Retention of Health Care Workers in Low-Resource Settings: Challenges and Responses
Fatu Yumkella, IntraHealth International

The Problem of Low Retention
The number of health workers employed is an indicator of a country’s ability to meet the health care needs of its people, especially the poorest and most vulnerable. Resource-constrained countries committed to the Millennium Development Goals are facing up to the reality that shortages and uneven distribution of health workers threaten their capacity to tackle the HIV/AIDS pandemic, as well as the resurgence of tuberculosis and malaria. Worker shortages are linked to three factors: 1) decreasing student enrollment in health training institutions, 2) delays or freezes in the hiring of qualified professionals and 3) high turnover among those already employed.

Increasingly, health care managers and organizations are focusing attention on the problem of low retention, recognizing that these losses are costly, negatively affect continuity of care and raise the potential for turnover of remaining employees who suffer stress and burnout from taking on the additional burden of care. Based on an intensive literature review, this technical brief considers challenges and responses related to retention of health care workers, including the causes of turnover, actions to address turnover and emerging evidence on retention approaches. The brief considers retention primarily in the context of sub-Saharan Africa.

Turnover and Vacancy Rate
Turnover and vacancy rate are commonly used indicators for understanding recruitment and retention. Turnover records job moves, including transfers. Vacuum rate is the extent to which an organization has unfilled positions (Buchan and Calman, 2004) and the cause for this can be linked to internal as well as external factors. In general, worker flow data sets for developing countries are incomplete and inaccurate, and do not allow for precise measurements of turnover or vacancy rates. Still, available data indicate that many sub-Saharan African countries are experiencing high vacancy rates. Increasing vacancy rates over time almost certainly reflect high turnover.

The Causes of Turnover
For health managers and organizations to feel empowered to reduce uncontrolled turnover, it is important for them to understand the characteristics of workers who are at risk of moving, the patterns of movement—in-country versus out-migration—and the reasons why workers make a decision to leave. The rising trend in out-migration is of concern because these losses reduce a country’s labor supply and further weaken health system capacity to tackle priority health problems. Poor financial compensation and unsatisfactory working conditions are emerging as the most likely “push factors” causing workers to move between sectors or cross borders (Buchan and Calman, 2004, Schrecker and Labonte, 2004, Vujicic et al, 2004).

Poor financial compensation: Health workers are often willing to leave their posts for higher pay elsewhere. A pattern has emerged in which workers are seeking better paid jobs not only in developed countries but also in less poor countries within their regions. Physicians from Ghana and Zambia who emigrate to the United States can expect to earn up to 20 times more pay (Vujicic et al, 2004), while junior doctors from those countries can earn five times more by moving to Lesotho, Botswana or South Africa to work (Schrecker and Labonte, 2004). Out-migration for higher pay is assumed to be playing a part in the situation in Zambia, where only 30 of over 600 medical graduates trained between 1997 and 2000 were still working in the country’s public-sector services as of 2000 (Schrecker and Labonte, 2004). Salary outranked all other factors when health care professionals were asked what would make them remain in their home country. The majority in Cameroon (68%), Ghana (81%), South Africa (78%) and Uganda (84%) implied that an improvement in salary structures would be a good reason to stay (Vujicic et al, 2004).

Unsatisfactory working conditions: Many studies have shown, however, that financial compensation alone does not explain migration decisions (Buchan and Calman 2004, Vujicic et al, 2004). For example, South African health professionals are more likely to cross borders than Ugandan professionals, even though pay is lower in Uganda (Lehmann and Sanders, 2004). Turnover is often influenced by dissatisfaction with one or more attributes of the work environment, such as:

- Weak performance management, leadership and supervision structures (Huddart and Picazo, 2003)
- Inadequate equipment and supplies (Mathauer and Imhoff, 2005)

Vacancy Rate

- South Africa: One third of all public health posts unfilled (Lehmann and Sanders, 2004)
- Malawi: Vacancy rate of 36% for doctors in public health service (Schrecker and Labonte, 2004)
- Ghana: Vacancy rate for nurses doubled from 28% to 57% between 1998 and 2002 (Buchan and Dovlo, 2004)
Lack of recognition for good work (Naidoo, 2000)
- Stress due to heavy workload (Mathauer and Imhoff, 2003, Naidoo, 2000)
- Gender-related issues, including sexual harassment and gender-based discrimination (Standing, 2000, Standing and Baume, 2000)
- Limited opportunities for career development and advancement (Buchan and Dovlo, 2004)

**Actions to Address Turnover**

Health care managers and organizations have tried a variety of approaches designed to retain valued employees through financial incentives and non-financial incentives, including addressing gender issues and safety concerns.

**Financial incentives:** While still relatively small in number, there are examples available of the use of financial incentives to address the low-wage situation in resource-constrained countries. The South Africa Department of Health introduced a ‘rural and scarce skill’ allowance in 2003 to attempt to curtail the alarming number of health workers opting to work in other countries (Lehmann and Sanders, 2004). In 2000, Ghana implemented an Additional Duty Hours Allowance scheme intended to help curb out-migration of doctors (Dovlo and Martineau, 2004). Zambia’s successful proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria, Round 4, allowed the government to subsidize salaries by about 50% for 972 doctors and clinical officers and 4,292 nurses as a form of motivation for workers so that ARV scale-up targets will be achieved.

**Non-financial incentives:** Given the difficulty of providing financial incentives, governments in some resource-constrained countries have explored other avenues to offer in-kind benefits to professional workers. Malawi is among very few sub-Saharan countries to provide housing facilities (Huddart and Picazo, 2003). Ghana distributed cars but gave priority to doctors who were members of the medical association (Buchan and Dovlo, 2004). A work improvement initiative in Tanzania attempted to link good management practices, worker satisfaction and retention; two districts received support under the Tanzania Essential Health Project (TEHIP) to install two-way radios at selected facilities to improve communications and reduce time lost to travel (De Savigny et al, 2004). Swaziland and Malawi responded to complaints about career opportunities being biased in favor of doctors by revising career structures to improve progression opportunities for all cadres (Dovlo and Martineau, 2004). The Ghana Medical Association is spearheading proposals for shorter locally-based post-graduate medical training to provide career advancement and foster retention (Dovlo, 2004). Namibia has developed a comprehensive policy and legislative framework to address workplace discrimination against people living with HIV/AIDS (FHI, 2005).

**Emerging Evidence on Retention Approaches**

The literature reviewed for this paper contains a recent number of suggested approaches for improving retention and examples of approaches under implementation. However, few of these approaches have been evaluated and much of the available evidence about the variables that affect retention is anecdotal. A multi-country study conducted by GTZ suggests that refresher training opportunities led to high retention in Zambia, while in Ethiopia a mix of continuing education, provision of housing and establishment of clear career structures is claimed to have resulted in improved job satisfaction and retention (Mathauer and Imhoff, 2003). Preliminary findings suggest that as a result of South Africa’s ‘rural and scarce skill’ allowance, more health professionals will likely alter their short-term career plans in favor of staying in post (Lehmann and Sanders, 2004). Researchers have concluded that Ghana’s Additional Duty Hours Allowance has slowed out-migration of doctors and resulted in the shift of doctors from the private to the public sector (Dovlo and Martineau, 2004). In Uganda there is a belief that private not-for-profit organizations are losing providers to the public sector because of increased compensation in the public sector (Capacity Project, 2005). A convincing case showing a link between financial compensation, motivation and retention is drawn from a study targeting lower-level health workers in Gongola State, Nigeria, where male community health workers (CHWs) with relatively higher remuneration stayed on average for 3.25 years compared to two years for male CHWs with lower pay (Bhattacharya et al, 2001).

**Conclusions**

While the literature contains evidence-based examples of the magnitude of and causes for turnover, evidence-based information on tested approaches to improve retention remains scarce. Notwithstanding this limitation, anecdotal findings suggest health care managers and organizations should examine three opportunity areas—financial compensation, improving the work environment and strategies to manage migration—in determining which approach or combination of approaches will deliver the greatest potential impact on maintaining a qualified workforce.

**Financial compensation:** The literature suggests that retention solutions for resource-constrained countries should address the challenge of low wages if health goals are to be achieved. Skeptics may ask “What else is new?” or “What about sustainability?” As witnessed in Zambia, what is new is the emerging shift among donors toward providing funding support to cover wages in addition to training and technical activities. In consideration of the sustainability issue, WHO has proposed that a proportion of all donor funding be allocated to the health workforce with no stipulation about the way the funds are to be spent (WHO, 2004). Countries would then have a choice as to whether to spend part of the funds for salary supplements.
Improving the work environment: Retention solutions must also seek to enhance the work environment, which is often a significant ‘push factor’ and cause of job dissatisfaction. The literature suggests that health workers are more likely to remain with organizations that offer a combination of benefits to boost job satisfaction. These may include:

- Non-financial incentives (e.g., housing opportunities for training)
- Opportunities for career advancement
- A constructive work environment, including supportive supervision
- Strategies to address gender-related issues and safety concerns related to HIV/AIDS infection.

Given resource limitations, many health care managers and organizations will need to choose which areas of the work environment to address first in order to yield quick and sustainable results. In developed countries, more emphasis is increasingly placed on retention approaches that make employees feel valued and supported. For example, employees surveyed from 240 US-based organizations indicate that “trust, concern and support from the supervisor” is a key driver of stay or leave decisions (Levin and Thornton, 2003). The Sunderland UK national health flexible organizations indicate that “trust, concern and support from the supervisor” is a key driver of stay or leave decisions (Levin and Thornton, 2003). The Sunderland UK national health flexible organizational policy, which provides for special leave, career breaks and flex-time, is said to have resulted in reduced absenteeism and an increased number of nurses choosing to return to work after having children (Standing and Baume, 2000).

**Strategies to manage out-migration:**
Governments are urged to combine policies for worker retention with policies that will buffer the effect of turnover, especially turnover due to out-migration. Such policies include: 1) alternative staffing strategies to reduce the overdependence on cadres more likely to migrate, 2) compulsory and well-managed community service and bonding schemes tied to an incentive scheme, 3) innovative contracting arrangements, including ‘secondment arrangements’ that will convert to financial gain for valued employees and 4) creative approaches aimed at improving productivity of present health care workers, which may prove far less expensive than persistently having to recruit, prepare and deploy new ones (Buchan and Dovlo, 2004, Dovlo and Martin, 2004, Dovlo, 2004).

Developing countries planning to introduce or strengthen worker retention approaches can build the evidence base on retention by:

- Gathering data from existing workers as well as from workers who have moved between sectors or left the health sector to determine factors that cause workers to make a decision to leave
- Designing retention approaches based on the data gathered
- Tracking which retention approaches work best through sound monitoring and evaluation systems.

### Retention Approaches and Approaches to Manage Migration—Case Examples from sub-Saharan Africa

#### RETENTION APPROACHES

**Financial Incentives**
- Zambia: Increased salaries for doctors, lab technicians and nurses to enhance ARV scale-up (Global Fund, 2005)
- Ethiopia: Increasing per diem (Global Fund, 2005)
- Namibia: 30% overtime allowance for nurses and generous end-of-service payments (Martineau, 2002)
- Ghana: Additional Duty Hours Allowance, especially for physicians (Dovlo and Martin, 2004)
- South Africa: Rural and scarce skill allowance (Lehmann, 2004).

**Non-Financial Incentives**
- Zambia: Refresher training (Mathauer and Imhoff, 2003)
- Ethiopia: Mix of continuing education, housing provision and establishment of clear career structures (Mathauer and Imhoff, 2003)
- Tanzania: Improved facility-related communications and transportation (DeSavigny, 2004)
- Botswana, Namibia: Established set of benefits for nurses, including housing, car loans and medical allowance (Martineau, 2002)
- Ghana: Car and housing loan schemes for rural-based professionals (Dovlo and Martin, 2004).

**Career Advancement Opportunities**
- Ghana: Proposal for more opportunities for two-year post-graduate training program (Dovlo and Nyontor, 1999)
- Ghana, Namibia: Relaxing eligibility criteria for promotion (Huddart, 2003)
- Swaziland, Malawi: Improved progression opportunities for all cadres (Dovlo and Martin, 2004).

**Workplace Safety/HIV/AIDS Care**
- Namibia: Capacity building of local NGOs and institutions to provide a comprehensive HIV/AIDS workplace package to private, public, state and local government sectors (FHI, 2005)
- Tanzania: Limited home ownership schemes introduced by Kahama Mining Corporation to decrease risky behavior resulting from separation from families (WHO, 2003).

### APPROACHES TO MANAGE MIGRATION

**Alternative Staffing Arrangements**
- Tanzania: Clinical officers, deployed at all levels, trained to perform voluntary surgical contraception, which was previously done exclusively by doctors (Dovlo, 2004)
- Kenya: Clinical officers deployed at all levels, including dispensaries (Dovlo, 2004)
- South Africa: Task team commissioned to develop guidelines for Doctor Assistant program (Lehmann and Sanders, 2004)
- South Africa: Suggestion to increase proportion of black medical students, who are less likely to emigrate (Dovlo and Martin, 2004).

**Community Service and/or Bonding Schemes**
- Ghana: Proposal to reintroduce three to five year bonding schemes for doctors (Dovlo, 2003)
- South Africa: One year of compulsory community service for doctors and dentists on completion of training (Reid, 2003).

**Creative Contracting Arrangements**
- South Africa: Through agreement between South Africa and UK, South African professionals work in UK National Health Service and UK staff serve in rural parts of South Africa (Braine, 2005)
- Zambia: Explored de-linking health commission from civil service so that staff could be hired on renewable contract allowing for higher salaries (Huddart, 2003)
- Ghana: Allows public-sector pharmacists to work for private for-profit sector (Dovlo and Martin, 2004).

<table>
<thead>
<tr>
<th>Country</th>
<th>Case Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>Proposal for more opportunities for two-year post-graduate training program (Dovlo and Nyontor, 1999)</td>
</tr>
<tr>
<td>Ghana</td>
<td>Proposal to reintroduce three to five year bonding schemes for doctors (Dovlo, 2003)</td>
</tr>
<tr>
<td>South Africa</td>
<td>Suggestion to increase proportion of black medical students, who are less likely to emigrate (Dovlo and Martin, 2004).</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Limited home ownership schemes introduced by Kahama Mining Corporation to decrease risky behavior resulting from separation from families (WHO, 2003).</td>
</tr>
<tr>
<td>Zambia</td>
<td>Increased salaries for doctors, lab technicians and nurses to enhance ARV scale-up (Global Fund, 2005)</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Increasing per diem (Global Fund, 2005)</td>
</tr>
<tr>
<td>Namibia</td>
<td>30% overtime allowance for nurses and generous end-of-service payments (Martineau, 2002)</td>
</tr>
<tr>
<td>Ghana</td>
<td>Additional Duty Hours Allowance, especially for physicians (Dovlo and Martin, 2004)</td>
</tr>
<tr>
<td>South Africa</td>
<td>Rural and scarce skill allowance (Lehmann, 2004).</td>
</tr>
</tbody>
</table>
Sources
15. Global Fund to Fight AIDS, Tuberculosis and Malaria, Round 5 Proposal guidelines
18. Lehmann U, Sanders D. Human Resources for Health in South Africa: Background and overview paper for JLI National Consultation, 3-4 Sep 2004; Cape Town, South Africa
21. Martineau T, Decker K, Budred P. Briefing note on international migration of health professionals: leveling the playing field for developing countries. Liverpool, UK: Health Sector Reform Research Work Programme, Liverpool School of Tropical Medicine (LSTM), 2002.