANCE RECORD

Course:		From:				To:				
Implemented by:		Venue:								
Name	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

EXAMPLE 10

Use of health professional educators by a nongovernmental organization

A strategy undertaken by Médecins Sans Frontières (MSF) in Cambodia was to appoint a training coordinator to work with MSF health teams in Cambodia, Thailand and Laos to provide support and guidance in relation to capacity building. The educators appointed were nurses who were either qualified educators or were at the time undertaking a master's-level degree course in medical education.

In Cambodia this strategy proved invaluable. The training coordinator, in addition to working with the health teams to support in-service and continuing education training, acted as a bridge between the Ministry of Health and the nongovernmental organizations and was influential in guiding nongovernmental organizations to undertake training that was in line with the Ministry of Health's efforts to institute standardized continuing education that could be accredited.

The training coordinator, as a highly qualified educator, also gave great support to the Ministry of Health/WHO initiative to train Cambodian health professional educators through providing direct input and also as an external evaluator of the students' teaching practice.

The role of the training coordinator in translating the Ministry of Health's human resources strategies into action by nongovernmental organizations was of immense value, as the guidance was coming from within the nongovernmental community, and was thus not perceived as being imposed by the Ministry of Health or the multilateral agencies.

The input of the training coordinator into the Ministry of Health/WHO diploma course in health personnel education contributed to the accreditation of the course by an external university, the level of qualifications of all the educational experts who made an input to the course being one of the criteria for accreditation.

This example of the appointment of the training coordinator by a nongovernmental organization demonstrates the value of qualified health personnel educators in the early post-conflict period in ensuring that nongovernmental organization input to capacity building contributes positively to ministry of health strategies for re-establishing educational and professional standards.

This contrasts strongly with examples of situations where agencies have provided input to training schools through clinical practitioners who have no teaching experience or qualifications. The sharing of good clinical practice is important. However, without the input of good educational methodology—including curriculum development, modern teaching methodology, and educational evaluation methodology—the impact of the teaching of clinical skills is less than optimal in the degraded environment of the teaching institutions in the post-conflict period.

EXAMPLE 11

Raising of educational and professional standards through linkages to external universities

Re-establishing standards of health professional education can be a difficult process. Where possible, it is important to use opportunities to work towards achieving regional or international recognition for the qualifications.

CAMBODIA

Post-basic training of psychiatrists was addressed early on by the International Organization for Migration (IOM). This was conducted in-country, in conjunction with the University of Norway.

The training of nurse anaesthetists was undertaken in collaboration with the University of Paris Nord. Already-qualified nurses were trained in basic methods of anaesthesia that could be administered in the absence of a medical anaesthetist. As part of the programme, Cambodian trainers were thoroughly trained, so that they would be in a position to take over training from the expatriates in a gradual handover.

TIMOR-LESTE

Training of nurses in post-traumatic stress counselling was undertaken in collaboration with an Australian university very early in the post-conflict period. While the training equipped the nurses to deal with one particular aspect of mental health in the absence of a psychiatrist from Timor-Leste, their short training did not prepare them to deal adequately with other aspects of mental health. Consequently, the project became dependent on visiting psychiatrists from Australia.

The nurses were paid salaries by the project that were considerably above the level of the future planned government salaries. When a future comprehensive approach to basic community-based mental health was proposed, it was hoped that the nurses trained under the original project would be key personnel to be given further training to expand their role under the ministry of health. Unfortunately, many of the nurses declined to join the Ministry of Health programme as they were unwilling to accept lower salaries.

COORDINATION OF INPUTS FROM EXTERNAL UNIVERSITIES

In post-conflict countries where many universities from different countries may provide input to one particular training institution, it is important to ensure that there is a very strong coordination mechanism to maximize the outcome of the input, while avoiding problems occurring over language and approach in order to minimize duplication and territorialism.

Identification of the needs of the training institution is key to planning how to use the assistance. This should be based on a comprehensive assessment of the training institution that allows costed plans to be drawn up.

EXAMPLE 12

Process for allocating international training opportunities, developed for use in Afghanistan

OBJECTIVES OF THE PROCESS

- To ensure that international fellowships, meetings, etc., are consistent with and support the Ministry of Health's health service redevelopment process.

- To ensure the appropriate and objective selection of suitable candidates to undertake international studies/attendance at meetings/study tours.

- To ensure that the objective selection process will take into account the following factors, as appropriate:

    □ relevant language and computing skills

    □ specialist knowledge

    □ length of work experience in the relevant specialist field

    □ ability to use knowledge and skills gained on return to Afghanistan.

- To ensure equity of opportunity of applicants in relation to sex, ethnicity, departments and provinces.

- To ensure that all candidates who are awarded fellowships or attend meetings or study tours report back to the Board (that oversees the allocation of training opportunities) and present plans for dissemination of knowledge and skills gained.

- To conduct a weekly review of the available places for fellowships and meetings together with the candidates nominated.

- To conduct interviews as appropriate where there is more than one suitable candidate.

TYPES OF MEETINGS AND FELLOWSHIPS[1]

- high-level international meetings, e.g. the World Health Assembly and WHO regional committee meetings

- university-based courses

  - □ degree courses—Bachelor's /Master's/PhD courses

  - □ other postgraduate certificated university courses, e.g. Diploma or Certificate

- short, taught courses on specific subject areas, e.g. management, technical, education, etc.

- workshops

- technical meetings

- conferences

- study tours

- professional attachments

- postgraduate clinical specialist training

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1. Terminology: fellowship and scholarship are both terms used to designate the award of funding to cover the cost of undertaking a course of study.

TABLE 13   **Issues related to all categories of meetings and fellowships**

Category	Issues
High-level international meetings (restricted attendance)	■ These meetings are attended by the highest level within the ministry of health (Minister or Deputy Minister level).
Degree courses and postgraduate (non-clinical) university-based courses of more than 9 months' duration (all health professionals)	■ The awarding of fellowships for degree courses can be difficult in a post-conflict redevelopment situation, particularly at a time when there is no functioning human resources database and no human resources plans, and at a time of political change.
	■ Fellowships for degree courses are high-cost and most effective when used within the framework of Ministry of Health capacity-building plans.
	■ The majority of donors awarding academic fellowships stipulate that recipients work for the Ministry of Health for a fixed period upon graduation, since this major investment in capacity building is primarily designed to strengthen the Ministry of Health. Should the successful candidate not fulfil this obligation, they may be responsible for repaying the cost of their studies to the donor organization.
	■ In the post-conflict reconstruction period, fellowships should be awarded for fields of study based on Ministry of Health's health service needs. While attending universities, students should not be allowed to change courses to suit individual preferences while attending universities without obtaining prior approval of both the donor and the Ministry of Health.
	■ Forward planning is required to ensure that the recipient of a fellowship for a specific area of study can be appropriately employed by the Ministry of Health after an absence of more than one year, particularly if the fellow is absent during a period when civil service recruitment is taking place.
	■ A high level of language ability is required. This can raise difficulties in finding a suitable candidate working in the appropriate field with the required level of language proficiency or a candidate with sufficient language proficiency who is willing to change his or her field of work after completion of training.
	■ All academic degree courses have stringent language requirements, based on TOEFL or IELTS scores for overseas students. When requesting donors to provide funding for academic fellowships, it is important to request funding for necessary language training. The language requirements may be slightly less stringent for diploma or certificate courses.
	■ Computer skills are essential.
Short, taught courses	■ The range of courses offered is very large. They can vary from courses that give a general overview of a subject to very specific courses on technical subjects (e.g. the integrated management of childhood illness or primary eye care) or that develop capacity in teaching particular technical skills through the provision of short training of trainers.
	■ Some courses offered are not well described and the subject may not be clear. Little information may be given as to objectives of the training and course content. This makes it difficult to assess the relevance of a course to Ministry of Health's health service development and its associated capacity building plans.
	■ It is important to request as much detail as possible on the content of courses in order to assess its relevance to the work of the Ministry of Health and its health service development.
	■ Length of time can vary from 5 days to several weeks.
	■ Some courses just provide certificates of attendance; others may provide certificates of knowledge or skill achievement.
	■ Criteria for selection may or may not be defined.
	■ Language of training course may be specified but no language capacity defined. However, it is expected that a good working knowledge of the language of training is required to ensure understanding and participation.

TABLE 13   **Issues related to all categories of meetings and fellowships (cont.)**

Category	Issues
Workshops	■ Workshops are organized to address specific subjects. Objectives are clearly defined. ■ Participants are expected to have sufficient level of the appropriate language in which the workshop is conducted to be able to participate fully. ■ Participants are expected to be working in and have experience in a field relevant to the topic of the workshop. ■ Participants may be required to bring with them documents or data or to prepare a paper or make a presentation on issues from their own country related to the subject of the workshop. These papers or presentations will require clearance for presentation from relevant managers in the Ministry of Health.
Technical meetings	■ Technical meetings generally are high-level meetings that bring together top experts to address a specific technical area. ■ Participants in technical meetings require a high level of technical expertise in the technical area addressed by the meeting. ■ Participants may have to make presentations, and these should be cleared with the Ministry of Health. ■ Participants require a high level of language ability in the language of the meeting.
Conferences	■ Conferences generally are 2 to 3 days long and are attended by large numbers of delegates. Conferences include a number of key presentations to the entire conference by a limited number of experts. A large number of papers are also presented to smaller groups, and there are many sessions of presentations running simultaneously. ■ Participants may be required to present papers. Content of papers should be cleared by the Ministry of Health. ■ Many of the papers presented may not be relevant to post-conflict country health service delivery. ■ Unless participants have a high level of language ability in the language of the conference, it is extremely difficult to determine which conference sessions and papers are relevant and useful to attend. ■ Participation in a conference does provide some opportunity for networking.
Study tours	■ Study tours are designed to allow health professionals to visit one or more countries to observe particular aspects of health service delivery, including approaches, training or implementation of specific technical programmes. ■ Study tours have been widely criticized as "holiday tours", particularly where the study tours take place on an ad hoc basis and are not linked to strategic plans. ■ The success of study tours depends on: 　□ clear definition of objectives of the study tour and the expected outcomes for the Ministry of Health; 　□ appropriate selection of candidates for the study tour in relation to the subject to be studied; 　□ language ability of the candidates chosen—it is crucial that at least 50% of the members of the study tour have fluency in the professional language of the host country to ensure good communications between hosts and study tour members; 　□ sufficient lead time for preparations to be made in the countries in which the study tour takes place, allowing for the communication to the Ministry of Health of the host country of particular areas of interest to the Ministry of Health of the recipient of country, so that information on those areas of interest can be fed back into the health system on the return of candidates; 　□ appropriate mechanisms (such as the holding of meetings or workshops) being in place to ensure that the members of the study tour can share information and findings with relevant Ministry of Health personnel on their return—thus the selected participants are required to plan not only the study tour, but also how to present findings on their return.

TABLE 13   **Issues related to all categories of meetings and fellowships (cont.)**

Category	Issues
Professional attachments	■ Professional attachments involve temporary engagements of health professionals in a clinical or administrative/management department in a health service in another country.
	■ These attachments can be for a variety of lengths, from a few weeks to several months.
	■ These attachments are generally purely observational. Particularly in medical, nursing and technical fields, the selected candidates for clinical areas will only observe clinical procedures and not be allowed to practise them. Consequently, completing the attachment does not certify competence in these clinical procedures.
	■ A high level of language is required to ensure communication. A common criticism of professional attachments is the inadequate language ability of candidates selected. This leads to supervisors' frustration and their reluctance to participate in attachments.
	■ Professional attachments can be beneficial where:
	□ there is careful selection of candidates
	□ language level of candidates is appropriate
	□ objectives and desired outcomes of the professional attachment are clearly defined
	■ In some cases, attachments may be offered by an international organization within Afghanistan; in such cases it is crucial to clarify whether an attachment will provide some certification of level of knowledge and competence gained.
Postgraduate clinical specialist training	■ Specialist clinical training is costly. Fellowships/scholarships be awarded to health professionals to study a clinical specialty overseas have proved problematic. This has led to providing more cost-effective specialist clinical training in-country rather than abroad.
	■ Medical legislation in many countries now forbids health professionals from countries whose qualifications are not recognized by health professional councils to treat patients in the country of study. The result is that health professionals, while being accepted for study, undertake theoretical studies and observation only, but do not develop clinical competence. Care should be taken to ensure clarification of legislation relating to the scope of practice permitted for Afghan health professionals in the proposed country of study.
	■ Health professionals who successfully achieve a fully recognized international level of clinical competence are trained in procedures and to use equipment not available or affordable in their own countries. This leads to frustration and a high attrition rate among highly qualified clinical specialists, who leave to work abroad, where they have a greater scope of practice and earn higher salaries.
	■ A high level of language ability is required to ensure both good communication with patients and ability to follow a course of study in a foreign language.
	■ Many health professionals sent abroad for full clinical specialist training fail to return after training, resulting in costly fellowships' yielding no benefit to the country.
	■ Specialists trained in-country are more cost-effective and more likely to be retained in-country.
	■ Specialists trained under fellowships who return to their country should be used to build clinical capacity of other health professionals in-country through a formal training system.

TABLE 14 Assessment of a training offer's appropriateness to the Ministry of Health's policies and plans

Question	Answer	Suggested action
1. Is the subject relevant, useful and consistent with Ministry of Health plans and policies?	YES/NO	If NO to question 1, consider declining offer. If NO to questions 1 and 2, decline the offer.
2. Is there sufficient lead time for appropriate selection and preparation of candidates before departure?	YES/NO	If YES to question 1 and NO to question 2, ask donor to reschedule. If YES to questions 1 and 2, continue.
3. Has the donor already submitted a nominee to the Ministry of Health?	YES/NO	If NO to question 3, proceed to question 1 of Table 15. If YES to questions 3 and all sections of question 4, accept nominee.
4. Is the person nominated the appropriate candidate, based on the following criteria:		If YES to question 3 and NO to any section of question 4, discuss whether to look for another candidate.
■ working in the particular area related to the meeting?	YES/NO	
■ working at the appropriate level of seniority?	YES/NO	
■ has the appropriate level of language required?	YES/NO	

TABLE 15 Selection of suitable candidates for the training opportunity

Question	Answer	Suggested action
1. Is the subject of the field of study/workshop/meeting more appropriate to:		YES indicates the level from which candidates should be drawn.
■ Central/Ministry level?	YES/NO	
■ Provincial level?	YES/NO	
■ District level?	YES/NO	
■ Departmental level?	YES/NO	
2. Are there suitable candidates who meet the following criteria required for attendance/participation:		For candidates who achieve YES for ALL criteria, continue to question 3.
■ relevant language skills?	YES/NO	
■ specialist knowledge of subject?	YES/NO	
■ reasonable length of work experience in relevant field?	YES/NO	
■ ability to use knowledge and skills gained on return to Afghanistan?	YES/NO	
3. Is there more than one equally-qualified candidate?	YES/NO	If YES, consider questions 4 and 5 in relation to each candidate.
4. Has the candidate attended other meetings/workshops or courses on the same subject within the past 2 years?	YES/NO	If YES to either or both questions 4 and 5, candidate should not be considered.
5. Is the candidate selected or likely to be selected to attend any further meetings/courses/workshops on other subjects within the next few months?	YES/NO	If NO to both questions 4 and 5 for more than one candidate, consider competitive interviewing of candidates.

PROCESS OF ORGANIZING A COMPETITIVE INTERVIEW

University-level courses

In selecting candidates to undertake costly university-based degree or diploma courses, it is common for donors to fund an allocated number of university places for study in subjects relevant to the needs of the Ministry of Health. The following scenarios are common.

Scenario 1. The donor may ask the Ministry of Health to shortlist a number of possible candidates. The candidates are then interviewed by a panel, set up by the donor, that includes a representative from the Ministry of Health and other external donors. The interview panel may consist of at least four to five people and the interview process is rigorous. The interview is conducted in the language of the country of study, thereby giving the interview panel an opportunity to assess the candidates' ability to express themselves in a second language. The selection process may also include language testing to identify the need for language training before study begins.

Awards will be given only to those candidates who meet the criteria. Where the shortlisted candidates are not of suitable calibre or do not meet the criteria, not all the allocated university places will be filled, and consequently these places will be lost to the Ministry of Health.

It is crucial that the Ministry of Health apply strict criteria to the selection of shortlisted candidates to ensure that all the available places are filled.

Scenario 2. The donor may expect the Ministry of Health to organize an interview process and ensure a transparent, objective selection process. This would require a panel of interviewers (minimum four people), consisting of representatives from the Ministry of Health, the donor agency and another external agency, and one technical expert in the particular field of study. Where possible, all the members of the panel should hold degrees of a level comparable to or higher than that of the course to be undertaken.

Other courses

In order to conduct an objective interview, the interview panel should consist of at least three people, preferably one person being external. The external member of the panel could be a representative of the agency sponsoring the meeting or course of study.

PROCESS OF CONDUCTING AN INTERVIEW

As there is great competition for places to study abroad, the Ministry of Health may come under intense pressure in allocating fellowships and opportunities to attend meetings. The Ministry of Health may also be criticized by unsuccessful applicants, donors, international training establishments and host governments if inappropriate candidates are selected. A number of international training institutions have become reluctant to accept students from certain countries where inappropriate selection takes place.

- The Ministry of Health must develop a process that is transparent, and that allows for decisions to be justified.

- Use of the tools for assessment of suitability of the offer and the suitability of the candidates to be interviewed provides a basis for decisions.

- Careful selection of the interview panel, to include either a representative of the donor or of another external agency, can guarantee impartiality.

- Careful briefing of the interview panel is needed on the details of the fellowship and the objectives and expected outcome for the Ministry of Health.

- There must be careful briefing of the interview panel on the interview process and scoring system.

- The panel must discuss the questions that will be put to the candidates during the interview, and who will ask what.

- The panel should be aware that candidates may be nervous, so initial questions should be regarded as questions to put candidates at their ease.

- Open-ended questions should be used to allow the candidate to express ideas and opinions.

- Questions should address the specific relevant technical areas to assess the candidate's knowledge, interest and understanding of the field of study and its application to Ministry of Health's health services delivery.

- Candidates will be scored against a number of criteria by each member of the interview panel (see interview scoring sheet below). Individual scores will be entered into a cumulative master sheet, and totalled.

- Where two candidates tie for first place, the interview panel can do one of two things:

  - either review their individual scores and discuss the basis for awarding the scores, and consider whether any other attributes of the candidates emerged during the interviews that were not scored but that merited a score, that made one candidate more outstanding than the other;

  - or recall both candidates for further interviewing.

- The final results, together with the scoring sheets and comments from the interview panel, will be submitted to the Ministry of Health.

- The second-highest-scoring candidate will be held in reserve in case unforeseen circumstances would prevent the highest-scoring candidate from taking up the scholarship.

SCORING THE COMPETITIVE INTERVIEW

Each member of the interview panel is provided with a score sheet and individually scores the applicant for each of the attributes on the scoring sheet, ranking the score from 1 to 10, the lowest score being 1, and the highest score being 10.

On the scoring sheet the attributes covered are:

- knowledge of or interest in the subject of field of study;

- understanding of the application of the subject studied to the Ministry of Health and its work;

- applicability of the field of study to the candidate's current position;

- motivation to share knowledge and skills on return;

- personal/family—this relates to the family situation of the applicant, e.g. if there are family reasons that might influence the candidate not to return from abroad or not to move within the health service if so required after completion of studies;

- other factors—there may be factors that are not specified in the job description but that may be considered as contributing to the suitability of the interviewee for the post, e.g. other work experience, role in community leadership, etc.

The scores of all interviewers are then entered on a cumulative scoring sheet.

INTERVIEW SCORING SHEET

Fellowship applied for:

Date of interview:

Score each section from 1 to 10: lowest=1; highest=10

Candidate number	Name	Motivation/ interest	Application of subject to Ministry of Health requirements	Relevance of field of study to current and future position	Personal and family issues	Other	Total score
1							
2							
3							
4							

Comments:

CUMULATIVE SCORING SHEET

Fellowship details:

Candidate number	Name	Interviewer 1 score	Interviewer 2 score	Interviewer 3 score	Interviewer 4 score	Interviewer 5 score	Total score
1							
2							
3							
4							

Comments:

Result:

Signature of interviewers:

14. Human resources management

There are two main aspects to human resources management: performance management and personnel management. *Performance management* deals with what is required of a health worker to perform the job. It involves collaboration between the human resources development focal unit and the health services delivery sector. This begins with with a clear description (job description) of what is the expected role and function of a health worker in a specific post. These job descriptions not only guide the health worker but also act as a guide to training institutions to ensure that education is linked to service delivery.

Once the health worker is in post, he or she requires continuous supportive supervision, which is provided by a senior professional who has a management or supervisory role. The essential characteristic of this supervision is that it is supportive and not punitive.

The supervisor, in addition to providing support to the health worker, must also also monitor performance to ensure that health workers are working to the required level, as defined in the job description. This can be undertaken by developing a regular staff appraisal process. Over and above that, however, supportive supervision provides an opportunity to identify where health workers are experiencing problems with particular aspects of their work, and to develop strategies to overcome the problems, such as use of mentoring, on-the-job training or formal continuing education programmes. This is particularly important in post-conflict conditions where health workers are being required to assume roles for which they have not been trained.

Supportive supervision can make an important contribution to health worker motivation. Health workers, particularly in rural areas, frequently work in isolation, lacking regular supervision, supplies and even salary. While attention is frequently given to such motivational factors as salary subsidies, performance incentives and housing, little attention is directed to ensuring that there is adequate funding to provide regular supervision.

Personnel management deals with the administrative aspects of employment and involves close collaboration with government civil service/public service commis-

sions in order to ensure that employment is in line with government regulations and conditions. Personnel management covers areas such as job classification (which is particularly important in establishing the different posts and their parity across the civil service), recruitment procedures, hiring, transfer and promotion.

There is a need to interface with the civil service authorities in relation to negotiating compensation, benefits and incentives, since health services must be covered on a 24-hour basis, unlike services overseen by other ministries, and also to clarify issues of discipline, grievance procedures and termination in relation to professional misconduct and poor performance. It is also the responsibility of presonnel managers to ensure that policy manuals are followed and updated regularly, and that labour laws are complied with. Another area in which personnel managers must be active is in maintaining relations with unions and professional associations.

New approaches to health service delivery, such as contracting, will have implications for personnel management.

Impact of conflict

As conflict invariably affects human resources, it generally results in the breakdown of human resources management systems. Job descriptions, if they existed, are lost or become irrelevant in a difficult and frequently dangerous situation, where health workers struggle to meet emergency needs while trying to ensure survival for themselves and their families.

Although nongovernmental organizations and aid agencies working in individual health facilities attempt to draft job descriptions, these generally reflect immediate needs in the particular health facilities concerned. Consequently, a plethora of job descriptions arises. Having these emergency job descriptions can nevertheless be useful to the de facto health authority when it starts to develop national job descriptions.

Once the national job descriptions are developed, it is essential that they are all communicated to every health worker. It is not uncommon that—because of a lack of management, transport or channels of communication—job descriptions are communicated to provincial or district health authorities but are not disseminated further. This results in an untenable health service management situation that inhibits implementation of the desired changes in health service delivery at peripheral level and negates any attempts to institute future systems of performance monitoring and motivation.

Providing continuous supportive supervision has a particularly high motivational impact in the post-conflict phase. Initial assessment visits raise the hopes and morale of health workers who have struggled to keep services going through prolonged periods of isolation and personal danger. Unless these visits are followed up with some visible form of action, hopes are dashed, there is a lowering of morale, and cynicism takes hold. Follow-up is also important in building up trust among health workers

that they will not be ignored or abandoned in the future, and ensures that they are kept informed of and involved in achieving change. Investment in a simple system of continuous supportive supervision is a cost-effective and essential strategy in ensuring that human resources management is an integral component of effective health services management.

Where government systems are affected or broken down by conflict, interim authorities quickly start work on re-establishing civil service regulations in relation to employment and personnel management. This is generally undertaken in a blanket fashion to cover all civil servants. However, some of the regulations may not fit with the imperatives of a health service system, which requires health workers to provide services 24 hours a day and seven days a week. It is important that de facto health authorities engage early on with civil service regulatory authorities to amend and develop regulations that reflect the realities of health service delivery.

There is frequently an absence of professional associations, because of disruption or total collapse over a prolonged period. While efforts are made to re-establish these associations, the associations are frequently not in a position—for some years—to interact with the ministry of health in relation to personnel matters such as terms and conditions of employment, professional capacity development or regulatory mechanisms.

Development of capacity in management is difficult, and the impact of interventions in post-conflict countries has not been evaluated.

Key issues

The key issue in human resources management is how to set the foundations for managing an effective human resources system. It is important to understand that the role of a focal human resources development unit is to work collaboratively with all departments, through coordinating and monitoring all the human resources functions that were previously scattered throughout different departments of the former ministry of health. The role includes developing and monitoring tools and strategies in relation to the workforce that can be incorporated within the health services management system. An essential aspect of the whole process is how to develop and strengthen management capacity to use the tools and implement the management strategies. Of particular concern is how to integrate and adapt modern participatory management methods into traditional hierarchical management systems, many of which are based on patronage.

What information is required?

In addressing the strengthening of human resources management systems, it is essential to gather information on how performance and personnel management issues were dealt with before the conflict. This information brings to light the traditional

management systems, which are frequently hierarchical patronage systems, which must be taken into account when developing new approaches to management in the post-conflict period.

What are the opportunities and benefits?

The establishment of a human resources development focal unit provides an opportunity to reappraise former management systems and their problems and constraints, and to put in place the foundations for a new and improved system of human resources management that is an integral part of overall health services management. It is also an opportunity to seek donor support to develop the necessary capacity.

TABLE 16   **Key steps in human resources management**

Key steps	Related questions
Assess the human resources management situation.	■ What is the current situation in regard to the main components of performance and personnel management? ■ What is the current system and style of management?
Assess the existing management capacity.	■ What is the current capacity in performance management within the de facto health authority? ■ Who undertakes, or is supposed to undertake, performance management ? ■ Have they been trained? ■ What is the current capacity in personnel management within the de facto health authority? ■ How does the de facto health authority work with the public/civil service authority? ■ How is personnel management structured outside the de facto health authority and within the regions/provinces/districts?
Identify requirements for development or strengthening of management capacity.	■ Who at each level of the health service has been trained or had experience in management? ■ Are they being used in a management or supervisory capacity? ■ What are the different levels of management for the new system? ■ Who requires training? In what aspects of management?
Clarify the interrelations between the human resources focal unit and other units of the de facto health authority in relation to management.	■ What de facto health authority units are concerned with: ☐ performance management? ☐ personnel management? ■ How can linkages and interrelations be clearly defined and strengthened?
Clarify interrelations between public/civil service authorities to ensure that civil service employment regulations are appropriate for the health services.	■ What authority defines civil service employment regulations? ■ How can linkages between the human resources development focal unit and the regulatory authority be clarified? ■ How can the human resources development focal unit negotiate with the regulatory authority to ensure that regulations are appropriately adjusted to cover health services employment?

TABLE 16   **Key steps in human resources management (cont.)**

Key steps	Related questions
Develop strategies for dissemination of job descriptions and personnel regulations.	■ Do national job descriptions exist? ■ Are they appropriate or have they been adapted for the newly defined health system? ■ How can each of the health workers at each level be provided with their job descriptions? ■ What strategies or who can be used to disseminate the job descriptions to health workers at the periphery and in insecure areas? ■ How can the human resources development focal unit ensure that the job descriptions have been disseminated?
Develop systems of supportive supervision.	■ How to promote supportive rather than punitive management systems? ■ What are the current constraints to implementing good management practice? ■ How can supportive supervisory systems be set in place? ■ What are the logistical requirements to provide supportive supervisory systems to staff in rural isolated health facilities? ■ How to use supervisory visits to identify capacity-building requirements?

Further reading

McMahon R, Barton E, Piot M (1992). *On being in charge: a guide to management in primary health care.* Geneva, World Health Organization.

This is an excellent "first read" on management. While it focuses primarily on the management of primary health care, it covers all the basic principles of management that are applicable to management in all areas of the health service. It is written in a simple, easy-to-read style that is useful for those for whom English is their second language. It has been translated into local languages in many countries.

Management Sciences for Health (2005). *Human resource management rapid assessment tool for public- and private-sector health organizations.* Cambridge, MA, Management Sciences for Health. (http://erc.msh.org/mainpage.cfm?file=7.40.htm&module=Toolkit&language=english, accessed 16 November 2005).

This covers many aspects of human resources management in a clear and easily readable format.

Egger D, Lipson D, Adams O (2000). *Achieving the right balance: the role of policy-making processes in managing human resources for health problems.* Geneva, World Health Organization (Issues in health services delivery. Discussion Paper No. 2).

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SUMMARY OF KEY POINTS

- Effective management of the workforce is a key factor in the effective implementation of any health system.

- Strengthening of management capacity should based on identified training needs.

- Care should be taken to ensure that modern management methods are carefully integrated into existing hierarchical patronage management systems.

- The de facto health authority must work closely with the civil service authorities to ensure that standard government employment regulations are adjusted to cover the employment of health workers, who have to provide cover 24 hours a day, seven days a week.

- Supervision should be supportive and not punitive.

- Attention should be given to establishing a system of supportive supervision at every level of the health service.

- The human resources development focal unit should work collaboratively with all units and departments of the de facto health authority to set the foundation for good management practice through development and monitoring of management tools and strategies, such as drawing up and disseminating job descriptions.

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Example

The following example demonstrates how a simple approach to developing clinical management capacity successfully improved patient care.

EXAMPLE 13

Re-establishing a nursing management system in Battambang Hospital, Cambodia

Battambang Provincial Hospital is located in the north-west of Cambodia. It was badly affected by the conflict. In the post-Khmer Rouge period (1979–1991) the hospital was rebuilt and renovated by the local people, and by 1992 was one of the best-functioning hospitals in the country.

The emergency strategy to train and upgrade nurses to become doctors had effectively destroyed any potential nursing management system. Nurses worked under the direct orders of doctors and medical assistants in the individual hospital units where they were posted. Because nurses' salaries were insufficient to support their families, nurses no longer provided nursing care and became "mini doctors", undertaking technical tasks from which they could generate income. Consequently, basic patient care fell to family members. Student nurses and midwives came to the hospital for practical experience but were largely unsupervised in the clinical setting.

In 1993, a project was undertaken by the Provincial Health Department with support from Médecins Sans Frontières to develop a nursing management structure for the hospital. A simple management structure was developed, although efforts to place the Chief Nurse at the same level as the Vice Directors were resisted by the medical staff.

FIGURE 5   **Nursing management structure, Battambang Hospital, Cambodia, 1993**
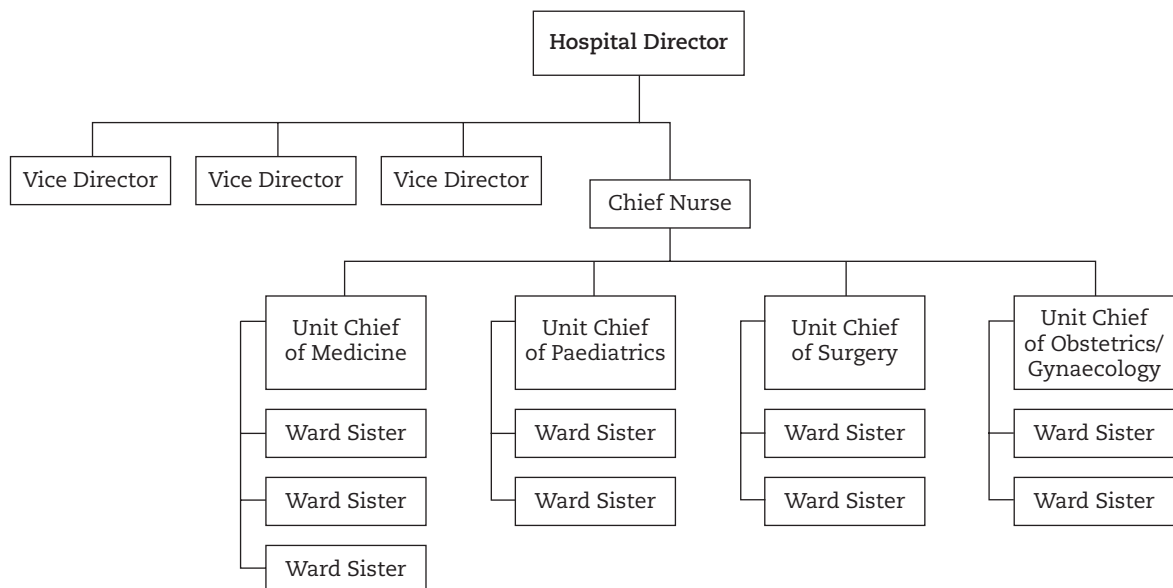
Within this structure, Ward Sisters assumed responsibility for ensuring hygiene on the wards, patient allocation, staff rosters to ensure 24-hour coverage, and guidance given to families of the patients in carrying out basic care both while in the hospital and in preparation for home care on discharge. Students' clinical practice was supervised, resulting in better liaison with the School of Nursing. Within six months, the nursing management project had demonstrated a significant and visible improvement in patient care.

A key factor in the success of the project was the presence of health professionals who had a memory of pre-conflict nursing care and standards. The senior midwife, who was appointed as Chief Nurse, had trained and practised pre-conflict, and the Hospital Director—although having upgraded to be a doctor—was a former state nurse, also trained pre-conflict.

It is of interest that the older doctors, who had trained pre-conflict, were generally supportive of the project, apart from objecting to the level of the Chief Nurse post. The young doctors, who had trained post-1979, and who had no model other than that of the "emergency approach", did not support the initiative.

Source: Abstracted from Sileap & Smith (1996).

15. Human resources financing

There are two main aspects of human resources financing, the first being recurrent costs, which are funded through an annual recurrent budget. Recurrent costs include: salaries and incentives, which consume a high proportion of the recurrent health budget (up to 80%); training costs; continuous supportive supervision costs for both human resources management and training, which are a low-cost—but largely underestimated—essential component contributing to human resources quality; and general running and administrative costs.

The second aspect of human resources financing comprises the capital or development costs for training institutions, including buildings, equipment, vehicles, etc. In a post-conflict environment, capital costs can be so high as to be prohibitive. It is imperative that capital costings are based on carefully developed and rationalized planning. Donors are more likely to consider funding plans that are well developed and rationally justified than ad hoc "wish lists". For example, donors are more likely to consider funding a plan for rebuilding or renovating key training institutions that is coherent with national health development planning than a plan to renovate all former basic training institutions in a country where there had previously been an overproduction of health workers.

Initial payment of salaries, which account for the highest proportion of the recurrent health budget, is usually covered by trust funds, a mechanism through which donors channel funding. The question of what future funding requirements will be, and how the future government can raise the required revenue, must be borne in mind when undertaking short-term planning. The issue of incentives as a motivational tool must be examined carefully. It is crucial, particularly in post-conflict reconstruction, not only to provide salaries but also to ensure appropriate investment in raising the quality of the workforce so that it is able to provide the requisite health care package. Lack of investment in strengthening capacity of health workers can result in poor health service delivery and poor return on overall investment in the health services.

Before a conflict, it is most likely that health services were provided by health staff trained in training institutions of the ministry of health and directly employed after basic training by the ministry of health. In the post-conflict period, particularly

after a prolonged conflict, the ministry of health has to come to terms with new approaches to health service delivery, in which staff may no longer have the lifelong security of government employment.

The international trend is for health training institutions, as tertiary level educational institutions, to be under the authority of the ministry of education, with the ministry of health as the consumer defining the product of training and the required standards of practice. In some cases, training institutions may in the future become independent institutions that may be funded from different sources or may cover costs by undertaking training contracts (e.g. from the ministry of health or other agencies) or may admit fee-paying students who meet the entry criteria.

Funding requirements for re-establishing training institutions in the post-conflict period can be high, depending upon how severely the institutions were affected. While this funding is generally provided by donors, the de facto health authority will ultimately have to confront the reality of how these institutions will be funded. Consequently, comprehensive assessment should be carried out, both of the individual institutions and the future training needs, to allow for rational planning of what the future requirements, both of number and type of training institutions, will be. This will contribute to realistic financial planning.

The costs of continuing education can also be high, and a national continuing education plan, developed based on detailed human resources data, can provide the basis for identifying the required funding and determining how it can be administered effectively.

Impact of conflict

Health workers, particularly those in rural areas, are affected by disrupted environments. Where there is a breakdown of government systems and prolonged conflict, these health workers may not receive salaries for months or even years. In the post-conflict period, as many nongovernmental organizations and donor agencies start to support the health services, they provide funds to pay salaries to health workers working in the government health facilities that they are supporting. It is not uncommon for a high proportion of health workers in a post-conflict country to be paid by nongovernmental organizations. While this enables health workers to continue working, the salaries paid by donors—although varying widely—are all significantly higher than government salaries. Consequently, as interim administrations are set up before the holding of the first elections, they experience great difficulty in attracting experienced managerial and technical staff back to work within the de facto health authorities.

There are increasing efforts by de facto health authorities to encourage donors to undertake a common approach to salary levels and salary supplementation. However, these efforts at times can be overridden, both by donors needing to achieve identified targets within the funding timeframe and by survival concerns of the individual health workers.

In countries such as Afghanistan, some donor agencies have seconded high-level national health professionals in senior management posts in the de facto health authority. The issue of retention of these senior personnel—and the ability of the de facto health authority to take over the payment of their salaries—has still to be resolved. While civil service commissions struggle to reduce workforce size and set higher and more realistic salary levels, particularly at senior level, the problem remains as to how a future elected government can raise sufficient income to support these salaries in an environment where systems to raise government revenues are in their infancy and the legal systems that underpin the raising of these revenues are not well established.

As previously outlined, the impact of conflict on human resources can be severe, particularly on health worker production, through destruction and damage to training institutions. As government systems break down, so do systems for government funding of training institutions. Where there are no alternative sources of external funding (e.g. local warlords or factions, or nongovernmental or international organizations), the institutions are forced to seek alternative methods of financing the training institution and paying the teachers. This invariably results in payment to enter a training school, entry to medicine having the highest cost. Typically there is no transparent system to use the funds received in a structured manner to cover salaries and running and maintenance costs of the training institute, consequently the facilities deteriorate.

As teachers and senior administrators leave, their place is taken by less-experienced or less-qualified staff who have no skills in planning and budgeting. As a result, there is a tendency in the post-conflict period for training institutes not to look beyond an expectation of funds to cover their staff salaries. There is no expectation of receiving funds to cover running costs, since the institute has not received them in the past.

Continuing education training is viewed by health workers as an opportunity to supplement meagre salaries. Where training is provided in an ad hoc and unplanned manner, it results in waste of limited funding, with no guarantee that the desired health workers receive the necessary training.

Lack of investment in restructuring and revision of basic health worker training to make it more appropriate leads to a continuance of production of health workers who are not appropriately trained for the new health service delivery system. This results in the costly production of inappropriate graduates who still require considerable amounts of costly continuing education in order to ensure that they can function appropriately in their role within the health system.

Key issues

The main issues in human resources financing revolve around: how to ensure that health workers can be employed and retained at standardized, realistic salary levels; how de facto health authorities can ensure the return and retention of experienced senior technical and managerial staff; and how to develop capacity to realistically

cost human resources development plans; and how to develop and defend annual human resources budgets, within an unstable environment where there is no confidence that funding will be available. From the perspective of human resources for health, these issues are also relevant throughout every section of the de facto health authority.

What information is required?

It is frequently difficult in a post-conflict environment to establish human resources costing beyond that of the salary levels. Initial information is required on what salary levels are being paid by the nongovernmental and international organizations to health workers, as well as what salary supplements and incentives are provided by nongovernmental organizations to staff in government health facilities. This information provides baseline information for de facto health authorities, embryonic public service commissions and donors in their efforts to come to a common accord on establishing minimal realistic salary levels, as well as initial staffing levels.

In planning for basic training, it is necessary to establish costings such as the cost of training a medical student per year or the cost of a student studying for another of the health professions. Given the probable state of the training institutions, it is likely that it will be virtually impossible to establish such costings in the early post-conflict period. In such cases, access to relevant information from other countries in the region can be used or adjusted to provide general estimates. Technical agencies such as WHO can assist in gaining access to this information.

Information is also required on the capital costs of rebuilding or renovating and equipping training institutes. This requires assessment of existing training facilities, and determining whether all or some of these facilities will continue to be used as training institutions. The next step is to draw up a ranking of the priorities for rehabilitation or renovation of all the identified institutions. For example, a choice might have to be made on whether to accord the highest priority to an auditorium in the main training institute in the capital city, or to dormitories for female students at training institutions in the regions, where there is high maternal mortality and a shortage of midwifery students because of a lack of accommodation at the training schools.

Once priorities are set, it is relatively straightforward to undertake costing of renovation and rebuilding, as well as provision of required teaching aids and equipment.

Less straightforward is the identification and costing of the strategic capacity building that is required to re-establish quality of teaching and educational management within the training institution.

Development of funding proposals for building, renovation and equipment alone—without inclusion of realistic capacity building for teaching staff—will make no impact on raising standards of health professional education.

It is strongly recommended that de facto health authorities seek assistance from professional proposal-writers to develop appropriate, strategic and realistic funding proposals.

Continuing education in the post-conflict period is generally funded by donor agencies and nongovernmental organizations. It is important that costs for continuing education are standardized and initially pitched at a realistic level that is in line with what the de facto health authority is likely to be able to sustain financially in the future. This requires the de facto health authority to gather information on costing from all the different agencies, and to take a strong stand in subsequent negotiation with these agencies to standardize training costs.

Where possible, it is necessary to access the national workforce and training plans to adequately assess the requisite funding requirements. Where these plans do not exist, it is important that de facto health authorities seek support to develop basic workforce and capacity building plans as soon as possible, to act as a guide for development of more realistic human resources financing plans.

What are the opportunities and benefits?

The support by donors in the post-conflict period provides an opportunity to review and revise budgetary processes, and to develop capacity in de facto health authorities to analyse needs and draw up both recurrent and development budgets linked to national plans.

The post-conflict period offers a unique opportunity to obtain sufficient funding to redevelop health personnel education systems that include cost-effective approaches to providing high-quality basic and continuing education that is closely linked to the needs of the health service.

TABLE 17   **Key steps in human resources financing**

Key steps	Related questions
Assess the existing capacity in budgeting and financing in the de facto health authority.	■ Are there existing staff who have had experience and training in budget and finance?
Identify how capacity can be developed and strengthened.	■ What are the training needs in the de facto health authority in relation to budget and finance? ■ Where can assistance be sought to provide training (e.g. ministry of finance or donors)? ■ How can training be made relevant to the reality of the task in hand? ■ How can training be implemented?
Apply basic principles of budgeting and finance to cost development plans.	■ How can basic principles be applied to the real situation? ■ Who can provide supportive supervision to the process? ■ How to present and justify the proposed and prioritized human resources development plans?
Develop and justify the annual budgets.	■ How to link the budgeting process to national workforce and training plans? ■ How to develop an annual budget that adequately provides for operating costs in addition to salaries? ■ Who is responsible for developing the budgets? ■ Who can provide support to the process? ■ How to present and justify the annual human resources budget?
Strengthen capacity to manage budgets.	■ How is funding disbursed? ■ What is the current capacity to manage budgets? ■ What capacity development is required to manage allocated budgets? ■ What supportive supervision is required to implement the budgetary processes? ■ Who should be involved?

Further reading

Green A (1999). *An introduction to health planning in developing countries,* 2nd ed. Oxford, Oxford University Press.

> *This is a clear and concise text that covers all the essential elements of planning. It is particularly useful to read the following chapters: Chapter 5—Financing health care; Chapter 9—Costs and costing; Chapter 11—Resource-allocation and budgeting.*

WHO (n.d.). *Analysing disrupted health sectors: a toolkit. Geneva, World Health Organization*   (http://www.who.int/hac/techguidance/tools/disrupted_sectors/en/index.html, accessed 16 November 2005).

SUMMARY OF KEY POINTS

- Salaries account for up to 80% of the recurrent budget.

- It is important to ensure that both the capital and recurrent costs for human resources development are clearly identified in the post-conflict period.

- There is a great need to develop capacity at every level of health services in the basic principles of development and management of budgets.

- Identification of required budgets must be based on clearly demonstrated needs and costed realistically. These budgets must be linked to human resources development policies and plans.

- Budgets must be justified and not just consist of "wish lists".

- Budgets must be realistic, taking account of what can be afforded and sustained, and what can be expected from donors: the "financial envelope".

- The post-conflict period is a time of opportunity to obtain funding for well-planned and strategic approaches to redevelopment of human resources capacity.

Example

The following example demonstrates the problems and issues of ensuring adequate funding for human resources development within the context of implementing a national health budget during the early post-conflict period in one country.

EXAMPLE 14

Development of the first health budgets in Cambodia

Following the first elections in Cambodia in 1993 and the installation of the new government, work began on developing the first national budget. This work had to be completed in a very short time.

The Ministry of Finance developed guidance on estimated recurrent costs (e.g. cost of electricity per day, and cost of stationery per week). It rapidly became clear that while these estimated costs were reasonable for a ministry that functioned on the basis of a five-day week, they were not realistic for the running of a hospital where electricity (via generators) could well be required to deal with emergency surgery for situations such as a weekend road accident in which there were many casualties.

Supported by WHO advisers, the Ministry of Health entered into negotiations with the Ministry of Finance. As a result of those negotiations, and anxious to involve provincial health staff and heads of training institutes, the Ministry of Health launched a series of workshops. These workshops were conducted regionally to bring together the relevant heads of provincial health services and training institutions, to introduce the budgetary process, and to work with the heads of provincial health services and training institutions to develop provisional budgets for their services for the following year.

In many cases, there was disbelief that there would be any possibility of receiving any funding other than salaries. This attitude was reflected in either the gross over-estimation or underestimation of some costs. The budgets were rationalized within the Ministry of Health, where staff had also to undertake research into areas such as minimum costing of food for hospital patients and essential drugs.

Because the Ministry of Health had worked closely with the Ministry of Finance, the Ministry of Finance was aware of the amount of research the Ministry of Health had undertaken to establish realistic minimum costing. The Ministry of Health was able to successfully justify its budget. For the first time, almost 75% of the budget was allocated to operational costs.

The allocation of funding for operational costs greatly raised morale in the training institutions. For example, the staff of one regional training school was so delighted that they could now afford to repair their duplicating machine and buy ink and paper to finally be able to reproduce lecture notes, that they began to tackle other issues. Noting that the small amount of funding allocated for sanitation was insufficient to build much-needed latrines, the staff mobilized the students and the local community to hold a fund-raising event to augment the funds to purchase building materials. The latrines were built by volunteers from among the staff, students and local community.

The funding for training was paid directly to the institutions in the first year. In the second year, funding was channelled via the health department of the province in which the school was located. This resulted in only a proportion of the funding for the regional training schools actually reaching the schools, as the funding was channelled towards service delivery. It was some time before the situation could be reversed and funding could again go directly to the training institutions.

16. Interagency coordination

Interagency coordination is crucial for all aspects of post-conflict reconstruction of health services. It is particularly important in the area of human resources development, since most aid agencies become involved in capacity-building activities of some sort, and have costs for training included in their budgets even before the human resources development situation is assessed and training needs are determined.

The issue of coordination is one of the most difficult for embryonic de facto health authorities to tackle. The de facto health authority is faced with a bewildering array of agencies, including the multilateral agencies such as the United Nations agencies, the development banks such as the World Bank, Asian Development Bank and the African Development Bank, and bilateral aid (direct donor assistance from governments of individual countries). These agencies provide the major funding (frequently channeled through trust funds) for reconstruction and re-establishment of government. They also provide high-level technical assistance for the redevelopment of de facto health authorities.

Nongovernmental organizations—both international and local—deal with direct delivery of services in particular areas. Some nongovernmental organizations are self-funding. However, there is an increasing trend for nongovernmental organizations to obtain funding by implementing contracts funded by the multilateral and bilateral agencies.

At a time when members of the de facto health authority themselves may still be suffering from the effects of conflict and may have limited second-language ability, it is difficult for them to face and coordinate a plethora of aid organizations that enthusiastically and persuasively present numerous proposals and project documents, all written in a second language. Many agencies have already decided where they wish to work—which is generally in easily accessible, well-served areas—while there is a need to provide input in isolated areas that are difficult to reach. It is particularly difficult for the de facto health authority to coordinate and direct this input at a time when there is little reliable information on which to base plans.

Impact of conflict

As government systems are disrupted or break down, nongovernmental organizations and donor agencies work in isolation from government and frequently from each other. Agreement to implement projects is usually made with the most powerful authority figure, such as the local governor, warlord or factional leader. In the absence of a single national authority to set standards, aid—including health worker training—is consequently fragmented and, while meeting the needs of a particular area, results in a wide range of unstandardized levels of knowledge and competence among health workers throughout the country.

Where this has occurred for quite a number of years, donors become accustomed to getting agreement to all their projects from the highest-level political figure who will make an arbitrary decision. While, in the main, nongovernmental organizations and donor agencies collaborate with the de facto health authority's coordination strategies, some donors whose projects may not be in line with the de facto health authority's policies and plans may bypass the de facto health authority and approach the highest political level directly, effectively bypassing the de facto health authority's development strategies.

There is a great need for politicians to refer to de facto health authorities for advice on whether proposals are suitable and, if not, to suggest alternative inputs.

In setting up coordination mechanisms, a common strategy is to set up a committee that is chaired by a very senior member of the de facto health authority, with membership comprising senior officials of the de facto health authority as well as representatives of the major donor agencies (some of whom may be involved in health policy development) and some representation from the nongovernmental organization community. Specific technical working groups may also be set up, composed of de facto health authority specialists in the relevant field, as well as technical specialists from donor agencies and nongovernmental organizations. It is important to ensure that there are very clear guidelines for the functioning of these technical working groups, which indicate what output is required by the de facto health authority from the group, to support the de facto health authority's policy and planning processes. In the absence of a clear mandate, these working groups frequently focus only on exchange of information and discussion.

Types of coordination mechanisms

There are a number of coordination mechanisms. Nongovernmental organizations frequently already have a mechanism for bringing the majority of nongovernmental and international organizations together. Where such a mechanism exists, it may be useful to make links between this forum and the de facto health authority as it begins to establish a coordination mechanism.

While everyone wants to be involved in the coordination, this is impossible, particularly when there are a large number of agencies involved in health. In some post-conflict countries, there have been known to be more than 60 agencies. It is important to identify mechanisms whereby representatives of different types of donors can interact with the donor coordination mechanisms of the de facto health authority. Bilateral and multilateral donors may have direct representation on the de facto health authority coordination commitee or forum. Nongovernmental organizations can have an elected representative on the coordination committee or forum who reports back to the nongovernmental organization forum.

Since the majority of donors support capacity building, it is essential that the head of the human resources development focal unit in the de facto health authority is represented in the health authority coordination committee or forum.

Where de facto health authorities set up specific technical working groups, with nongovernmental organization representation, the technical representatives of nongovernmental organizations can also report back to the nongovernmental organization forum as well as to the health authority coordination committee or forum.

The United Nations specialist health agencies generally play a major part in supporting the de facto health authorities to develop capacity to ensure the sustainability of these coordination mechanisms.

What information is required?

It is necessary to gather as much information as possible on both past and current activities of nongovernmental organizations and donor agencies that have an impact on human resources development. This information can be obtained from the donor organizations or through the international relations focal unit of the de facto health authority. The information from the international relations focal unit may reflect only the agreements made directly with the de facto health authority; it may not include information on projects agreed by other sectors and individuals. It may therefore be necessary to require all agencies working in the health sector to register their activities with the de facto health authority to ensure that their activities are taken into account within the overall planning processes of the de facto health authority.

Detailed information on inputs of nongovernmental organizations and donors is most useful if it is contained in a database held within international relations departments. The information can contribute to a mapping process that highlights which agency is working where, what funding and what expertise is provided, at which level, and what activities are undertaken (see Box 14).

**BOX 14   Examples of information required for
human resources coordination**

The location where an agency is working or wishes to work

The technical areas that the agency wishes to address

Employment of health staff, and the salary and levels of incentives proposed

Level of technical expertise provided

Proposed capacity-building plans

This information permits the de facto health authority to undertake a mapping process that supports coordination of donor input to human resources development, avoiding duplication and highlighting areas of greatest unmet need. It also allows the de facto health authority, nongovernmental organizations and donor agencies to coordinate their efforts, thereby contributing to a strategic approach to implementation of national plans for human resources development.

What are the opportunities and benefits?

A process of donor coordination provides the opportunity to maximize the input of donors to develop and implement policies and strategic plans, and to set professional standards. Strong coordination processes contribute to the provision of equitable coverage and to the reduction of waste of scarce funding through unnecessary duplication of effort.

Additional valuable opportunities can occur in human resources development, particularly in the field of training, where de facto health authorities are faced with redeveloping not only physical facilities but also a degraded educational system. Twinning with external universities provides a valuable tool for strategic redevelopment of educational standards that will eventually receive international recognition. However, strong coordination is required where a number of external training institutions wish to provide input to a particular training institution.

TABLE 18   **Key steps in donor coordination for human resources development**

Key steps	Related questions
Identify how human resources development coordination can be integrated into overall donor coordination mechanisms of the de facto health authority.	■ What are the donor coordination mechanisms of the de facto health authority? ■ How can human resources development be specifically addressed within the framework of this coordination mechanism?
Set up a human resources development technical working group or committee to address coordination of activities related to human resources.	■ Who is the most senior official in the de facto health authority, who is working in human resources development and who can chair this working group? ■ Who should be involved as members of the group? Should multilateral organizations be involved? Should bilateral organizations be involved? What about international organizations or nongovernmental organizations? ■ How large should the group be to ensure optimum working? ■ How to ensure that members of the working group bring together the required professional skills in human resources development?
Establish clear terms of reference for the human resources development working group.	■ What output does the de facto health authority require from the working group to assist them in relation to addressing human resources development within the overall process of redevelopment of the health services? ■ What are the timeframes for the work of the group?
Establish the mechanisms for the human resources development working group to interface with the main donor coordination committee or forum of the de facto health authority.	■ How will the working group feed back findings and technical recommendations to the main donor coordination committee or forum of the de facto health authority? ■ How will this be communicated to the nongovernmental and international organizations and other donor agencies?

Further reading

Lanjouw S, Macrae J, Zwi A (1999). Rehabilitating health services in Cambodia: the challenge of co-ordination in chronic political emergencies. *Health Policy and Planning,* 14 (3):229-242.

Pavignani E, Durao JR (1997). Aid, change and second thoughts: co-ordinating external resources to the health sector in Mozambique. Part of a four country research project on national coordination of external resources. London, Department for International Development/London School of Hygiene and Tropical Medicine Policy Unit.

Walt G et al. (1999). Health sector development: from aid coordination to resource management. *Health Policy and Planning;* 14:207–218.

SUMMARY OF KEY POINTS

- Interagency coordination is essential to ensure an appropriate approach to human resources development (United Nations agencies, nongovernmental organizations, development banks, universities, consultants, etc.).

- It is essential to establish donor coordination mechanisms as soon as possible.

- Politicians must be made aware of the coordination mechanisms and encouraged to refer to and use these mechanisms.

- Clear terms of reference for the donor coordination forum and its related technical working groups prevent them from becoming "talking shops" and ensure that they contribute constructively to the rehabilitation process.

- Membership of the technical working groups should be related to specific technical expertise in the relevant field.

- The de facto health authority must be specific on the outputs required of each working group and ensure representation of de facto health authority staff in the technical subcommittees and working groups.

- Mechanisms for interfacing with and providing feedback to the donor coordination forum must be clearly defined.

Examples

The following examples demonstrate the approaches of two countries to the issue of donor coordination in human resources. The differences reflect the changing approach of donors and the increased recognition of the importance of human resources issues over a 10-year period.

EXAMPLE 15

Establishing donor coordination mechanisms in Cambodia

The donor coordination mechanism set up in 1992 consisted of a several committees.

A COORDINATION COMMITTEE (COCOM)

This committee was chaired by either the Minister of Health or the Secretary of State or the most available senior Ministry of Health official.

Representation on the COCOM consisted of:

- United Nations specialist agencies (WHO, United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), etc.)
- other multilateral agencies (e.g. the development banks)
- bilateral donors (e.g. France, Germany, Japan, United States)
- nongovernmental organizations: two or three elected representatives of the nongovernmental organization (NGO) forum, responsible for reporting back on the proceedings of the COCOM to the monthly meeting of the NGO forum.

TECHNICAL SUBCOMMITTEES

The technical subcommittees were appointed by the COCOM and addressed specific technical areas such as maternal and child health, mental health, blood safety, human resources development, prevention of blindness, etc. Membership consisted of:

- Director or representative of the relevant Ministry of Health department (Chairperson)
- other local technical experts
- relevant experts from United Nations specialist technical agencies
- two NGO technical experts who were appointed by the NGO forum.

ISSUES IN RELATION TO THE HUMAN RESOURCES DEVELOPMENT TECHNICAL SUBCOMMITTEE

Lack of appropriate staff in the Ministry of Health's Human Resources Development Department and the pressures of work on the existing staff led to lack of regular representation and leadership by Ministry of Health staff, which resulted in the subcommittee's being donor driven.

As the Human Resources Development Department became better organized and staffed, it took over the role undertaken by the Human Resources Development Technical Subcommittee, rendering the subcommittee redundant.

EXAMPLE 16

Establishing donor coordination mechanisms in Afghanistan

A National Technical Coordination Committee (NTCC) was established within the interim Ministry of Health at the beginning of 2002. The committee was attended by the main stakeholders in health, covering multilateral and bilateral donors as well as other international and nongovernmental organizations.

Following on from the establishment of the NTCC, a series of technical taskforces were set up to address a range of technical areas.

The Human Resources Taskforce is the main technical body to make decisions on human resources issues and strategies, and to make recommendations to the Ministry of Health Executive Board. Membership of the taskforce consists of:

- Director or representative of the Human Resources Department (Chairperson)
- Director of Ministry of Health main training institute
- representatives of WHO
- representatives of nongovernmental organizations involved in overall human resources development issues
- representatives of nongovernmental organizations involved in training initiatives.

A number of working groups have been set up to address particular human resources issues. These include:

- Institute of Health Sciences Working Group (addresses the issues of the main Ministry of Health training institutes, which train nursing/midwifery and allied health workers)
- Pre-service Medical Education Working Group
- Training Management Working Group
- Human Resources Database Working Group
- Clinical and Technical Capacity-Building Working Group.

There are representatives of the Human Resources Taskforce on all the working groups, who report back on progress and outcomes of these working groups to the Human Resources Taskforce on a regular basis. Membership of the working groups consists of:

- relevant Ministry of Health technical expert (Chairperson)

- other relevant Ministry of Health technical staff

- relevant representatives of the United Nations, its specialized agencies, other international, intergovernmental and nongovernmental organizations.

Recommendations and outputs from the working groups are considered by the Taskforce and, if agreed upon, these are presented to the Ministry of Health Executive Board for official adoption by the Ministry of Health.

A Testing and Certification Board has been established to address the issue of the large numbers of health workers trained on an ad hoc basis during more than 23 years of conflict by a variety of donors, nongovernmental organizations and international organizations, and also to establish the level of competence for which they can be certified. The Board reports directly to the Human Resources Taskforce. Membership of the Board consists of:

- Human Resources Director (Chairperson)

- a representative of the Ministry of Health Training Institution

- representatives of the United Nations specialized agencies

- representatives of international and nongovernmental organizations involved in training.

The Board has appointed a number of working groups:

- Community Health Worker Testing and Certification Working Group

- Nursing, Midwifery Testing and Certification Working Group

- Allied Health Worker Testing and Certification Working Group

- Medical Testing and Certification Working Group.

The Board's working groups, composed of Ministry of Health and nongovernmental organization specialists in training of the various categories of health workers, have two tasks. The first is to establish what the minimum expected competences are based on the Basic Package of Health Services. The second is to establish a process for determining equivalencies or the need for testing in order to establish the level of competence for certification.

Checklist
Getting off to a quick start in human resources development

In conclusion, identifying effective approaches for the development of human resources is complex and time-consuming. It presents many challenges, particularly in an environment where there have been large population movements, security is poor, there has been degradation of training systems, and there is ad hoc input to human resources development by a large number of agencies both inside and outside the country. In the initial stages, it is important to identify the key questions to be addressed in order to ensure the building of a strong foundation for human resources development.

This checklist sets out those questions, and suggests ways of finding the necessary information.

ASSESSMENT OF CURRENT SITUATION

Identification of how human resources development is approached within the de facto health authority

☐ How well are the essential elements of human resources development understood and addressed?

☐ Is there a human resources development department? Where is it placed? What is its level of importance? What is its capacity?

☐ What other sectors and institutions are involved, e.g. education, public service commissions, institutes? What is the working relationship between the sectors, institutions and the de facto health authority?

Identification of the main players in human resources development

☐ Who are the main external agencies involved in human resources development (e.g. multilateral or bilateral agencies, international or nongovernmental organizations)?

☐ What components of human resources development do they address?

☐ How is input coordinated and output accredited?

Clarification of existing knowledge of the human resources development implications of changes in approaches to health sector development

☐ What is the existing understanding of the evolution of new approaches to health services delivery that are being proposed by external donors?

☐ What are the implications of these approaches for human resources planning, production, management and financing?

Identification of existing knowledge on the health workforce in relation to the different categories of health workers, their training, certification, numbers, location, age and sex

☐ What are the potential sources of health workers? How can they be accredited in relation to the health worker categories identified by the de facto health authority?

☐ What are the existing sources of data on health workers? How reliable is the information?

☐ What are the opportunities for human resources development data collection or health worker registration to be linked to or incorporated into overall data collection on the health services?

☐ How can this process be linked to identification of over-supply or under-supply of particular categories of health workers?

☐ How can the data be used to achieve change in health worker production?

☐ Is a health worker certification process required in-country? Is such a certification process required out of the country (e.g. in refugee camps)?

Review of human resources development policy and planning capacity

☐ Are there existing human resources development policies and plans that are appropriate for the future role of human resources development within the reformed approaches to health sector development?

☐ What is the existing capacity for developing human resources policies and plans? What support is required?

Review of health professional education systems

☐ What is the status of informal health professional training systems and training institutions?

☐ What is the existing situation of teaching capacity in the training institutions?

☐ Have any systems for ensuring health professional equivalencies been developed or do they exist?

☐ Who are the main players in health personnel education, and what is the extent of their input?

Potential sources of funding for human resources

☐ Who are the main actors in human resources?

☐ What is the level of their support?

☐ What interest is there in funding strategic human resources plans?

HOW TO BEGIN TO OBTAIN THIS INFORMATION

☐ Meet with relevant de facto health authority human resources focal points (this will probably be a training office or department) and the external relations/international relations office. They may hold some information on the input of donor and nongovernmental organization projects.

☐ Meet with United Nations specialist agencies, such as WHO, UNICEF, UNFPA and UNHCR. They may have information on the agencies working in-country and their focus.

☐ Nongovernmental organizations frequently have a specific forum or representative agency that holds information in databases on all nongovernmental organizations and their activities both in-country and also in refugee camps in neighbouring countries. In the absence of such a forum, contact the nongovernmental organizations that have been working the longest both in-country and cross-border.

☐ Members of former governments-in-exile may be able to provide information on human resources activities, including levels and certification of health workers trained outside the country.

☐ Organize a meeting with all relevant representatives of agencies involved in human resources activities. It is essential that this meeting is organized in collaboration with relevant senior members of the de facto health authority.

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Questionnaire: Assessing and expanding the guidance

How do you rate the guidance in terms of:
[choose one]

usefulness   ☐ very useful
                 ☐ useful
                 ☐ a little useful
                 ☐ not useful

interest   ☐ very interesting
                 ☐ interesting
                 ☐ a little interesting
                 ☐ not interesting

Which section did you find the most interesting, and why?

Which section did you find the least interesting, and why?

Have you been able to use any of the examples and tools? If so, which?

Which sections do you consider need expanding?

Do you have any evidence or experience from other countries that could be
included in an expanded version of the guidance?
☐ Yes   ☐ No
[If yes, please fill in the next section of this questionnaire.]

FURTHER EXAMPLES OR LESSONS LEARNT

Your name:

Your background in human resources (e.g. nongovernmental organization, international, multilateral or bilateral organization, consultant, etc.)

Post-conflict countries in which you have worked:

Which country or countries are your examples/lessons learnt taken from?

Which particular aspects of human resources development are addressed in your examples/lessons learnt?

☐ Human resources policy

☐ Human resources planning

☐ Human resources production and procurement

☐ Human resources management

☐ Human resources financing

Detailed description of example/lessons learnt (please provide specific information such as dates and places, and cover both positive and negative aspects):

Please send the completed questionnaire to: Health Action in Crises (Fax: +41 22 791 4844; Email: crises@who.int) or Human Resources for Health (Fax: +41 22 791 4747; Email: hrh@who.int), World Health Organization, 1211 Geneva 27, Switzerland.