

HIV/AIDS, EQUITY AND HEALTH SECTOR PERSONNEL IN SOUTHERN AFRICA

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Executive Summary

This paper is one of a series of papers commissioned by the Regional Network for Equity in Health in southern Africa (EQUINET) for a programme of work with Oxfam GB on 'Equity issues in HIV/AIDS, Health Sector Responses and Treatment Access in Southern Africa'. This paper discusses the implications for health personnel of the HIV epidemic, and health sector responses to it, in southern Africa, using Malawi as a case study. Published and grey literature has been consulted to assess the situation and its implications for equity.

Key findings

HIV/AIDS impacts on all organisations by increasing absenteeism and attrition. Worker losses and replacement needs add to direct and indirect organisational costs. HIV impedes the efforts of educational systems to produce different cadres.

In the health sector, HIV/AIDS has additional impacts. It increases the demand for care, the level and complexity of work and the risk of infection, whilst also placing a strain on resources. These burdens exacerbate problems of sickness, absenteeism and workload, increasing losses of health workers. Health workers lose status in their patients' eyes by their inability to treat the disease. The consequent stress and fear lowers health worker morale and adds to factors pushing them out of low income countries and into the international labour market.

International migration of workers undermines worker campaigns in both host and recipient countries to improve working conditions. In countries where risk of infection is high, occupational health and compensation programmes are weakest. While *actual* risk of infection defines the level of illness and death, it is the *perceived* risk of infection that determines voluntary departures and healthcare provider behaviour. Attrition and consequent understaffing impacts most on remote primary health facilities. In this way HIV can exacerbate poorer access to health services in these areas.

Government capacity to manage attrition and understaffing is limited by a lack of good information on human resources for health (HRH) and a lack of suitably qualified staff to interpret and respond to information. Experienced clinical and managerial staff can most easily find work in the expanding non government organization (NGO) sector or outside the country. Staff loss peaking in the 30–44 year age group is particularly damaging, increasing reliance on younger workers who in turn are more vulnerable to AIDS.

In contrast, new resources for HIV/AIDS create demand for HRH inputs, and in particular for staff with experience in managing or delivering health services. Hence active scaling up of the health sector's response to the AIDS epidemic could place further stress on public sector employment. Increasingly, it is the availability of staff, not funding, which is the factor limiting expansion of service delivery. There is a real danger that the introduction of new services can only be at the cost of redeploying staff from existing services.

Follow up issues

The impact of HIV/AIDS on human resources for health raises issues that need to be considered by those planning healthcare responses to HIV/AIDS, particularly if policies of equity in access to healthcare are to be protected:

- Is the relative political priority of introducing new services for HIV affecting the standards and coverage of existing services? And if so, who is losing services?

- Is the availability of new sources of funding allowing NGOs to determine what services are delivered to which groups and where? If so, what are the equity implications?
- Are providers discriminating against certain groups? Is this affecting unmet need for HIV services and demand for services?
- Is attrition intensified by poor infection prevention or the perception of it?
- To what extent is the health system contributing to HIV transmission and for whom?
- To what extent are current debates about treatment issues exacerbating the risks of transmission by the health services by diverting resources and political attention from routine activities such as infection prevention?
- Could the targeting of Highly Active Antiretroviral Therapy (HAART) to healthcare workers be justified and if so what would the implications of delivering them be for wider health service delivery?

Policy responses

A range of policy responses is identified to respond to the human resources for health crisis in the longer and shorter term.

1. Making better use of the staff currently available through:

- redeployment to reflect utilisation patterns and fill priority posts
- upgrading existing staff through sandwich and distance learning courses
- speeding up public service placement and promotion procedures
- effective performance management strategies.

2. Producing more staff through:

- increasing training capacity
- regrading jobs and entry requirements downwards for faster production
- creation of new cadres appropriate to actual working situations.

3. Recruiting and retaining more staff through:

- streamlining public service appointment procedures
- investigating reasons for attrition and developing targeted incentives
- improving pay and terms and conditions
- developing 'return to work' packages targeted at those who have left the sector
- flexible working schemes for positive living for those who are HIV positive
- occupational health schemes and antiretroviral therapy (ART) for health workers.

4. Protecting the institution from the negative effects of attrition through:

- strengthening institutional memory and knowledge management
- improved succession planning
- monitoring and predicting attrition
- encouraging staff to know and reveal their status
- skills development and sharing through an emphasis on team working.

Development partners need to develop clear long-term strategies for support to human resources (HR) in southern Africa, through commitments that are large scale and long term. It is accepted that the impact of HIV/AIDS is devastating and will continue for decades – the response must be on a similar scale and timeframe.

Many of the issues concerning equity raised in this paper involve a complex balancing of rights and priorities, including the rights of individual health workers to career development; the rural poor to basic health services and all with HIV to the full continuum of care and support. Negotiating where priorities should lie must be the result of open policy debate involving all concerned parties.

1. Introduction

This paper is one of a series of papers commissioned by the Regional Network for Equity in Health in Southern Africa (EQUINET) for a programme of work with Oxfam GB on 'Equity issues in HIV/AIDS, Health Sector Responses and Treatment Access in Southern Africa'. This programme of work seeks to inform the policy debates and advocacy that have grown around health sector responses to HIV/AIDS in the region. Papers include a number of country case studies plus papers on cross-cutting issues, such as nutrition and health personnel.

This paper discusses the implications for health personnel of the HIV epidemic, and health sector responses to it, in southern Africa, using Malawi as a case study. Published and grey literature has been consulted to assess the situation and its implications for equity. Where data is not available at present, suggestions are made on the information needed and its collection. A more detailed briefing on case study data collection on HR issues has also been produced from this work.

The first part of the paper covers the context of health sector organisations in southern Africa. It discusses the global labour market for health workers; the impacts that the HIV epidemic is having on health organisations; and the impacts of the epidemic on individuals and their life expectations and career choices. It raises the areas requiring policy responses.

The second part of the paper explores these issues further in Malawi. A very brief introduction is given to the context of the HIV epidemic and the health sector in Malawi. Further information on Malawi is presented in a separate country paper in the same programme of work by Kemp et al (2003).¹ The paper then reviews the HRH situation in Malawi in relation to the impacts of HIV/AIDS. It explores the difficulties in monitoring and managing the deployment of HRH, and the risks of infection to the users and workers in Malawi's health services. The paper discusses the equity implications of the situation in Malawi, the policy responses initiated and required and how these could best be supported. A concluding section summarises the issues and conclusions in relation to HIV/AIDS and HRH in equitable health sector responses for southern African countries.

2. A global labour market for healthcare workers

The increasing demand for healthcare (and for trained workers to provide it) in the developed world has created a growth in career options for qualified health personnel. With the demographic transition and technological advances, the demand for health staff to care for the growing aging populations of the richer countries is increasing. Recruitment from abroad to fill shortfalls in the labour supply of developed countries has turned many developing countries into exporters of health staff and created a global labour market for health workers.²

The impacts of this phenomenon on the economy and health systems of developing countries are numerous. A more detailed argument on the costs and benefits are given in a separate EQUINET discussion paper³ on maldistribution and the brain drain among health workers in southern Africa and are not repeated here. Padrath et al (2003) give evidence of savings to importing countries in recruiting trained personnel, and of benefits to exporting countries in terms of remittance revenue. However, they note significant costs in lost personnel, training investments and skills to exporting country health systems. Pull factors alone are unlikely to lead to migration; push factors are required. These could come from outside the health system (exogenous) or inside the health system (endogenous).

Overseas recruitment of health workers has negative equity implications for workers in both the host and exporting countries. Shortages of nursing staff are often related to relatively poorer pay and conditions in the exporting countries. In the importing countries, immigrant workers are more likely to accept lower wages and longer working hours and thus undercut the demands of local workers. The resulting shortage of healthcare workers and loss of more highly trained and experienced workers in exporting countries weakens the bargaining power of those left behind over their working conditions.⁴ The global labour market undermines health worker campaigns for better pay and conditions in both sending and receiving countries.

This international labour migration now means that no country's HRH can be viewed in isolation. Any interventions have to take account of the wider push and pull factors that determine the movement of health workers between organisations and countries.

3. The impacts of HIV/AIDS on health systems and health workers in southern Africa

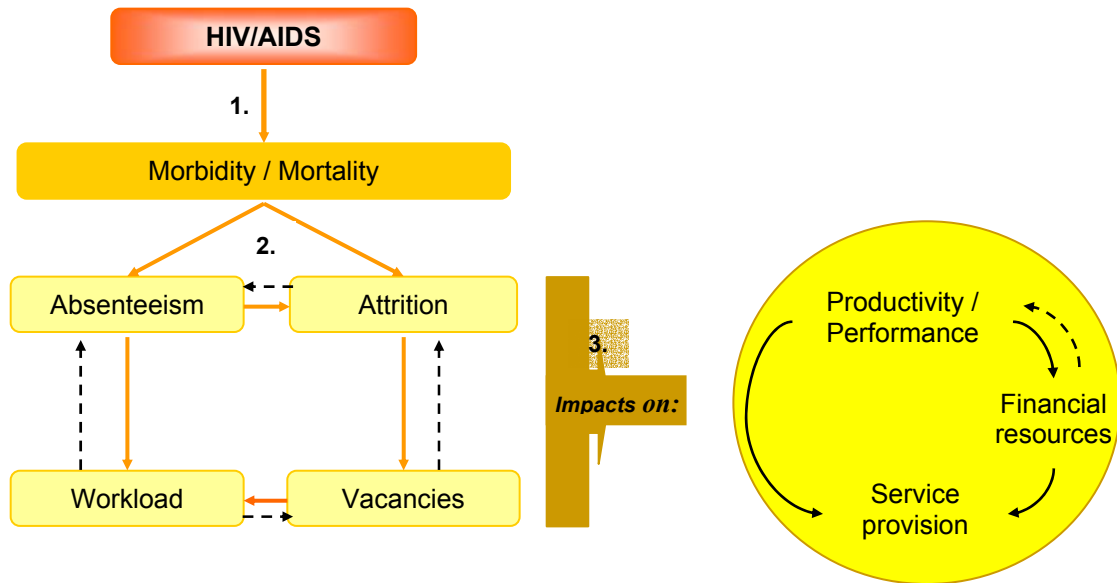
3.1 Impacts on health systems

Acute staffing shortages have become the 'killer risk' in much development work in southern Africa, particularly in key social sectors. Previous development gains and current development efforts are endangered by the impact of HIV on the staffing and productivity of organisations. These organisational impacts are summarised in Figure 1.

HIV impacts on organisations in a number of ways:

- Staff become ill and die. If this happens quickly, it results in *sudden vacancies* with little time to plan recruitment; if slowly, staff may be on *long-term indefinite sick leave* with no indication of when or whether they may return. Both scenarios present difficulties for HR planning and management.^{5,6}
- Care for additional dependents and the sick at home increases the pressures on workers and may result in *reduced availability for employment*. Where economic pressures are great, workers may take on more than one job, reducing the time and energy they can give to each.
- Social obligations, such as attendance at funerals, lead to *short-term absence from work*.^{6,7}
- As Cohen⁵ notes, HIV/AIDS reduces the stock of trained workers and the capacity to maintain the flow. The impact on educational and training institutions *reduces their capacity to train future workers*. Decreasing numbers of school leavers with adequate qualifications are produced, reducing potential trainees, due to shortages of teachers and declining educational standards. Staff losses and difficulties with staff replacement reduce training institution capacities.⁵
- *The organisation loses institutional memory and skills* as it loses its experienced workers and increasingly relies on younger, newly recruited staff.^{5,8}
- Increasing staff absenteeism and vacancies increase the workload for the remaining staff, leading to *burn out*. This in turn contributes to further absenteeism and attrition.⁶

Figure 1. Organisational Impacts of HIV/AIDS



Source: GoM/UNDP 2002

Direct and indirect costs to the organisation include death benefits, funeral costs, absenteeism, lower productivity, and costs of recruiting and training new staff to replace those lost.^{5,6}

HIV/AIDS impacts on health service organisations in all the above ways but also in several additional ways, significantly amplifying the effects.

- HIV/AIDS hugely *increases caseloads* and hence the work which health services and their staff must do.^{8,9}
- Management of chronically and terminally ill HIV/AIDS patients increases the *complexity of services* and the responsibility levels of the staff required.⁹ New skills are required for services such as counselling and home-based care.
- Increasing demands for health services lead to *pressures on resources* in already underfunded health systems, such as for drugs, gloves, protective clothing and equipment.⁹
- HIV significantly increases the *risks of infection* with HIV and opportunistic infections, such as TB, in health facilities for both staff and patients.^{8,9}

These factors increase the demands and pressures on health staff, generate greater risk in employment and add to the 'push' factors that cause the 'brain drain'.

3.2 Impacts on healthcare workers

In African countries with a high prevalence of HIV, the life expectancy of a person infected with HIV will at best be 5–10 years without Highly Active Antiretroviral Therapy (HAART). Although many people do not know their status, if they suspect that they may be HIV positive, they will be aware that they may not have long to live.

The impact of a shortened (real or perceived) life expectancy on an individual's economic and employment choices is not well explored. It is likely that early mortality results in *pressures to*

make money quickly; either to buy ART privately or to provide for their children's future. This may *change the individual's life and career priorities* away from public sector jobs where pay is lower and benefits often accrue in longer term security and pension returns.

Risks of Infection

The WHO and UNAIDS now estimate that 2.5% of HIV infections are caused by unsafe injections.¹⁰ A recent paper by Gisselquist et al¹¹ has generated much controversy by suggesting that 'unsafe medical care' may be responsible for even more HIV infection than previously estimated. Sagoe-Moses et al¹² note that the prevalence of blood-borne diseases – particularly hepatitis B (HBV), hepatitis C virus (HCV) and HIV – is highest in countries where there may be high client demand for injections, and where safe equipment and disposal systems are least likely to be present.¹² This is further noted by Tawfik and Kinoti,⁹ who report that 'the HIV seroconversion risk among surgeons in tropical Africa may be 15 times higher than in developed countries'. A study in one South African hospital found that 63.1% of nurses had experienced accidental blood exposure and 49.5% had experienced a needlestick injury. About half of these (31.2% and 23.7% respectively) had been exposed in the last 3 months.⁸ A study in Tanzania found '... the average health worker being pricked five times and being splashed nine times per year. The annual occupational risk of HIV transmission was estimated at 0.27% for health workers. Among surgeons, the risk was 0.7% (i.e. more than twice as high) if no special protective measures were taken.'¹³ The study recommended greater support for protective equipment such as gloves and needle-disposal boxes.

Health workers, cleaners, waste disposal staff and local communities are all at risk of equipment disposed of unsafely. Cleaners were reported to have a particularly high proportion of the needlestick injuries in a South African hospital.⁹ Sagoe-Moses et al¹² suggest that if the cost of loss of trained workers is taken into account, using the more expensive safety equipment available (such as auto-disable syringes) may offer a real saving. 'Scaling up the safety level can be costly, but ignoring the importance of additional hygiene, sterilization and blood screening could be substantially more costly in human and financial terms in the long run' (Tawfik & Kinoti).⁹

Despite this, there is generally an inverse relationship between occupational risk and occupational protection for health workers in developing countries. Sagoe-Moses et al report that while 70% of the world's HIV-infected population lives in sub-Saharan Africa, only 4% of worldwide cases of occupational HIV infection are reported from this region. 'By contrast, 4% of the world's HIV-infected population lives in North America and western Europe, yet 90% of documented occupational HIV infections are reported from these areas.' Where occupational health programmes are weak, worker compensation is not paid and interventions like post-exposure testing and prophylaxis are unavailable, there is little incentive for workers to report cases of injury or infection. Further, because the organisation does not have to bear the direct costs of post-exposure prophylaxis (PEP) or treatment or compensation, it may not see the value in investing in protecting against occupational infections.

Actual risk of infection will determine loss of workers due to sickness or death, but it is the *perceived* risk of infection that will determine voluntary departure and healthcare provider behaviour. Perceptions of risks will be critical in determining how the worker feels about their job. Inadequate knowledge and consequent inaccurate perceptions of risk may cause greater *psychological stress* to workers. Unrealistic *fear of transmission* could be an unnecessary push factor.¹⁰ Studies note that while actual risk may be small, perceived risk and stigma is high, especially for nurses providing direct patient care. Poorly resourced work environments and lack of incentives (for example hazard pay) compound this for those providing direct care to HIV patients.⁷ Nurses in a South African hospital overestimated

their risk of HIV infection from needlestick injury (3–4 per 1000 injuries), with only 4.3% correctly estimating the risk of HIV infection and the largest group (40.9%) perceiving it to be in the range 901–1000 per 1000 injuries.⁸

Job satisfaction

HIV/AIDS impacts on health worker job satisfaction, particularly due to increased workloads, resource shortfalls and increasing patient mortality. In a South African hospital the majority of nurses felt that they were overworked and that this affected their performance negatively; 94.8% felt this affected their own safety and 86.5% felt it affected their sensitivity towards patients.⁸ In 1998, a staff survey conducted in Zimbabwe found that the inability to offer effective care for patients due to lack of equipment and appropriate drugs and supplies was the reason cited most frequently by respondents for resigning from the government^{14,7}

These frustrations also impact upon the *relationship between the health workers and their patients*. Patients may accuse staff who are unable to offer them drugs or treatment of unfair practices. Staff may find that the advice they have to give patients (e.g. concerning condom use) dissonant with their own religious or moral beliefs.⁹ Issues of confidentiality about patient's HIV status and the need to wear additional protective clothing distance the caregiver from the patient.

4. Proposed policy responses for southern Africa

The HRH situation in sub-Saharan Africa has become an acute crisis, which will not be resolved quickly. The response will need to encompass strategies for producing more staff, making better use of the staff available, recruiting and retaining more staff and protecting institutions from the negative effects of attrition.

4.1 Producing more staff

Increasing training capacity (possibly through external collaboration) is a priority. There have been calls for deliberate 'over-production' of health workers. Decisions on numbers, training and deployment need to take account of AIDS-related impacts but rarely do so.⁷ Shortages of more experienced workers will require promotion of the less experienced who will need additional training and support to learn their new jobs.

Regrading course entry requirements downwards will allow greater accessibility and faster production. This may require running 'top up' courses to compensate for poor secondary science teaching and prepare under-qualified students for higher grade training. A recent issues paper on the HRH crisis in Africa questions government and professional pressures to raise the status of the health professions by raising entry requirements, extending the length of training, and raising the level of qualification. This reduces the supply and distribution of health workers, increases the cost of training, reduces the number of graduates and inflates their career expectations, encouraging migration out of low income countries. The authors call for countries hit by the HR crisis to revive and fast-track the enrolled nurse programme and to re-consider community health nurses as a legitimate cadre of health workers.⁷ Beyond more rapid production of health workers there is also the need to ensure that they acquire experience and in service skills at a faster rate.⁵

4.2 Making better use of the staff currently available

Optimal deployment is crucial when HR is limited, to gain maximum benefit from the skills and individuals available. The majority of HRH vacancies occur in rural areas.^{5,7,8} Inequity in deployment can arise along three axes: rural–urban; primary–tertiary facility and public–private facility. If deployment is not actively managed, the impact of understaffing is likely to affect the rural population most.³

Deployment can be hard to assess: ‘Where the only available slot is in a rural area, a health worker may agree to be posted there but actually work in an urban facility. This “rural post/urban work” phenomenon which occurs in sub-Saharan Africa implies that the geographic maldistribution reflected in official government rosters of health workers may be understated.’⁷ This phenomenon can have major effects on the actual distribution of staff and availability of services.¹⁵

Redeployment is needed to reflect utilisation patterns and fill priority posts in order to best meet demands for health services. It is important to recognize here however, a conflict between equity and efficiency. Allocating staff according to current utilization patterns would maximize the efficiency of use of staffing resources and would respond to current demand for services, but would perpetuate any inequities in access. Addressing equity implies assessing health needs (including those currently unmet) and allocating staff according to these needs. This is a more complicated exercise and requires demand creation to make good use of the staff.

Creation of new cadres appropriate to actual working situations (e.g. auxiliary nurses/district specialist doctors) would ensure that staff are effective in their jobs and do not have unrealistic expectations. This might improve retention in rural areas. There is evidence that those with the highest skills prefer to work in urban tertiary facilities.⁷

Reviewing the skill mix of the workforce is necessary to maximise on available skills. Revising job descriptions and regrading jobs may be necessary to ensure that those with skills in short supply do not have to spend their time on other, less skilled tasks. A 2003 USAID report calls for a revisiting of professional standards and a more pluralistic approach to the delivery of care, ‘rather than the inflexible adherence to standards that are often irrelevant, unrealistic, unenforceable, and costly’. They also note the likely sources of resistance to such a route.⁷ Changing the contents of training courses may reduce their acceptability overseas and limit the marketability of their graduates abroad. This raises the trade-offs between the rights of individual workers to develop their careers and skills by migrating versus the rights of the country which trained them to retain its workforce.

Upgrading the skills and knowledge of existing staff through sandwich and distance learning courses will keep staff in post and working while they train. This approach has been developed in the UK National Health Service to train managers and is now being used in South Africa and Namibia.¹⁶ Training ‘on the job’ helps to reduce the disruption of staff leaving posts for long training courses and reduces the danger that they will not return to their previous posting.

Speeding up public service placement and promotion procedures to allow rapid filling of key posts and replacement of lost staff is required to avoid periods of 6 months to a year required to replace some lost health workers.

Effective performance management strategies are required to ensure that performance is appropriately rewarded and that high performers are identified and supported to increase their

skills. The USAID study cited earlier notes that this calls for local managers to have authority to hire, deploy, promote, discipline and fire health staff, noting efficiency gains from decentralisation of these authorities from health reforms. While lack of HR management capacity at the district level is a constraint for this in many areas, 'the larger and more urbanized districts certainly show promise and should be used as starting points.'⁷

This needs support from *improving HR information systems and HR planning*, with access to information about staff numbers, their flows and the costs of employment and in-service training. This information can have a positive impact on how managers reconfigure health facilities to adapt to changes, recognise health worker performance and link HRH data to health outcomes and patient utilization of health services, as shown in the experience of Zimbabwe in the mid-1990s.⁷

4.3 Recruiting and retaining more staff

High rates of attrition (for whatever reason) mean that the organisation must take in more potential managers than previously in order to ensure sufficient numbers reach the senior levels. This calls for *streamlining public service appointment procedures* to allow rapid recruitment of staff, overcoming cumbersome civil service recruitment procedures, which mean that recent graduates wait up to many months before they are recruited to the public service.

'Return to work' packages targeted at those no longer working in the health sector have been used with success in countries such as the UK. Many female healthcare workers leave to raise a family and may return with offers of refresher training and part-time working. Linked to the above is the possibility of permitting agency work. Health professionals can be employed on a casual basis to cater for unexpected staff shortages or annual peak activity periods. This arrangement, common in industrial countries and emerging economies, might be a means of enabling worker re-entry into service.

Investigating reasons for attrition among specific groups and cadres and *developing targeted incentives* will be essential if certain priority cadres are to be retained. Given that the specific push and pull factors vary between cadres, more needs to be understood about which factors are most important for which groups of staff, if effective retention strategies are to be designed.³

Improving pay and terms and conditions is clearly one priority. Low public-sector pay levels and significant differentials in wages and working conditions between public sector and private and NGO sector workers are commonly found in southern Africa. Conditions for health workers in the public sector are often linked to basic rates of pay and allowances for the whole public sector, and linked to cumbersome bureaucratic and economic processes. Changes to the public sector wage bill require, for example, negotiations with the International Monetary Fund (IMF) and donor agencies contributing to budget support programmes.

As noted earlier, pay is not the only factor, and many staff are leaving because of their perception of risk. Strong and supportive occupational health programmes could go a long way towards reducing the 'push' factors for out migration.

This calls for *occupational health schemes for health workers*, including Information Education and Communication (IEC), to improve understanding and knowledge about HIV and infection risk and improve quality assurance around infection prevention. The inverse relationship

between risk and care noted earlier means that priority should be given to supplying adequate safety equipment and materials. Post-exposure prophylaxis (PEP) to protect against HIV transmission should be readily available, along with isoniazid preventive therapy (IPT) and cotrimoxazole preventive therapy (CPT) for HIV-positive staff to protect against TB and other opportunistic infections. These interventions would not only reduce the amounts of absence and attrition due to ill health but, as importantly, they would counter the impression of many healthcare workers that their health is not cared for and is at risk.

While protection of workers' health and safety rights are the function of unions and workers' organisations, these organisations are not strong in countries where the risks to staff are high.⁵ Even in South Africa, levels of compliance with infection prevention laws is reported to be poor, for example managers are not aware of the legislation and cleaners and waste disposal workers are not aware of the risks. South African laws making PEP available for victims of rape and occupational exposure are not uniformly implemented. Even where PEP is provided a requirement that it is accompanied by voluntary counselling and testing (VCT) means that some workers do not take up PEP because they do not want to know their HIV status nor trust the confidentiality of the occupational health service.⁸

Related to the above is the possibility of *providing antiretroviral (ARV) drugs for healthcare workers*. Bennell describes how provision of ARVs to public servants in Botswana over the past 5 years (through the public service medical aid scheme) has dramatically reduced both mortality and morbidity among school teachers.¹⁷ Private companies are increasingly recognising that to provide highly active antiretroviral therapy (HAART) to their employees, while costly, may be less expensive in the long run than having to constantly recruit and train new staff, particularly at the senior level. The provision of HAART for healthcare workers could prolong their working lives and would significantly reduce 'push' factors such as fear and insufficient economic incentive. The equity implications of such an action are, however, complex (see later discussion).

Flexible working schemes for positive living for those who are HIV positive are another possibility. Flexible working is an increasingly popular option in many western organisations and can include job-sharing, flexible working hours, home working, unpaid leave, etc. This kind of scheme could be adapted for positive living with options for part-time working or flexible hours; opportunities for 'breaks' from work with options to return later and so on. It could allow those who are sick to remain with the organisation, working when they are able, so their knowledge and experience would not be lost.

4.4 Protecting the institution from the negative effects of attrition

In the immediate term, while the above strategies are being implemented, organisational strategies need to be developed to mitigate the effects of high attrition. A study of the various strategies used by organisations in developed countries that have high staff turnover identified a range of organisational strategies that can be used to combat high attrition rates.¹⁸

Strengthening institutional memory and knowledge management are key when individuals may not stay long in post. This can include improved filing and information retrieval, access to electronic filing systems and so on. It requires effective management processes with clear job descriptions, standard operating procedures and guidelines so that tasks and responsibilities are clear and can be quickly learned.

Improved succession planning to mitigate the impact of attrition could be achieved through:

- monitoring and predicting attrition by better use of HR information systems
- encouraging staff to know and reveal their status so that appropriate plans for succession can be made in good time
- development of 'fast-track' schemes to identify and prepare those with potential for rapid promotion.

As with occupational health services, staff are unlikely to reveal their HIV status if they fear they have everything to lose and nothing to gain. Organisations will have to demonstrate that no discrimination will attach to a test or positive result and that care and support services will be available.

Skills development and sharing through an emphasis on team working allows junior members of the team to benefit from the experience of their seniors. It also reduces the organisation's reliance on individuals and the knowledge they hold. Policies and strategies also need to be developed to monitor the impact of HIV on the institution's performance, staffing and expenditure.

4.5 A new approach to development and public sector reform (PSR)

Donor agencies must review their own requirements. Skewed donor support in favour of training (mostly in-service) rather than staff retention and HR systems improvement is criticised for having contributed to or not having abated the human resource crisis. Donor investment in training, on the understanding that government shoulders recurrent costs, has put the onus for staff retention almost solely on the government. More recently, traditional barriers to donors' topping-off government salaries have been abandoned to keep experienced staff in place.⁷

As donor agencies move away from small project and vertical disease programme support and towards sector wide and budget support there is greater latitude for salary support and higher level interventions to address staffing issues.

However, many of the responses outlined above cannot be initiated at the sector level and need a wider public sector approach, often missing in HIV/AIDS interventions. Structural Adjustment programmes and other 'neoliberal' policies are blamed for contributing to cuts in the civil service, salary decline and the brain drain in Africa.⁵¹ Poverty Reduction Strategies in many countries are criticised for not recognising the contribution of ill health to poverty and not sufficiently prioritising resources for healthcare.⁵¹ Such policies need to revise their assumptions to factor in the growing poverty, economic decline and health system collapse facing many countries in southern Africa.

Donor moves 'upstream' towards support at the policy level, through instruments such as Sector Wide Approaches (SWAs) and Budget Support, offer opportunities for such wider support across sectors while pooled funding creates significant sums to address major systemic issues, such as the HR crisis. Furthermore, given the complex nature of the constraints to training more staff, it cannot be assumed that the availability of funding will immediately solve these problems. Formal nationwide planning for HR across sectors to ensure adequate numbers of priority cadres is just as important a measure as a medium-term expenditure framework (MTEF) in directing and prioritising national resources.

Within the context of public sector reform programmes, further research at the strategic level would usefully inform better institutional planning. This might include the capacity for the public sector to:

- respond flexibly and more quickly to staffing gaps through re-deployment and better focused use of external technical expertise
- enable better institutional management of chronic illness through *different configuration of pension and disability arrangements*.

If supportive options such as long-term sick leave, early retirement or flexible working were available, staff would have more incentive to reveal their status. Staff who can afford to leave, will depart earlier and leave with dignity. This in turn will enable succession planning and knowledge management strategies. The significant shifts in benefits packages (to allow long-term sick leave, early retirement, etc) that are implied by flexible working strategies, will require negotiation with the World Bank and IMF.

Development partners need to develop clear long-term strategies for support to HR in southern Africa. HIV ravaged economies are not sustainable. SWAps and Direct Budget Support (DBS) offer the possibility of long-term commitments to pooled support to salaries and other reforms through public sector reform programmes. These could allow the retention of vital cadres of staff without whom public services will not be delivered in the future.

5. HIV/AIDS and human resources for health: a case study from Malawi

This section of the paper builds on and adds to a country review on HIV, equity and health sector responses in Malawi as part of the EQUINET/Oxfam GB programme of work.¹⁹ This paper explores the specific dimension of health personnel, using Malawi as a more detailed case study example of the general issues and responses raised in Sections 3 and 4 above.

5.1 Context

Malawi's poor health indicators reflect the extent of poverty in the country. Life expectancy at birth dropped from 46 years in 1996 to 39 years in 2000. The maternal mortality ratio has almost doubled over the last 5 years, from 620 per 100,000 live births to 1120.⁴³ 49% of children under 5 years are chronically malnourished and the under-5 mortality rate is 189 per 1000 live births.²⁰ The major causes of mortality and morbidity in Malawi are preventable, with malaria as the leading cause of outpatient visits (30%). Diarrhoeal diseases, including cholera, and acute respiratory infections also contribute significantly to outpatient visits.²⁰

The national adult (15-49) HIV prevalence is 15%, translating into about 739,000 adults living with HIV/AIDS, 56% of them being women. Annual deaths due to HIV/AIDS are estimated at 81,000.²¹

Allopathic health services in Malawi are mainly provided by the Ministry of Health and Population (MoHP) (60%) and the Christian Health Association of Malawi (CHAM) (25%) through a network of 4 central urban hospitals, 22 district hospitals and a range of health centres, clinics, dispensaries and maternity units. Various NGOs, company clinics and private for-profit providers provide the remaining 15% of services.²³

Apart from the mission facilities (jointly organised under CHAM), the formal private health sector (both for profit and not for profit) is still quite small, with most institutions less than a

decade old. Some private employers do provide health services for their employees and some of the larger ones are starting to offer ART to their staff. The traditional sector is informal and, although still active and well used, has been little engaged with the formal health sector. Traditional and informal health service provision by traditional healers and birth attendants, grocery shops, etc is unquantified.

On paper, coverage and access are better than many developing countries with 84% of the population having access to a facility within 8 km.²⁴ This figure masks considerable differences between districts and does not take account of the many documented barriers to access to care, including physical distance; transport difficulties and costs; poverty and cultural factors.²⁵ Current shortages of essential supplies and health workers mean that the required treatment may not be available at the local facility. Preliminary findings from the Malawi Health Facilities Survey conducted in 2002 indicate that 90% of facilities do not satisfy the requirements of the Essential Health Package (EHP) for health services and health staff.²⁶ Many patients are therefore unnecessarily referred to a hospital.

Malawi has a number of policy initiatives that will impact upon the provision of health services and the response to the HIV/AIDS epidemic:

- Malawi's Poverty Reduction Strategy, launched in 2002, recognises the links between HIV and poverty and aims to reduce incidence of HIV transmission, improve the quality of life of those infected and mitigate the economic and social impacts of HIV/AIDS.³¹
- Malawi receives debt relief (7.9% of revenues in 2002/3) from the Heavily Indebted Poor Countries (HIPC) initiative, which is targeted at social sector spending including health.
- The National AIDS Commission has led the production of a draft National HIV/AIDS Policy.
- Both the health component of the Poverty Reduction Strategy Paper (PRSP) and the SWAp are based on the concept of an Essential Health Package (EHP) which should be made available free of charge to all Malawians. The EHP includes HIV interventions such as VCT, community home-based care and the treatment of opportunistic infections.⁵⁰ The costing of the EHP is currently being revised to include ART. The inclusion of ART is likely to widen the resource gap in funding the EHP.
- The Global Fund for TB, AIDS and Malaria (GFATM) has approved an application from Malawi for US\$196m for HIV/AIDS (largely for care and support). Its requirements for performance-based funding and quick results are already creating pressures on the health system to scale-up HIV/AIDS interventions very fast.

The national response to HIV/AIDS is guided by a number of institutions, including: the recently created Minister of State Responsible for HIV/AIDS Programmes; a Cabinet Committee on HIV/AIDS; the National Aids Commission (NAC) and its Secretariat and District AIDS Coordinating Committees. The Ministry of Health and Population (MoHP) provides leadership for the health sector response and the Department of Human Resource Management and Development (DHRMD) is responsible for coordinating the public sector response to the epidemic. A Business Coalition on HIV/AIDS represents the private sector.

Roles, responsibilities and coordination mechanisms are not always clear and this has resulted in delays in the planning and implementation of activities. Institutional arrangements to clarify the division of roles between NAC and MoHP and strengthen the MoHP capacity to respond to HIV are being designed.

5.2 Human resources for health in Malawi

The workforce in the health sector as whole is estimated at 15,700 plus an estimated 3,600 traditional birth attendants and 2,300 community-based distributor agents for contraceptives.²⁵ The draft Malawi Human Resources for Health Sector Strategic Plan 2003–13 states that 69% of all healthcare workers work in the public sector.²⁹ Employment in the non-government sector is growing rapidly but most reports and analysis deal primarily with those employed in the public sector.

There are no target population: staff ratios in MoHP. There is one doctor per 100,000 population,²⁰ compared to South Africa with 56.3, Zimbabwe with 13.9 and Tanzania with 4.1.³⁰ The nurse to population ratio is 1:3500.²⁶ This is equivalent to 28.6 per 100,000 population, which compares to 471.8 for South Africa, 128.7 for Zimbabwe and 85.2 for Tanzania.³⁰ With an average number of nurses per health centre of 1.9, the majority of health centres have only one nurse on the staff.²⁶

Inappropriate deployment is one issue highlighted by the MoHP stock and flow report. 26% and 13% respectively of the total workforces of psychiatric and community nurses were working at tertiary hospitals with no mental health services. Similarly, 22% of Health Surveillance Assistants were working at district hospitals. The report concludes 'In general, the distribution of all groups of health workers favours urban areas' and the secondary and tertiary levels of care.⁴² Half of Malawi's doctors (government and CHAM) are working in its four central hospitals together with 25% of the nurses.²⁶ While Malawi's population is 87% rural, 96.6% of clinical officers were in urban facilities and 47% of enrolled nurses were in tertiary facilities; CHAM had 85.3% of their front-line staff in rural areas in contrast to the public sector urban deployment.⁴²

Vacancy rates

It is well known and documented that Malawi's health services are hampered by acute shortages of staff. A study in three hospitals found nursing ratios of 1:50 in maternity and paediatric units and 1:120 in the general wards.³⁸ Reports on all aspects of service delivery mention the shortage of skilled staff.³⁹ Qualitative work with users and providers of services raises instances of facilities or services being closed because of staff shortages or of untrained staff delivering babies.²⁸ 'Ward attendants do most of the work that is supposed to be undertaken by nurses.'¹⁶

Staffing and vacancy rates are complex to analyse due to considerable fluctuations in the number of 'established' posts over the past decade. Table 1 shows that, despite increasing concerns about staffing levels, the trend of staff to population ratios shows that most have improved over the past decade (some dramatically) and only the ratios for registered nurses, health assistants and medical assistants have worsened. This must be viewed in the context of Malawi's very low staffing ratios, greatly increased current burden of disease and currently escalating attrition rates. Nonetheless, it is important to recognise that considerable investment and progress have been made over the past decade, posing the challenge to ensure that these achievements are not lost.

Table 1. Health Workers to Population Ratio by Staff Category, 1992-2000

Staff category	1992 ^a	1996 ^b	1998 ^c	2000 ^d
	Population per health worker			
Medical Officer	140,880	131,413	136,645	117,647
Clinical Officer	66,992	46,892	47,992	26,246
Registered Nurse	19,198	25,223	25,959	33,333
Enrolled Nurse / Midwife	9,419	7,538	7,783	6,042
Public Health Nurse	478,993	380,160	983,848	<i>not available</i>
Environmental Health Officer	416,515	115,701	104,664	31,746
Health Assistant	40,251	42,073	34,280	48,076
Laboratory Technician	532,214	483,840	447,203	21,276
Laboratory Assistant	154,513	145,815	124,537	18,518
Pharmacy Technician	1,064,429	3,548,166	756,806	99,009
Pharmacy Assistant	383,194	204,701	115,746	153,846
Dental Technician	<i>not available</i>	818,807	258,907	87,719
Medical Assistant	23,537	23,974	23,996	28,169
Health Surveillance Assistant	19,314	3,014	<i>not available</i>	2,832

^a 1992 population estimated at 9,579,865

^b 1996 population estimated at 10,644,500

^c 1998 population estimated at 9,838,486

^d 2000 population estimated at 10,000,000

Source: GoM/UNDP 2002

Donors' refusal to support Government of Malawi (GoM) recurrent and salary costs has led increasingly to situations where donors are recruiting and placing external (or sometimes local) technical assistance (TA) in key posts in ministries in order to maintain essential activities. This leads to the unsatisfactory situation where staff in a Ministry unit may be employed by, and accountable to, a range of different organisations. The resulting inequities in the salaries and allowances received by externally supported and government staff do not support good working relations.

Skills mix

The draft Malawi Human Resources for Health Sector Strategic Plan 2003–13 comments that Malawi's total health staff: population ratio is high but not extreme for the region. The problem is that most of the staff are in the lowest skill groups. The only cadre that is fully staffed is the Health Surveillance Assistants, the outreach workers who assist with immunisations and health promotion. Their numbers are planned to be doubled so that they can take on community home-based care activities. An analysis of distribution of skill levels found that the 'highly trained' were 8.7% of the MoHP workforce while 'medium skills' were 26.2% and 'minimal training' constituted the remaining 65.1%.²⁵ The Plan identified an 'exceptionally low skilled to unskilled mix' with a 'deficiency in the middle technical grades'. It concluded: 'There is a substantial imbalance in the current skills distribution and with it comes significant problems of supervision and leadership... This distribution is on the extreme end of staff structures in other parts of southern Africa. Most countries are attempting to move towards a higher overall skill level with a new high to low distribution (of 20%, 45%, 35%).'²⁹ The pay differentials between mid-grade and unskilled workers were found to be too low and needing reappraisal. Salary compression and lack of career paths were blamed for the loss of many health workers to other sectors or countries.

The Strategic Plan comments that the current emphasis on the recruitment of Health Surveillance Assistants and paramedical cadres is not matching Malawi's needs and will increase the distortion of the skill mix.²⁹ While it is undoubtedly true that Malawi is very short of skilled cadres of health workers, the issue of training less skilled cadres has been the subject of much debate. In the early 1990s, the government, with strong urging from the Nursing and Midwifery Council, abolished the enrolled nursing programme to focus on professional nurses. Similarly the training course for laboratory staff was upgraded from two years to three and the training for medical assistants was stopped. This course of action led to higher entry requirements for professional training programmes and higher out-of-pocket expenses during the longer training, putting off many potential candidates, considering the low salaries for the qualification. It also took longer to train entry-level staff to replace those being lost.

As the impact of these changes was recognised, attention turned to the need to increase production of basic cadres to fill urgent vacancies and provide material for subsequent up-grading programmes. Some of the changes described above have therefore been reversed. Operational research showing that cleaners, ward attendants and other non-clinical staff could be trained to take on some non-clinical or administrative tasks have however not been taken up, in part due to the demand to maintain standards.^{19,52}

Donor focus on single disease programmes has led to an emphasis on clinical technical skills and less attention being paid to the management and support skills needed to run a health service. This has left pharmacy and pharmaceutical management, health-facility management, health planning and administration, HR planning and systems, accounting and finance, and procurement and logistics skills in short supply. Yet this shortfall in managers and administrative bottlenecks are a major reason for the low absorption of donor resources,⁴⁷ including that in aid administration, procurement and financial management.⁷

This extends to HRH planning. Kathyola³⁴ states: 'It is estimated that there are less than six people in the civil service who are trained and specialised in human resource planning.' This critical skills shortage means GoM and its various ministries are not able to project HR requirements based on attrition rates and contribute to the poor performance of the public sector.

Policy and institutional context

There are a number of policies and institutions that influence human resources for health:

- Malawi embarked with donor support on a series of public sector reform initiatives in the mid-1990s. These include mainstreaming the response to HIV/AIDS in the public sector. Senior civil servants have the option of fixed-term, performance-linked contracts at significantly higher pay levels as part of the effort to improve performance.
- The Ministry of Labour and Vocational Training has facilitated the drafting of a National Policy on HIV/AIDS in the Workplace.
- A Health Service Commission is to be formed to take on the posting and promotions of health service staff.

In addition, the professional organisations, the Nurse and Midwives Council of Malawi (NMCM) and the Medical Council of Malawi (MCM) license and register certain staff cadres. Unions are not well established in Malawi. Nursing Associations act on behalf of their members but are severely constrained by lack of funding.

The Southern African Development Community (SADC) has produced an HIV at the

Workplace Code of Conduct that prohibits any form of discrimination. The Constitution of Malawi³² and the Health and Safety Act³³ require employers to provide safe working environments. Nonetheless MoHP HQ does not have an HIV in the workplace programme or a prevention and support programme for staff.⁶

Individual public sector institutions have no mandate to make or change HR policies and regulations. There is no system to track staff movements out of the public sector and no mechanisms to retain valuable skills so the public sector is very vulnerable to the impact of HIV. Existing human resource policies, practices and performance management systems in both the civil service and District Assemblies are not yet sensitive to the HIV/AIDS epidemic, undermining the public sector's capacity to respond effectively to the epidemic.³⁴

In response, the Department for Human Resource Management and Development (DHRMD) has produced a concept paper as the basis for discussion on implementing the recommendations of the HIV/AIDS impact assessment study. It proposes new institutional arrangements to strengthen the policy and technical advice and monitoring of each public sector institution's response to HIV.³⁵

Training capacity

The nursing schools in Malawi were running at well below capacity in the early 2000s because of a lack of suitably qualified trainees. Declining standards in the country's schools meant that secondary schools were unable to produce enough entrants for medical, nursing and midwifery programmes due, among others, to weak science and maths education at the primary and secondary levels. Attrition rates from pre-service training courses are also high (between 6% and 10% annual loss in the different programmes).²⁵ The reasons given ranged from academic difficulties to the cost of accommodation.

Donor interest in funding discrete disease programmes and their reluctance to support on-going recurrent costs have led to a focus on short-term in-service training at the expense of support for basic pre-service training. Studies report that in Malawi close to a tenth of all donor expenditures in financial year 1997 went to training, which includes long- and short-term training out of the country (US\$1.5 million), in-country and out-of-the-country workshops (US\$2.2 million) and other unclassified training activities (US\$0.8 million). The US\$4.5 million annual cost of these training activities is staggering for a country the size of Malawi and would translate to a US\$473 salary increase for one year for each of Malawi's 9,500 health-sector civil servants, which is around US\$40 per month, or 50% of the US\$80 monthly salary of a typical civil servant at that time^{47, 7}

Donor refusal to commit to recurrent cost and salary support has led to an over-emphasis on in-service training to the detriment of pre-service training. In-service training effectively functions as salary support to the trainee through the provision of additional allowances. This benefit is distributed on an individual and often inequitable basis between workers. The process distorts attention and resources from basic training and results in the 'workshop syndrome' in which workers are constantly being called from their station to attend more short courses.

5.3 Impacts of the HIV/AIDS epidemic on HR in Malawi

The AIDS epidemic impacts on this HRH situation to produce further equity challenges.

Increasing caseload

The HIV epidemic has increased the demand for health services. HIV-related conditions account for 40% of all inpatient admission and 70% of admissions to medical wards.³⁶ Reported cases of TB have risen from 95 per 100,000 population in 1987 to 275 in 2001.³⁶ With 77% of those identified with TB also HIV sero-positive,³⁷ the huge rise in TB case rates is likely to be mirrored by equivalent increases in rates of other opportunistic infections.

HR information systems

Attempting to quantify and monitor the impact of HIV/AIDS on the HR situation has proved difficult for a number of reasons.

There are difficulties in determining current numbers of established posts and hence vacancy rates due to the absence of routine data or centralised records on staffing in development partner funded projects/programmes.^{6, 40} MoHP monthly staff-list returns do not match with the current recognized establishment of MoHP as held by the DHRMD and no reconciliation of the discrepancies is made.

This means that there are a variety of data sources on HRH, none of which is complete or consistent with the others,⁴¹ including:

1. MoHP Situation Analysis 1998 – the baseline for the 1999 HR Development Plan covering the current staffing of Government, CHAM and private facilities.
2. MoHP Stock and Flow Analysis 2002 – a study was done by the Planning Unit.
3. MoHP Human Resource Financial Analysis 2002 – a study (done by DHRMD) differs by 200 in the number of posts currently filled when compared with the MoHP's Stock and Flow Analysis.
4. MoHP Payroll, Pensions and Personnel Database – a new government-wide computerised system being introduced but it does not link employees with established posts or facilities.ⁱⁱ
5. Both the Nursing Directorate and the HRMD Unit of the MoHP have set up systems of staff returns since they do not get the information they need from the PPP system. There is inadequate compliance with both systems however, so their data is incomplete.
6. Clinical Services Directorate (MoHP) conducted a survey in 2002 to gather data on all clinicians.
7. The CHAM payroll database (a computerized system) is deemed 'exemplary' by Schenck-Yglesias⁴¹ and proved the only system that could produce HR information as required.
8. Both the Nurse and Midwives Council of Malawi (NMCM) and the Medical Council of Malawi (MCM) license and register certain staff cadres. The NMCM has an electronic register with data on over 6000 nurses and midwives. The main problem is data quality and many entries have 'unknown' current status.

Table 2 shows some of the vacancy rates found in the 1998 situation analysis. The more recent stock and flow analysis conducted by the MoHP Planning Unit found that the overall vacancy rate in MoHP (excluding management and support functions) averaged 37.3%. 1842 out of 6620 established posts for nurses were filled.⁴² Most middle level management posts (such as deputy directors and chief officers) had been unfilled for some time – particularly in

ⁱⁱ No study data is available to ascertain the extent of ghost working in Malawi (this phenomenon in other countries can render payroll data a very inaccurate reflection of actual staffing numbers).

the Planning and Administration units of the MoHP (8 out of 11 posts in Planning were unfilled). Only 9.3% of specialist posts were filled in the central hospitals (for instance only one of 24 surgeons posts was filled). The HIV Impact Assessment reported large numbers of vacancies in rural areas at the primary level.⁶

Table 2: MOHP Vacancy Analysis, 1998

Staff Category	Established Posts	Filled Posts	Vacancy	Vacancy Rate
Clinical Officer	279	205	74	27%
Medical Officer	113	72	41	36%
Medical Assistant	647	410	237	37%
Physician	2	0	2	100%
Paediatrician	4	2	2	50%
Pathologist	5	0	5	100%
Dermatologist	1	0	1	100%
Registered Nurse	717	379	338	47%
Enrolled Nurse / Midwife	1,549	1,264	285	18%
Public Health Nurse	17	10	7	41%
Health Surveillance Assistant	6,000	3,347	2,653	44%
Laboratory Technician	33	22	11	33%
Pharmacist	9	5	4	44%

Source: GoM/UNDP 2002

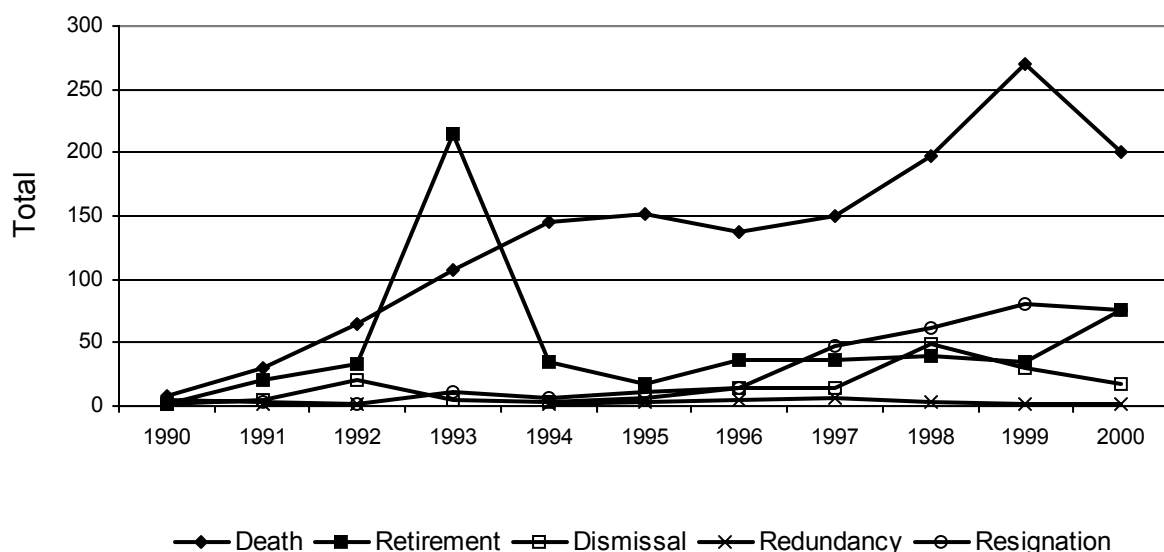
The MoHP Stock and Flow analysis⁴² reviews posts filled against the established posts. The report stresses that the current establishment has not been recently revised and it is based on facility-based norms that do not reflect actual needs or workload (in particular, the recent increase in caseload resulting from HIV). Unfortunately as Schenck-Yglesias⁴¹ points out, planning based on needs or services has much greater data requirements than that based on simple ratios. At present, it is not possible given the data available. The HIV/AIDS impact assessment study⁶ also notes the discrepancies between workload, established posts, HR planning and the resources available. Improving the HR information systems to improve data quality and coverage in order to allow more accurate monitoring and strategic planning for HR for health is clearly a priority.

Staff attrition and absenteeism

In 2002 the Government of Malawi, with the assistance of UNDP, undertook a study of five major ministries (including Health and Population) to try to assess the impact of HIV on Malawi's public sector⁶. The study encountered the same problems mentioned above in establishing how many posts there should be and how many were filled. It found that lack of knowledge of HIV status made it difficult to estimate or attribute attrition or absence to HIV.

The Impact Assessment study of trends in attrition and cause for the MoHP over the 1990s showed a peak in retirement in the early 1990s coinciding with public sector reforms to reduce the size of the civil service. A rise in resignation from 1996 reflects the liberalization of health services and increasing opportunities in the private sector. Figure 2 shows that death is the major cause of attrition.

Figure 2: Attrition by cause and year in MoHP



Source: GoM/UNDP 2002

Death

The Impact Assessment study found attrition to be 2.3% per year and increasing, with death the cause of 50% of the attrition. The age and gender profiles of the deaths corresponded with the prevalence of HIV in the general population. In the MoHP, 'Death is particularly high in the age groups 30–34 (19%), 35–39 (21%) and 40–44 (19%).⁶ Particularly high mortality rates were found among technical cadres and front-line staff. 799 of the 8105 deaths were estimated to be AIDS related but this was calculated based on NACP estimates of HIV/AIDS-related deaths among professionals (9.8%). The report acknowledged that this method for estimating AIDS-related deaths probably underestimated any additional risks that healthcare workers may be exposed to. The report found that in the MoHP, '...most occupational categories show a higher mortality rate than the average adult mortality rate of 11.2 in Malawi.^{43, 6} (see Table 3 below).

Table 3. Standardised Mortality Ratios (SMR) for MoHP Staff

Occupational Category	Expected Deaths	Observed Deaths	SMR
Medical Assistant	15.4	44	285
Clinical Officer	8.9	35	393
Registered Nurse	13.9	29	208
Enrolled Nurse	43.3	79	182
Health Surveillance Assistant	132.9	115	86
Environmental Health Officer	15.2	9	59
Laboratory Technician	0.9	9	1000

Source: GoM/UNDP 2002⁶

Where the SMR exceeds 100 it means that mortality is higher than average mortality in the general population of Malawi.

A study by Harries et al,⁴⁴ which compared the death rates of hospital-based healthcare workers at 40 rural or semi-urban hospitals (both mission and government run) and those of teachers at 4 primary schools nearby each hospital, found death rates of 2% among health workers and 2.3% among teachers. Among healthcare workers the death rate was higher among men than women (teachers were the opposite). For both teachers and healthcare workers, highest death rates for men were in the 35–44 age group while among women healthcare workers the highest death rate was in the 25–34 age group. In healthcare workers TB was the cause of 47% of deaths (only 27% in teachers), chronic causes were about the same for both groups and ‘acute’ was lower for healthcare workers and higher for teachers. While the death rates of health workers appear, therefore, to be slightly better than those of teachers (and while the likelihood of death in service may be higher for teachers than health workers due to other confounding factors), the study concludes that healthcare workers appear to be at particular risk of TB infection.

Migration

The MoHP Stock and Flow analysis⁴² comments that while death accounts for the highest number of losses, ‘abscondment and resignation contribute substantially to the wastage numbers of the public health sector’. The UK nursing authority, the UKCC reports Malawi nurse registrations increasing from one in 1999 to 45 in 2001.²⁹ Data from the Nurses and Midwives Council of Malawi indicates that most of the losses are from the most highly trained cadres.⁴⁵ In a small survey of 20 nurses who had practiced in Malawi but now left, 65% cited low salaries as a reason, 40% mentioned heavy workload, 25% mentioned lack of protective gear and 10% sickness.⁴⁶

Between 1999 and 2002 it has been estimated that the MoHP lost 278 registered nurses and midwives while its training institutions produced only 258.³⁴ A large part of Malawi’s current training capacity is simply directed to replacing the number of staff lost each year. Of the 30 nurses that graduated from Kamuzu College of Nursing in the 2000/01 year, only 2 joined the GoM; the rest went to NGOs.³⁸ Wages in the non-government sector can be 8–10 times higher than in government.

The NGO sector is growing rapidly and is expected to take on an important role in services such as VCT and community home-based care. The home-based care (HBC) volunteer attrition is said to be up to 40% per annum because of lack of incentives for the volunteers. There are also increasing concerns about the number of public sector health workers leaving to join the private sector. Collaboration with the NGO sector is a policy objective and funds will be available through the GFATM and other HIV funds, such as World Bank Multi-country AIDS Programme (MAP) funds. However, when this growth is at the cost of skilled workers from the public sector it does present a problem.

In Thyolo and Chiradzulu districts where the NGO Medecins Sans Frontieres (MSF) is attempting to support the government system to provide the continuum of HIV/AIDS care (including ART) they have had to recruit their own staff to supplement those in the district. In Thyolo MSF Luxembourg has 2 expatriate and 41 local clinical and administrative staff.¹⁹ In Chiradzulu MSF France has hired 8 expatriates and 19 local staff and still states: ‘Even with the presence of MSF staff, the district is far from having the appropriate health personnel to be able to cover the increased need for care of the population.’³⁹

It is often argued that if health care staff migrate from the public to the private sector this does not constitute a loss to the country, as they are retained within the country’s health sector. In Malawi where the public sector staffing levels were so low initially and the non-

government sector is now growing so quickly, the loss can constitute a real threat to the continuation of public service delivery, particularly in rural areas.

Lost work time and sick leave

Lack of information about sickness and absence combined with lack of knowledge of HIV status make it difficult to estimate or attribute absence to HIV.⁶ One assessment of laboratory staff found that absences due to ill health, family crises and attendance at funerals meant that the total time worked only averaged 23.8 hours per technician per week over a year, compared to the expected 44 hours per week.⁵²

The HIV impact assessment found that sick leave policy was not consistently applied, as officers often continue to be paid for as long as they are in post. This has significant financial implications to an institution. In the absence of effective ill-health monitoring, options for early retirement on medical grounds are rarely implemented.⁶

High vacancy rates resulting from attrition and the resulting increased workload has negatively affected morale, productivity and performance across Ministries.⁶ The loss of staff in the 30–44 age group is noted in studies to be particularly damaging for the MoHP, depriving the ministry of quality leadership and distorting output levels, quality of work and career structures.⁶ Attrition increases the institution's reliance on younger workers who in turn are more vulnerable to AIDS.⁸

Infection prevention

The risk of HIV transmission in health services has been noted earlier.^{22, 10} It is not possible in this paper to determine what rate of transmission is due to unsafe health service environments and practices in Malawi. Given that poor infection prevention standards increase these risks, the MoHP in collaboration with the World Bank, WHO and UNICEF, are developing a national policy and a 5-year strategic plan of action for medical waste management and injection safety. This included an assessment in 2002 of healthcare waste management and injection safety in the public and private health services. The assessment found that although use of sterilisables for vaccinations was official MoHP policy, the use of sterilisable equipment fell far below the standards needed to ensure the safety of recipients, presenting a major risk of transmitting blood-borne infections. Both patients and providers reported reuse of unsterilised equipment, most particularly in the Expanded Programme of Immunisation (EPI) services where reuse rates were up to 10.7%.⁴⁸

The report notes that 'Such harmful injection practices were present despite high levels of awareness about risk of transmission of HIV among healthcare staff and community and despite half of injection providers claiming to have received training on safe injections in the past.'⁴⁸ Hence, rather than lack of knowledge, unsafe practices must be due to lack of supplies or lack of time or lack of motivation.

The assessment concluded: '... all healthcare workers in Malawi were exposed to unacceptably high risk of accidental needle stick injury and consequently infection with blood-borne pathogens. On average, every injection provider sustained 1.6 needle stick injuries per year. This is disastrous in settings where prophylactic hepatitis B vaccination for health personnel is not given routinely and where protocols for HIV post exposure prophylaxis (PEP) are non-existent.'⁴⁸ Similarly, the assessment of waste management found that although health worker awareness was quite good, waste disposal was not, and 'as a result, healthcare workers, non-technical health facility staff, municipal landfill workers, and landfill scavengers are at serious risk of infection.'⁴⁸

Even where gloves are available they can give a false sense of protection. A study on infection prevention in hospitals found that workers would be less careful about which surfaces they touched while wearing gloves, with increased risk of spread of infection.³⁸ Hence any resource inputs to drugs and treatments need to include basic infection prevention procedures if users and staff of health services are to be protected from unnecessary risk.

Pressures on health workers

There is evidence in Malawi as in other countries that health workers also *perceive* their work to be putting their health at risk. A study conducted for the MoHP/JPHIEGO at 3 of the infection prevention baseline hospitals found that 66.7% of clients perceived risks of infection at their hospital while 95.9% of service providers perceived risk to themselves and 93.4% perceived risks to their clients.³⁸ Service providers mentioned TB (69.4%), exposure to HIV (16.5%) and other communicable diseases. Nurses were particularly concerned about TB and HIV/AIDS. The highest risk was perceived to be on the general ward because many patients there are not yet diagnosed.

Staff felt that their jobs were much more risky than those of other public sector workers but that their pay did not compensate for this and that good performance was not rewarded.³⁸

Many frontline healthcare workers in Malawi are women. The national risk profile shows that they are at greater risk of infection with HIV. Their roles as family caregivers, noted earlier, reduces the time and energy they have for their healthcare jobs. Many nurses complain about high workload and shortage of staff.²⁷ The perception that nursing is a *high-risk and unrewarding profession* (due to high workload, inadequate protection measures and lack of essential materials) is a deterrent to potential applicants.

5.4 Costs of HIV/AIDS and resource availability

These impacts mean that HIV/AIDS adds to organisational costs through the costs of paying death and funeral benefits for workers who die, the lost productivity of workers on sick leave, the additional costs of recruiting and training replacement workers and, in the case of health services, the additional requirements for infection prevention and occupational health activities.

Between 1997 and 2000 the MoHP paid MK 40.1m in death benefits for 818 employees and the total is rising each year.⁶ Direct costs for the funeral of a junior or middle level officer were estimated at MK 45,720.ⁱⁱⁱ It has been estimated that AIDS-related expenditure (death benefits, funeral costs, recruitment and training of replacements) may cost the Malawi Government between MK 6.6m and 9.6m per annum.⁶ It was not possible to quantify medical and hospital costs, which therefore mean the figure is an underestimate. This figure represents 'an enormous amount of scarce resources'.⁶

There are no budget lines or items for expenditures stemming from AIDS-related morbidity and mortality, so these expenses must be taken from other budgets leading to shortfalls on other expenditures. Funding for HR management and development is part of the district Other

ⁱⁱⁱ At the time of writing US\$1 = MK 110. The government policy on material support for funerals includes the provision of a coffin and three vehicles for a member of staff. However, due to a lack of resources only two vehicles are provided.

Recurrent Transactions (ORT) budget. Funds for HR activities are therefore often diverted to unplanned expenditures such as funerals.³⁴

The political priority and visibility given to different budget lines also has implications for equity in service delivery. A lot of attention is attached to the drug budget (particularly now that HIPC funding contributes to it). During the 2001/2 budget expenditure cuts the drug budget (which is centrally managed) was not cut, although it was unlikely to be spent by the end of the financial year. District Other Recurrent Transactions (ORT) was reduced in some months to only 25% of the budgeted amount, however. This budget is expected to cover fuel and supplies of bleach, disinfectant, etc, which are locally purchased by districts. Essential materials for infection prevention were therefore in very short supply. The emphasis on drugs appears to be leading to underspending on essential supplies for infection prevention and waste management with potential long-term impacts on quality of care and risks to patients and staff, a finding that was supported by the assessment of healthcare waste management (HCWM) and injection safety.⁴⁸

Thus, while considerable political attention and priority is given to the availability of drugs for the treatment of HIV (and in particular HAART), budgets may be inadequate for basic standards of infection prevention. This could contribute to both HIV transmission and (through staff infection) to the declining capacity of the health service to deliver HIV treatment and care.

5.5 Summary of impacts of HIV on HRH in Malawi

Evidence from Malawi indicates that HIV impacts on health workers through increasing their workload, stress and ill health. It decreases the resources available to them, thus increasing risk and also their frustrations and fear. Health worker status declines as patients find they are not able to help effectively and so lose faith in them. Mutual frustration and stress worsens relationships between providers and patients, lowers morale and adds to 'push' factors to leave the government health service. Experienced clinical and managerial staff are those who can most easily find work in the expanding NGO sector or outside the country.

The HIV/AIDS epidemic impacts, therefore, on the long and short-term availability of healthcare workers and their recruitment, production and retention. It exacerbates the problems created by an international labour market by adding to or reinforcing many of the push factors. The impact of HIV in other sectors such as education undermines the capacity to respond to this situation by decreasing the availability of trainees to replace lost health workers. Lack of good HR information limits the Ministry's capacity to manage these problems strategically.

Increasingly it is the availability of staff, not funding, which is the factor limiting expansion of service delivery. Unless this is addressed there is a danger that the introduction of new services can only be at the cost of redeploying staff from existing services.

6. Implications for equity in HRH and HIV/AIDS in Malawi

This situation has a number of implications for equity. HIV adds to the push factors that fuel the international labour market for health workers, depriving countries like Malawi of their most skilled workers and reducing their capacity to deliver health services. Loss of more skilled and experienced workers weakens the capacity of healthcare workers to campaign for better conditions in developing countries.

In the countries where health workers (and patients) are most at risk of infection (because of high disease prevalence, increasing workloads and decreasing resources for protection), occupational health and compensation programmes are weakest. Lack of treatment and supportive responses reduces the incentive for workers to report injuries (hence reducing awareness of the problem) and the economic incentive to reduce occupational risks.

AIDS has the capacity to reinforce and exacerbate inequity.⁶ As attrition proceeds, rural areas suffer disproportionately, through having understaffed, poorly supervised facilities with shortage of supplies, longer distances to cover to access care and poorer quality services. The Malawi Country Study¹⁹ concludes that equity is promoted through the availability of good quality services integrated at the periphery, both in terms of service level (e.g. health centres) and geography (e.g. remote districts). The study notes that many barriers to access to TB and other services relate to the poor coverage and quality of care provided within the *general* health services. 'Underlying these problems are the general issues of chronic understaffing, and weak infrastructure and management systems.'¹⁹

This section explores further these equity implications. It raises the unresolved questions in italics to flag them as areas for follow up study.

6.1 Resource allocation and service delivery priorities

New initiatives such as the GFATM and the World Bank Multi-country AIDS Programme (MAP) are bringing substantial new funding to Malawi, and with this, interest and hope among both the medical community and those infected with HIV. Previously, little had been offered to those who were infected, apart from existing services for opportunistic infections, such as TB. Additional resources bring the possibility of additional services for HIV/AIDS such as VCT, HBC and ART. It is hoped that the availability of these services will increase the incentive to know one's status, since support can now be offered.

The issue of whether the introduction of new services for HIV/AIDS will lead to a diversion of resources, particularly human resources, from existing services is one of increasing concern.⁴⁹ The GFATM requirements for quick outcomes and performance-based funding have introduced an enormous pressure to perform and reach annual targets at all costs. While this urgency is not misplaced, given the urgency of the response to the HIV epidemic in Malawi, the pressure to show results quickly is likely to lead to a diversion of resources (and particularly staff) into the intervention areas that are being GFATM-funded, to ensure that they perform.

Where health services are currently understaffed and struggling to provide existing services, the introduction of new services for HIV/AIDS (whether ARVs, HBC or VCT) cannot be seen as additional, but will be at the expense of some other service area. The question of which service area (geographical, disease-specific, etc) and consequently who, may be deprived of services they presently receive, is the key equity issue related to personnel issues (since personnel are the principal constraint in service delivery).

Furthermore, given the existing tendency for empty posts to be concentrated on the primary and remoter facilities, the impact of increasing vacancy rates will also be inequitable among those receiving HIV/AIDS services. The continuum of care that Malawi has adopted as its health sector response to HIV/AIDS will require strong networks of service delivery right down to the community level where community home-based care is to be delivered. Such

programmes require strong supervision and support in difficult conditions. If trained and experienced staff are increasingly drawn into the hospitals to ensure that ART services are successful, it will be to the detriment of those in the community who are not eligible for ART. These issues are discussed in more detail in the Malawi Case Study.¹⁹

Is the relative political priority of introducing new services for HIV affecting the standards and coverage of existing services? And if so, who is losing services?

Where staff are the limiting factor and NGOs are able to offer more attractive employment opportunities, they will de facto determine which health services are delivered, and where, unless MoHP is able to exercise strong strategic leadership over the activities of the entire health sector. At present, the mechanisms for agreeing Memoranda of Understanding (MoUs) with the NGO sector and joint strategic planning are not strong. The processes for reviewing applications for GFATM funds by NGOs are not yet finalised. Modalities for funding combined with concerns about government financial accounting systems mean that NGOs are likely to benefit more quickly from additional funding opportunities. There is a danger that NGO proposals that are technically sound, but staff intensive, will be approved and will attract more government staff away from other services or areas. This would result in islands of excellence in the NGO sector serving small populations, while the rural areas are progressively depleted of staff and basic health services.

Is the availability of new sources of funding allowing NGOs to determine what services are delivered to which groups and where? If so, what are the equity implications?

6.2 Provider behaviour

Equity will be affected by policy decisions concerning the emphasis and resources directed towards different institutions or service areas, but also by the individual decisions of healthcare workers. A nurse in sole charge of a ward of 100–200 patients will have to make decisions about which one they give care to first. Similarly, if drugs are insufficient they will have to make decisions about who to give them to. That decision may be based on judgements about the likelihood of survival or cure, about the moral worth of the patient or many other factors. *On what basis do healthcare workers, faced with more patients than they can help, make decisions on whom to treat? How do they ration their time and the limited drugs and supplies at their disposal and what implications do these decisions have for equity in access to health services?*

There is some evidence of health workers rationing drugs when they are in short supply by not giving them to ‘chronic patients’ (who they do not expect to be able to cure).²⁸ There are also allegations of staff prioritising their own family and friends for treatment. In other programmes worldwide, ad hoc decisions by health workers tend ultimately to exclude the poor.¹⁹

It has been suggested that healthcare workers overestimate the risk to themselves of treating HIV-positive patients and this may be leading both to higher rates of voluntary departure from the health sector and also to avoidance of, or poorer access to, care for those patients who are infected. If healthcare workers are over-estimating risks, then equity in access to healthcare will be affected through two mechanisms:

- i) Healthcare workers may avoid treating certain patients who they perceive to offer a risk to themselves, leading to inequitable treatment at the point of delivery.
- ii) Healthcare workers may leave the service perceiving the risks to their own health to be unacceptable, thus providing reduced access to care. In the initial stage,

reduced access will affect all in the catchment area of the healthcare worker's former facility. Given the tendency to favour urban over rural facilities in deployment trends, however, any reduction in overall staffing levels is likely to impact most on those who use rural facilities.

This is an area requiring further investigation if the true equity impacts of understaffing in health services are to be understood.

Are providers discriminating against certain groups?

Is provider behaviour affecting unmet needs for HIV services (and hence increasing the progression of the disease in some groups)?

Similarly is provider behaviour affecting demand for services if some groups suspect they will not be well treated and therefore chose not to present?

6.3 Managing infection risks

Infection prevention, injection safety and waste management are key activities both to reduce transmission of infections, and hence loss of workers through illness or death, but also to reduce the perception of risk among workers. It is the perception of risk (rather than the actual risk) that will determine a health worker's decision to stay or leave their job.

A better understanding of infection risk and which activities (and therefore cadres) it is associated with, is needed to reduce risks. For instance, Tawfik and Kinoti⁹ report cleaners getting more needle stick injuries than nurses, implying that it is not so much the clinical procedures as the waste management that requires improvement. This may also be an equity issue since cleaning and grounds staff may be less aware of the risks than trained healthcare staff.

Is the health system speeding up its own attrition through poor infection prevention or the perception of it?

There has been much recent debate about the extent of HIV transmission that can be attributed to poor injection safety procedures. What can be concluded here, however, is that poor injection and medical waste safety procedures can only increase the risks of transmission. Malawi has an excellent record in EPI. Many of those receiving injections from the public health service will be children receiving immunisations. The other group who routinely use health services when they are not sick are pregnant mothers who come for antenatal care. If the health services are an agent of transmission, these groups may be particularly at risk.

To what extent is the health system contributing to the transmission of HIV and which groups are most affected?

As stated earlier, the relative political priority and visibility given to different budget lines also has implications for equity in service delivery. A lot of attention is attached to the drug budget (particularly now that HIPC funding contributes to it). During the 2002 expenditure cuts, the drug budget was not cut, while funding for local purchase of fuel and supplies of bleach, disinfectant, etc, was cut drastically.

To what extent are current debates about treatment issues exacerbating the risks of transmission by the health services by diverting resources and political attention from routine

activities such as infection prevention?

6.4 ART for healthcare workers?

Private companies are increasingly recognising that to provide HAART to their employees, while costly, may be less expensive in the long run than having to constantly recruit and train new staff, particularly at the senior level. Given the very small pool of educated professionals in Malawi and the weak capacity of the education system to produce potential recruits, this argument seems particularly strong in Malawi. The possibility of providing HAART to key public sector workers has been raised by GoM and DHRMD.^{6,35} Targeting particular sectors or cadres would require substantial political debate. Malawi's application to the GFATM is based on delivering HAART to 25,000–50,000 people (depending on drug costs) over a five-year period and it has raised considerable expectations. It might be possible to justify prioritising healthcare workers on the grounds that if something is not done to reduce attrition in the health sector quickly, there will be no health sector to deliver HAART, or any other health service, to anyone.

Justifying targeting HAART to certain health workers is not the only equity issue to be resolved. It could also exacerbate the rural/urban and primary/tertiary inequities, since the health workers will want to be posted where ARVs are available. Initially this will only be in four hospitals (the three major cities and one rural district) and though it is planned to extend services to other district hospitals (using GFATM funding) this is likely to take some years.

Could the targeting of HAART to healthcare workers be justified and if so what would the implications of delivering them be for wider health service delivery?

7. Responses to AIDS impacts on HRH in Malawi

The responses to the impacts on HRH and equity concerns raised above in Malawi demands both longer-term strategies to increase training capacity and revise terms and conditions of work, and immediate actions to sustain the public health system. This implies confronting the issue of HIV-related attrition in Malawi to give political and policy leadership to these strategies.

7.1 Replacement strategies

The response to attrition so far in Malawi has been mainly at the sectoral level although the recent initiatives by DHRMD are aimed at generating a response across the public sector. In MoHP, attention has largely focused on staff 'replacement strategies' – the increased production of health workers to replace those being lost. MoHP produced an ambitious HR plan for health in 2000, but was unable to raise the necessary funding to implement it. It then produced a Six-Year Emergency Training Plan in 2002,⁵³ which proposed training increased numbers of priority cadres of staff. Again, it has had difficulty in gaining sufficiently large commitments of funds in the timeframes required.^{iv}

^{iv} For 1st Priority cadres, the cost of the plan is US\$27m. Resources are available to fund this part of the plan, providing HIPC and local monies flow from Treasury as budgeted. For 2nd Priority cadres, the cost of the plan is over US\$28m. Less than US\$3m is available to fund this part of the plan, so over US\$25 extra is needed to train these cadres.

This illustrates some of the problems of replacement strategies. Given the scale of the problem in countries like Malawi, the cost implications of such strategies render them unaffordable. The scale of the efforts required combined with current rates of attrition present a very poor investment. It is financially impossible to replace staff lost through HIV/AIDS related attrition unless something is also done to stem the flow. The cost of training relative to healthcare worker salaries for all but the least trained, is such that retention of existing staff would be a much cheaper option. Funding commitments are more likely to be forthcoming if the replacement strategies are implemented in the context of a much wider-ranging series of strategies to improve the retention and productivity of health workers.

Even if the funding were available, the decreasing numbers of school leavers with adequate qualifications coupled with increasing career options for them, preclude a simple scaling-up of training efforts in many countries. 'The dual pressures of supply and demand in the education sector will lead to the collapse of the educational system.'⁶ More pragmatic and creative approaches will need to be developed.

Furthermore, even if resources were available, these replacement strategies will not produce an adequate response sufficiently quickly. Different cadres of worker take two years or more to train, and if trainers must be trained first or 'top up' courses offered to raise trainees' knowledge to a suitable level, then further years will be needed.

Increasing training capacity

Replacement strategies cannot be completely abandoned. More trained health workers are urgently needed and will continue to be for the coming decades. The excess morbidity and mortality described in this paper, combined with attrition due to the global labour market, underscores the need to produce more trained health workers.

Increasing training capacity could be achieved in the short-term by a number of strategies including importing additional tutors; contracting an institution from another country to deliver courses in Malawi; developing self-learning materials and distance learning courses; hiring additional rooms to reduce the need to wait for more lecture rooms to be built; taking day students to reduce costs and the need for student accommodation; doubling up courses so that teaching resources are maximally used; running evening and weekend 'sandwich courses' for those already working and so on.

MoHP is now discussing some of these strategies with the training institutions and the six-year emergency training plan is based on expanding trainee numbers through a variety of these approaches. The pre-service training plan envisages enrolling 2,829 students each year (including 800 HSAs and 560 Auxiliary Nurses).⁵³

Plans to expand training capacity must take into account the impact of HIV on the capacity of training institutions and the availability of trainees. Clinically qualified trainers are as hard to recruit and retain as other clinical staff and so the same push and pull factors need to be addressed within these institutions. The shortage of suitably qualified trainees must also be addressed. Entry requirements for the different pre-service training courses need to be revised downwards where possible for greater accessibility and faster production. This may require running 'top up' or 'preparation' courses to prepare under-qualified students for their training. In many cases changes in entry requirements will have to be negotiated with the various professional bodies as well as MoHP and the training institutions. Reducing entry

requirements may also have the benefit of reducing the expectations of those trained so they are less likely to leave seeking greener pastures.

Targeting training efforts

Ensuring training capacity is directed towards priority needs and cadres will require more effective links between Ministry of Finance (MoF), MoHP and training institutions in the financing (and hence prioritisation) of training. At present the training institutions are funded by subventions, which they negotiate directly with Treasury. The MoHP budget for training does not include pre-service training and hence MoHP is not automatically part of the negotiations about which cadres are produced and in what numbers by the training institutions. If MoHP is to take a strategic role in directing the production of HR for the health sector, it is essential that it plays a central role in the negotiations over training plans and budgets for the various training institutions.

Greater attention needs to be given to the content and relevance of pre-service training.⁷ High quality and relevant pre-service training is essential for effective service delivery and to avert the current unsustainable investments in continuous in-service training programmes. It is essential that trainees are properly prepared for their future working situations if they are to be able to work effectively and not be frustrated. Where staff are trained in tertiary institutions they tend to find it hard to adapt to work at the primary level.

Supplying sufficient field training and supervision in a situation of acute staffing crisis in all health facilities is not easy. Nonetheless, some institutions are attempting to design courses that will prepare trainees for the situations in which they will work. Malawi's College of Medicine has developed a doctors' training course, which is specifically aimed at training doctors to work in rural districts. The course has a substantial community medicine component, which is taught at their field site in Mangochi.

7.2 Non-replacement strategies

Replacement strategies alone will not be enough, however. There is, therefore, a need to consider urgently further development and testing of non-replacement organisational strategies to mitigate the effects of high attrition.

HR strategic planning and management

Improving the HR information systems in order to allow more strategic planning for HR for health is clearly a priority. Collecting information on all health personnel, not just certain cadres is 'key in the new environment of cross-training and skills mixing'.⁴¹

Many studies have commented on the urgent need for better information on HR and for detailed studies to understand the patterns and causes of attrition in different cadres, calling for good HR information systems and skills for HR planning.^{6,41,42} Quantitative data on the situation in Malawi should become available routinely if the recommendations contained in the HR Strategic Plan and JPHIEGO/USAID and SWAp reports are followed. Such information would allow deployment to be rationalized. MoHP is planning to move the trained community nurses out of district hospitals so that they can lead the community home-based care programme. The creation of the proposed Health Service Commission should help to speed up the replacement of lost staff, but it will not be allowed to appoint staff, merely to manage postings and promotions.

Occupational health

It is crucial that healthcare worker understanding of the means of transmission and risks of infection is assessed and, if necessary, improved as part of an occupational health programme. Misconceptions of the actual risks of infection could be addressed by an occupational health and Information Education and Communication (IEC) programme aimed at all healthcare workers and linked to supportive measures to protect their health. These initiatives need to include all cadres of workers, including cleaners, so that they are aware of the treatments available. Where ART is offered to health workers in Thyolo district, the uptake by cleaners is much less than by other cadres and it is suggested this is because they are less aware that treatment is available.¹⁹

MoHP is already planning a 'Care for the Carer' programme. All Ministries are now supposed to spend the equivalent of 2% of their budget on AIDS and many (including MoHP) did not last year. While this would not be sufficient to fund a full 'Care for the Carer' programme including IPT, PEP and other interventions and materials, it would certainly allow activities to start immediately in designing such a programme.

Injection safety and waste management aspects are included in the National Infection Prevention Standards, which were developed by a MoHP National Quality Assurance Task Force with assistance from JHPIEGO. These standards have been developed as part of a performance and quality improvement effort and have been introduced in seven Malawian hospitals. Although the project is still in its early stages, all hospitals have shown dramatic improvements in their infection prevention standards over the first year.

A new approach to public sector reform

If higher skilled workers are to be retained and the overall skills mix of Malawi's human resources for health is to be strengthened, then meaningful incentives must be developed that will compete with those offered elsewhere (internationally and locally in the non-government sector). The development of incentives packages and more flexible forms of working to retain or encourage the return of key cadres will require a much closer investigation of the reasons for attrition among specific groups and cadres. In the context of high HIV prevalence, a pension does not promise the economic security that it used to. Provision of ARVS might be a much more meaningful incentive to stay in public service.

A comprehensive approach across the public sector is required. The DHRMD's Concept Paper and Implementation plan to lead the public sector response are a highly encouraging initiative in this direction, and should lead to practical actions, such as review of the sick leave policy in Malawi.

Other reforms that will require action at the national level include the creation of a budget line item for HIV-related expenditure, so that its costs can be monitored and other budgets (especially the district ORT) will not be depleted. Review of pensions and disability arrangements would also need to be conducted by DHRMD. This is critical if incentives are to be restructured to retain staff and allow them to work more flexibly.

The provision of ART for health workers (and possibly other public sector workers such as teachers) is an issue that requires a national political debate. The African Union (AU) has declared 2004 the 'Year for Development of Human Resources with Special Focus on Health Workers'. This may offer an opportunity to raise and resolve these issues.

8. Conclusions

8.1 Policy issues and responses

This paper highlights that HIV/AIDS can intensify the existing dilemmas of shortfalls, losses and inequities in health sector personnel in southern Africa. The epidemic impacts on the long and short-term availability of healthcare workers and their recruitment, production and retention. It exacerbates the problems created by an international labour market by adding to or reinforcing many of the push factors, which drive workers to leave the sector or country.

The HR crisis in the Malawian health sector is acute, and while it may be seen as an extreme example in the region (largely because of the very low staffing levels historically and weak educational infrastructure in the country) it throws the issue of equity and the necessary health sector responses to the HIV/AIDS epidemic into sharp relief. While the situation in neighbouring countries may be less extreme, the problems and policy responses required will be the same.

Making better use of the staff currently available

If deployment is not managed strongly and very strategically, the tendency will be to reinforce inequities in access to health services through progressive understaffing of primary level, more remote facilities. There must be trade-offs between equity and efficiency in deployment, which will require careful debate. Incentives will have to be developed to encourage staff to serve in remoter and lower level facilities.

Effective performance management strategies are a priority if workers are to be effective and quality of care improved. This will require attention to supervision and support (an activity that has suffered with shortages of senior and middle level staff). It also requires that managers be empowered with rewards and sanctions to respond to good or poor performance. Speeding up public service placement and promotion procedures is key to permit rapid promotion of those with potential and avoid long-empty posts in critical positions.

Producing more staff

Increasing training capacity may be difficult and will take time – owing to many constraints in the education sector – but it must be planned for and invested in. In the meantime, regrading jobs and course entry requirements downwards for greater accessibility and faster production will allow a more rapid replacement of lost workers. Creation of new cadres appropriate to actual working situations (such as auxiliary nurses and district specialist doctors) should produce staff that are able to be more effective and are less likely to want to change their working situation. The question of appropriate professional standards will require political honesty and pragmatism. There must be debate with both the users and providers of health care to balance the rights of healthcare workers and the needs of potential recipients of services.

Recruiting and retaining more staff

Improving pay and terms and conditions of public sector health workers is vital if services are not to collapse. Traditional donor reluctance to fund recurrent costs and to support only short in-service training has distorted incentives and undermined the capacity of the health sector to reproduce itself.

Sick leave, retirement and disability policies must also be reviewed urgently to allow those

with valuable skills to be retained and work as far as they are able. Flexible working schemes for positive living for those who are HIV positive would provide an incentive for workers to reveal their status. Barriers to revealing one's status are unlikely to be overcome as long as workers feel they have everything to lose and nothing to gain.

Recruitment must be increased to take account of the faster flow through the organisation and shorter period of service of most staff. Streamlining public service appointment procedures will ensure that new graduates can be recruited quickly and may be less likely to be lost to the private sector.

Managing internal migration and deployment between the public and private sectors is also critical. If strategic leadership is not exerted over the sector as a whole, there is a real danger that the growth in funding for new services in the non-government sector will undermine public sector staffing and delivery of essential services to the population as a whole in many countries.

Occupational health schemes are a critical means of retaining staff. Improved infection prevention will reduce attrition due to mortality and morbidity, but also attrition due to fear. The costs of such schemes must be regarded as an essential investment in maintaining the health sector, not an optional extra.

Protecting the institution from the negative effects of attrition

Attention to strengthening institutional memory and knowledge management within the organisation is the essential counterpoint to the development of staff. Skills development and sharing through an emphasis on team working, plus effective management systems, strengthen the organisation to withstand the loss of individuals.

Resource allocation is key. The organisation must be able to monitor and manage the costs of HIV to the organisation and this requires separate budget lines for related expenditures such as funerals. It also requires that a health sector-wide perspective be taken in political debates about resource allocation. Otherwise there is a danger that political focus on drugs budgets and expenditure will lead to under-expenditures on key activities, such as infection prevention.

8.2 Research and evidence for planning

This paper has highlighted the difficulties in monitoring the dynamics of the HRH situation in a country. Better data is needed to understand the impact of HIV on HR for the health sector and to inform planning. The availability of disaggregated data that can link individuals to facilities and cadres is essential for strategic planning. Data on attrition of different cadres is required in order to determine future training and recruitment priorities. Samples should include rural and urban facilities and primary, secondary and tertiary facilities for each cadre (if relevant) in order to assess if there are differences in attrition rates between different kinds of cadres and facilities. This information is also required to inform the design of incentive packages to improve retention, particularly in rural areas.

Establishing the attrition rates and causes for different cadres will also help to identify where infection prevention and occupational health programmes should be targeted first. Quantitative data on attrition from different cadres will need to be complemented by qualitative data to establish the reasons for voluntary (as opposed to death or illness) attrition.

Qualitative data around knowledge about HIV and its transmission, and perceptions of risk, are also urgently needed to inform the content of IEC for health workers. It will be important to separate out the different cadres of staff when reviewing knowledge and understanding of risk and to study all those who are in contact with materials that may put them at risk. Further research is also required to understand why, in cases where healthcare worker knowledge of infection prevention procedures is good, these actions are not practised.

Qualitative data around personal expectations of one's job, career and life are also urgently needed to inform the development of appropriate incentives to attract and retain staff. Issues that will need to be assessed will include the priority given to level of remuneration vs security of employment; the need for money quickly or over the longer term; the relative importance of provision for sickness/death in service, etc. Related to the above, it will be important to investigate attitudes to testing and revealing one's status as a means of assessing what kind of changes would encourage testing and use of Occupational Health services.

Focus group discussions with communities and former patients have revealed they perceive nursing staff to make many value judgements about their patients.^{27, 28} It would be important to follow up such work with the potential users of health services to see if certain groups are deterred from attending because they think they would be discriminated against and if so, where they go for care. Similarly, in situations where staff are overworked, their decisions will determine who gets treatment and hence equity in access to care.

The impact of the introduction of new (or expanded) services in certain areas must be closely monitored to assess the effect on existing services. Routine monitoring of health services could be matched with data on deployment of staff and attrition to see if service delivery was reducing for certain services or area and if this could be matched to staff movements.

8.3 Follow up actions and advocacy

There is a need for immediate concerted action. It takes time to train workers formally (3–4 years for nurses; 5 years or longer for physicians); legal, policy, and administrative changes to improve the environment for training, deployment and retention of skilled health workers can take an even longer period.

Development partners need to develop clear long-term strategies for support to HR in southern Africa. HIV-ravaged economies are not sustainable. SWAps and Direct Budget Support (DBS) offer the possibility of long-term commitments to pooled support to salaries and other reforms through Public Sector Reform programmes. Commitments will need to be large-scale and long-term. It is accepted that the impact of HIV/AIDS is devastating and will continue for decades – the response must be on a similar scale and timeframe.

If equity is to be achieved (or at least future changes are to reduce rather than increase existing levels of inequity) then resource allocation decisions must allow the inclusion of voice from all those concerned. The early SWAps in other countries and many Poverty Reduction Strategy Papers (PRSPs) have been criticised for their inadequate consultation and therefore their inadequate understanding of poverty and equity issues.⁵¹ Nonetheless, these instruments offer the opportunity for a strengthened response at a sufficiently high level *if* they can be based on a better analysis of poverty, equity and the impacts of HIV. Resources are scarce and decisions about introducing and allocating new services are deeply political. The national debate on equity, HIV and health sector responses has begun in Malawi through discussion of the country study in the programme.¹⁹ Such debate is needed across all

countries in the region and at the regional level.

Adopting some of the measures outlined above will require political honesty and pragmatism. Responses to HIV cannot be discussed in the absence of an appreciation of the critical issues facing the health sector as a whole, and without confronting the reality of real resource shortfalls.

Resolving such issues involves a complex balancing of rights and priorities: the rights of individual health workers to career development; the rights of the rural poor to basic health services; the rights of all with HIV to the full continuum of care and support.³ Negotiating where priorities should lie must again be the result of open political debate involving all concerned parties. As Padarath et al conclude:

‘Notions of fairness imply a need for social debate on rights and obligations around movement and migration of health personnel, in relation to the personnel themselves, to their employers in low income and industrialised countries, to users of health services and to training and labour market institutions.’³

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