

# GUIDELINES: INCENTIVES FOR HEALTH PROFESSIONALS













## Guidelines: Incentives for Health Professionals

Copyright © 2008 by: International Council of Nurses, International Pharmaceutical Federation, World Dental Federation, World Medical Association, International Hospital Federation, World Confederation for Physical Therapy.

All rights, including translation into other languages, reserved. No part of this publication may be reproduced in print, by photostatic means or in any other manner, or stored in a retrieval system, or transmitted in any form, or sold without the express written permission of the above mentioned organisations. Short excerpts (under 300 words) may be reproduced without authorisation, on condition that the source is indicated.

## **TABLE OF CONTENTS**

Contributor	4
Acknowledgements	4
Foreword	5
Executive summary	7
Introduction	9
A typology of incentives in health care	11
Financial incentives	13
Wages and conditions	13
Performance-linked payments	14
Other financial incentives	16
Non-financial incentives	17
Career and professional development	18
Workload management	19
Flexible working arrangements	20
Positive working environments	21
Access to benefits and supports	22
What does an effective incentive scheme look like?	25
Developing an incentive package	31
Conclusion	33
Appendix	35
References	37

## CONTRIBUTOR

Bridget Weller has extensive experience in public sector health and community services policy, funding and workforce development. She has more than 15 years' experience in a range of public sector policy and management positions. Her areas of interest include workforce development and strategy, acute health services, rural and regional health services delivery, health funding policy, demand management and children's services. She holds a Bachelor of Arts (Honours) from Monash University, Melbourne, an Executive Master of Public Administration (Australia and New Zealand School of Government, University of Melbourne), as well as formal qualifications and experience in professional writing and editing. Bridget now works as a consultant and writer in Edinburgh, United Kingdom.

## **ACKNOWLEDGEMENTS**

These guidelines were commissioned by the Global Health Workforce Alliance (GHWA), a partnership hosted and administered by the World Health Organization (WHO), as part of its work to identify and implement solutions to the health workforce crisis. The views and/or opinions expressed therein do not necessarily reflect the views of GHWA or the WHO but remain solely those of the author(s). It is a joint initiative of the International Council of Nurses, International Hospital Federation, International Pharmaceutical Federation, World Confederation for Physical Therapy, World Dental Federation and World Medical Association. It is part of a larger initiative to promote work settings that ensure the health, safety and personal well-being of staff, support the provision of quality patient care and improve the motivation, productivity and performance of individuals and organisations, thereby strengthening health systems and improving patient outcomes.

Further information about the project partners is provided in the Appendix.

The group acknowledges the support of the International Council of Nurses, which managed and coordinated the project on their behalf.

#### **FOREWORD**

The growing gap between the supply of health care professionals and the demand for their services is recognised as a key issue for health and development worldwide. Policy-makers, planners and managers continue to seek effective means to recruit and retain staff. One way to achieve this is to develop and implement effective incentive schemes.

The World Health Organization report *Working together for health* (2006a) estimated a global shortage of 4.3 million health workers, including 2.4 million physicians, nurses and midwives. Translated into access to care, the shortage means that over a billion people have no access to heath care. Many countries are affected by the shortage and 57 have been identified as 'in crisis'.

An effective workforce strategy will address the three core challenges of improving recruitment, improving the performance of the existing workforce, and slowing the rate at which workers leave the health workforce (WHO 2006a). Incentives can play a role in all these areas, providing a means by which health systems can attract and retain essential and highly sought-after health care professionals. Effective incentive schemes also help build a better motivated, more satisfied and better performing workforce.

Some countries have already implemented comprehensive incentive schemes (Dambisya 2007; Zurn *et al.* 2005; Langenbrunner & Xingzhu Lui 2004; ICN *et al.* 2008 unpublished). For others, there is further work to be done, requiring commitment from governments, employers and managers to develop schemes that are adequately funded, effectively targeted and, most importantly, respond to the needs and priorities of health service professionals and enable the delivery of quality care.

Innovative thinking and research into the effectiveness of incentive schemes must continue to inform development in decision-making. Improved monitoring and documentation, as well as sharing of good practices and lessons learned are crucial if we are to continue to develop better health workplaces, strengthen the health workforce and improve patient safety and outcomes.

International Council of Nurses
International Pharmaceutical Federation
World Dental Federation
World Medical Association
International Hospital Federation
World Confederation for Physical Therapy

#### **EXECUTIVE SUMMARY**

The growing gap between the supply of health care professionals and the demand for their services is a critical issue facing governments, managers and professionals seeking to improve international health and development. There are a number of complex and interrelated factors that contribute to the ongoing workforce shortage globally, including poorly resourced health systems, unsatisfactory working conditions and inadequate human resources management.

It is in this context that policy-makers and managers have turned their attention to using incentives to improve the recruitment, motivation and retention of health care professionals. Incentives are important levers that organisations can use to attract, retain, motivate, satisfy and improve the performance of staff. Their use is common in public and private sector organisations across all work settings. They can be applied to individuals, groups of workers, teams or organisations and may vary according to the type of employer (e.g. nongovernmental organisation, public or private). Incentives can be positive or negative, financial or non-financial, tangible or intangible.

Financial incentives are integral to the employment contract. Financial incentives involve "direct monetary payment from employer to employee" (Kingma, 2003 p.3), such as wages, bonuses or loans. They fall into three main categories. First, there are the basic wages and conditions that are offered to staff related to their role description and work classification. Second, there are additional payments or bonuses that are linked to the achievement of performance outcomes, with access to the payment either specified in advance or retrospectively assessed as part of a staff review or supervision process. Third, there may be additional financial incentives that are not directly related to the performance of the person's duties, such as access to financial services or fellowships.

Literature on the application of incentive schemes in health care acknowledges that financial incentives alone are not sufficient to retain and motivate staff. Research has confirmed that non-financial incentives play an equally crucial role. This is the case both in well resourced countries where staff are able to maintain a high standard of living, as well as in relatively poorly resourced nations.

Non-financial incentives include provision of work autonomy, flexibility in working time and recognition of work. Non-financial rewards are particularly vital for countries and organisations where limited funding constrains their capacity to provide financial rewards. Nevertheless, non-financial approaches require a significant investment of time and energy, as well as commitment across the whole organisation. They should be developed through consultative planning and aligned with strategic objectives, local and personal norms and values, and circumstances. While the importance and potential of non-financial incentives is widely recognised, it is important to note that there are limitations to what can be achieved with non-financial incentives alone.

The development and implementation of incentive schemes in health care is an emerging field. A wide variety of measures have been implemented using financial and non-financial approaches linked to various performance outcomes and targeting a range of health care professionals.

As yet, rigorous evaluation of the outcomes of these schemes is in relatively short supply. Nevertheless, the research that has been conducted among health professionals suggests that effective incentive schemes share the following characteristics. They:

- have clear objectives;
- are realistic and deliverable;
- reflect health professionals' needs and preferences;
- are well designed, strategic and fit-for-purpose;
- are contextually appropriate;
- are fair, equitable and transparent;
- are measurable; and
- incorporate financial and non-financial elements.

As noted above, the most successful incentive packages are those that are tailored to the particular context in which they will be implemented. There can be no one-size-fits-all approach to the development of a package that will meet the needs of a particular organisation or group of health professionals. However, a systematic approach can be proposed and adapted to local needs.

Incentives, both financial and non-financial, provide one tool that governments and other employer bodies can develop to sustain a workforce with the skills and experience to deliver required care. This demands not just political will and continued hard work, but an acknowledgement by all key stakeholders of the commitment, skills and health benefits provided by health professionals worldwide.

A health service's greatest asset is its staff. The implementation of effective incentive packages represents an investment through which that vital asset can be protected, nurtured and developed.

## **INTRODUCTION**

This paper was commissioned by the health professions with the support of the Global Health Workforce Alliance to provide an overview of the use of incentives for health care professionals. It describes some of the different approaches taken and presents characteristics shared by effective incentive schemes. The paper also suggests some approaches to their development and implementation.

The growing gap between the supply of health care professionals and the demand for their services is a critical issue facing governments, managers and professionals seeking to improve international health and development. The World Health Organization (2006a) estimates that over 4 million health workers will be needed to meet the shortfall, including 2.4 million physicians, nurses and midwives. It reports that 57 countries are defined as having a critical shortage; of these, 36 are in sub-Saharan Africa. In a number of countries underemployed and unemployed health professionals exist alongside shortages in the number of available personnel, contributing to the labour shortage.

This has significant implications for care provision and achieving improvements in health status. The attainment of the United Nations Millennium Development Goals by 2015 and the success of efforts to address HIV/AIDS, malaria, tuberculosis and other diseases are being threatened. In Tanzania, the size of the workforce must triple and in Chad quadruple by 2015 to meet priority health needs (WHO & World Bank 2003). In some countries, many communities have limited or no access to health care service, particularly in rural and remote areas, because of the workforce shortage. Meanwhile, lack of professional staff has contributed to ward and at times hospital closures in industrialised countries (Kusserow 1989).

Many countries report vacant posts for health care professionals, yet underemployment of trained health care professionals as a result of poor salary and working conditions, geographic barriers and other factors. In 2002, for example, the American Hospital Association estimated that in the United States (USA) alone there were 126,000 nursing vacancies or a rate of 11% [Muliira (n.d.)]. Estimates of the shortage of physicians in the USA range from 51,000 to 228,000 (Croasdale 2005). The Canadian Society of Hospital Pharmacists found that 63% of hospitals surveyed in British Columbia had pharmacy vacancies and estimated a 10% vacancy rate across that province (Naumann 2004). South Africa had over 30,000 vacant nursing posts in 2003 and anecdotal evidence suggests an even higher number of unemployed nurses (Zurn et al. 2005).

There are a number of complex and interrelated factors that contribute to the ongoing workforce shortage globally. These include:

- Insufficiently resourced and neglected health systems.
- Poor human resources (HR) planning and management practices and structures.
- Unsatisfactory working conditions characterised by:
  - heavy workloads;
  - lack of professional autonomy;
  - poor supervision and support;
  - long working hours;
  - unsafe workplaces;
  - inadequate career structures;
  - poor remuneration/unfair pay;
  - o poor access to needed supplies, tools and information; and
  - o limited or no access to professional development opportunities.
- The Impact of HIV/AIDS.
- Internal and international migration of workers.

(WHO 2006a; Caldwell & Kingma 2007)

Many factors, including the complexity and challenges involved in providing and managing competing demands in patient care, can contribute to job dissatisfaction and low motivation among health care professionals. Such factors can also have a negative impact on the retention of staff and, importantly, the quality of care they provide.

According to Zurn *et al.* (2005, p.3) "motivation at work is believed to be a key factor in the performance of individuals and organisations and is also a significant predictor of intention to quit the workplace." Mathauer and Imhoff (2006) emphasize:

"Low motivation has a negative impact on the performance of individual health workers, facilities and the health system as a whole. Moreover, it adds to the push factors for migration of health workers, both from rural areas to the cities and out of the country. It is therefore an important goal of human resources management in the health sector to strengthen the motivation of health workers..."

Zurn *et al.* (2005) stress that policy-makers and managers must strive to recruit people to the workplace and encourage them to stay in their posts and perform to an acceptable standard. It is within this context that policy-makers, planners and managers have turned their attention to using incentive systems to improve the recruitment, motivation and retention of health care personnel.

## A TYPOLOGY OF INCENTIVES IN HEALTH CARE

The delivery of health services is complex and often demanding. Health professionals face high levels of responsibility; high expectations from patients, communities and employer organisations; and sometimes competing clinical and organisational challenges to be managed. This requires a range of skills, from the interpersonal to the highly technical and specialist. At the same time, health professionals are the health sector's key resource. The health workforce absorbs between 40% to 90% of health service budgets. Health systems have tended to consider this a cost, not an investment.

As Hongoro and Normand (2006 p.1310) have pointed out, labour markets adhere to economic theory in that "a health worker will accept a job if the benefits of doing so outweigh the opportunity cost". The benefits are the incentives, financial and non-financial, that make a health professional want to continue to participate in the workforce. The risks, frustrations and opportunity costs provide the disincentives.

Incentives are important levers that organisations can use to attract, retain, motivate, satisfy and improve the performance of staff. Their use is common in public and private sector organisations across all work settings. They can be applied to individuals, groups of workers, teams or organisations and may vary according to the type of employer (e.g. nongovernmental organisation, public or private). Incentives can be positive or negative, financial or non-financial, tangible or intangible. Financial incentives involve "direct monetary payment from employer to employee", (Kingma, 2003 p.3) such as wages, bonuses and loans. Non-financial incentives include provision of work autonomy, flexibility in working time and recognition of work (Zurn *et al.* 2005; Hongoro & Normand 2006; Kingma 2003; Caldwell & Kingma 2007).

The World Health Organization defines incentives as "all the rewards and punishments that providers face as a consequence of the organizations in which they work, the institutions under which they operate and the specific interventions they provide" (WHO 2000 p.61). Mathauer and Imhoff (2006) define an incentive as "an available means applied with the intention to influence the willingness of physicians and nurses to exert and maintain an effort towards attaining organizational goals". More tightly defined, an incentive is "an explicit or implicit financial or non-financial reward for performing a particular act" (Saltman quoted in Zurn *et al.* 2005 p.14). Incentives can also be viewed as the factors and/or conditions within health professionals' work environments that enable, encourage and motivate them to stay in their jobs, in their profession and in their countries. Table 1 below illustrates the various types of incentives available.

Table 1. Types of incentives

Financial	Non-financial
Terms and conditions of employment	Positive work environment  Work autonomy and clarity of roles and responsibilities  Sufficient resources  Recognition of work and achievement  Supportive management and peer structures  Manageable workload and effective workload management  Effective management of occupational health and safety risks including a safe and clean workplace  Effective employee representation and communication  Enforced equal opportunity policy  Maternity/paternity leave  Sustainable employment  Flexibility in employment arrangements  Flexible work hours  Planned career breaks  Support for career and professional development  Effective supervision  Coaching and mentoring structures  Access to/support for training and education  Sabbatical and study leave  Access to services such as  Health  Child care and schools  Recreational facilities  Housing  Transport  Intrinsic rewards  Job satisfaction  Personal achievement  Commitment to shared values  Respect of colleagues and community  Membership of team, belonging

Source: Adapted from Buchan *et al.* (cited in Adams & Hicks 2001); Caldwell & Kingma 2007; Dambisya 2007.

## **FINANCIAL INCENTIVES**

Financial incentives are integral to the employment contract. Hongoro and Normand (2006 p.1311) quote a study which found that "at least half of the variation in turnover can be attributed to financial incentives".

Langenbrunner and Xingzhu Liu (2004) describe the resource allocation and funding mechanisms and the relationships that underlie these approaches, including the

- reimbursement approach, under which providers are funded retrospectively for services;
- contract approach, involving "some kind of prospective agreement"; and
- integrated approach, which "combines the role of purchasers and provider under a single institutional umbrella".

Within these funding frameworks, financial incentives provided to health workers fall into three main categories. First, there are the basic wages and conditions that are offered to staff related to their role description and work classification. Second, there are additional payments or bonuses that are linked to the achievement of performance outcomes, with access to the payment either specified in advance or retrospectively assessed as part of a staff review or supervision process. Third, there may be additional financial incentives that are not directly related to the performance of the person's duties, such as access to financial services or fellowships.

## Wages and conditions

The level of wages paid to workers is a crucial element of attracting people to consider a career in health service delivery. It also provides a key means of competing with other potential employers in domestic and international labour markets.

The project appraisal document of a World Bank health sector support project notes that "the exodus of health workers out of [Malawi's] civil service ... was precipitated largely by the erosion of salaries" (Record & Mohiddin 2006). The principles of equal opportunity and 'equal pay for work of equal value' within the national context has proven to be significant in the recruitment/retention of health care professionals (Kingma 2006). Satisfactory salary and allowance and perception that salaries are fair when compared to other colleagues and peers at the local level support the retention of health workers and reduce the pull of international employment opportunities.

Offering a basic level of adequate remuneration has become a key element to securing a workforce in a number of countries across the world:

#### **Examples**

- In October 2004, Malawi launched a major Sector Wide Approach (SWAp), pooling funds from major donors into the Ministry of Health Budget. As part of SWAp, salaries at most grades of nurse and physician rose 40% to 60% (Record & Mohiddin 2006).
- In 2006, the Ministry of Health in Ghana enhanced salaries through "consolidation of actual salary with allowances earned through extra duties performed in the course of the month e.g. overtime". (ICN et al. 2008 unpublished). The strategy applies to dentists, pharmacists, physicians, registered midwives, registered nurses and physiotherapists. It allows workers to obtain a larger social security fund at the end of their working life. So far, the impact has been positive and attrition rates are decreasing.

The introduction of additional 'extraneous' and 'non-practising' allowances for physicians in Kenya meant that 'wages of doctors de facto tripled' is cited as successfully resulting in the availability of 500 additional physicians (Mathauer & Imhoff 2006 p.6).

 One country in southern Africa has reported increasing overtime rates from 15% to 30% to help improve retention of practising nurses (ICN et al. 2008 unpublished).

## Performance-linked payments

In some cases, bonuses are paid in the form of a premium for additional service or service in a particular type of work or location. These mechanisms have been employed extensively where there has been 'market failure' in the distribution of health workers. Commonly, bonuses are a means to attract workers to practise in rural areas, where lack of organisational and community infrastructure, high demand for services and lack of professional opportunities and supports can act as disincentives for health workers to practise there. A study of oral health professionals in rural and remote Western Australia found, for example, that the most common reason for leaving rural practice was to access children's educational facilities (Kruger & Tennant 2005).

Incentives have also been applied to address retention issues where there is an ageing workforce. Organisations use an additional payment or pay increment for which the worker will become eligible after a specified length of service. This incentive aims to promote continuity of care, reduce the number of new recruits required and retain the more experienced workers in the workforce (see examples below).

Increasingly, though, access to financial bonuses is linked to the achievement of specified individual or corporate goals. In some cases, particularly in health systems using a 'purchaser-provider' model, performance requirements are incorporated into the funding mechanism itself. Failure to deliver on these targets may result in funding being adjusted or reallocated to other, better performing organisations, group practices or individuals. In other cases, a set quantum of services will be funded through competitive tender. In these cases, regulatory frameworks and other quality management mechanisms are established to ensure that the incentives that maximise efficiency do not adversely affect the quality of service provided.

Bonuses paid to individual health professionals will vary significantly according to the type of job and the duties the individual has. Performance incentives are often incorporated into the contracts of senior consultants and managers; the incentives reflect overall organisational outcomes and, in turn, the greater capacity and personal responsibility of consultants and managers to influence those high level outcomes. Where performance requirements are instituted for workers whose primary responsibilities are direct patient care or ancillary support, performance requirements are more likely to be related to an individual's work performance and professional development as assessed by a supervisor.

Although usually framed in terms of organisations or individuals, incentive schemes may also be applied at the team level. Here, members share in rewards when achieving outcomes for which they are jointly responsible. Because all parties have a shared interest in improving overall performance, this approach has a number of potential advantages. It promotes systematic improvement in the way teams work, creating positive relationships of mutual support. For this reason, some health professionals have expressed less distrust of team-based approaches to incentives (Kingma 2003). Some groups of health workers, citing an environment characterised by 'envy', have suggested that "individual efforts are futile and team efforts are necessary to reach further". This led the authors of the study to conclude that "it may be necessary to build performance management schemes on group identities" (Mathauer & Imhoff 2006 p.13). These approaches are most likely to be worthwhile in areas such as the management of chronic disease, where multidisciplinary models of care delivery have proven effective (Chaix-Couturier *et al.* 2000).

#### **Examples**

- In one country in Africa, nurses and clinical officers posted to remote health facilities in areas of high HIV prevalence are given a 31% bonus if they stay on for three years (ICN et al. 2008 unpublished).
- Uganda introduced cost-sharing arrangements to provide health workers with incentive payments ranging from 50% to 150% of salary. Staff reported that they spent more time at work and felt more valued, with quality of services improving as a result (Kipp et al. 2001).

- In Cambodia, health professionals were offered bonuses in return for "strict adherence to internal rules" (Disease Control Priorities Project 2006; Soeters & Griffiths 2003) in order to increase work hours and reduce the number of staff seeking salary supplement directly from patients. A drop in family health costs of up to 40% was reported as a result.
- South Africa also introduced a 'scarce skills allowance' ranging from 10% to 15% of annual salary, depending on occupational category. The allowance applies to more than 60,000 health professionals, regardless of work location. Eligible professions include medical officers, dentists, medical and dental specialists, pharmacists, radiographers, various types of therapists and nurses specialising in the areas of operating theatre technique, critical or intensive care and oncology (Reid 2004). However, the scheme proved counterproductive among enrolled and specialist nurses who were excluded from eligibility.

#### Other financial incentives

Financial incentives may also take the form of subsidies for transport, accommodation or other living expenses. They can be particularly effective in areas where these items are in short supply, or where they have been identified as particular issues for recruitment and retention. Financial incentives that are not cash-based can sometimes present a more viable option for organisations, since they do not have a direct impact on cash flow.

#### **Examples**

- In Ghana, the Ministry of Health offers health care professionals a tax waiver on the purchase of new cars in order to make them more affordable. The cost of the car is deducted from an individual's salary over the course of a five- to seven-year period. The initiative has had a positive impact. (ICN et al. 2008 unpublished).
- In an effort to address a high level of migration among graduates, one island nation reports that students who remain living and working in the country do not pay interest on their student loans. Interest accrues, however, should they leave the country (ICN et al. 2008 unpublished).
- An African nation has introduced a private practice initiative under which health professionals can use hospital facilities to see patients. A percentage of patient charges are paid to the hospital; the balance is retained by the practitioner (ICN et al. 2008 unpublished).
- One Caribbean nation has introduced relocation allowances to assist staff in moving to the island, followed by short term housing subsidies to help them secure ongoing accommodation. (ICN et al. 2008 unpublished).

## NON-FINANCIAL INCENTIVES

Literature on the application of incentive schemes in health care is almost universal in acknowledging that financial incentives alone are not sufficient to retain and motivate staff. A range of empirical research projects involving both staff surveys and qualitative focus group discussions have confirmed that non-financial incentives play an equally crucial role. This is the case both in well resourced countries where staff are able to maintain a high standard of living, as well as in relatively poorly resourced nations.

For both types of country, non-financial incentives are valued not just for the direct benefit provided to individual health professionals, but as a means by which employing organisations can recognise and acknowledge employees' contributions and commitment, as well as the challenges the employees face in their daily lives.

Non-financial rewards are particularly vital for countries and organisations where limited funding constrains their capacity to provide financial rewards. Nevertheless, non-financial approaches require a significant investment of time and energy, as well as substantial commitment across the whole organisation or health system. Dambisya 2007), in his comprehensive review of non-financial incentives in the health sector in east and southern Africa, found evidence that "the successful application of non-financial incentives is associated with

- proper consultative planning;
- long-term strategic planning within the framework of health sector planning;
- sustainable financing mechanisms, e.g. national budgets; and
- donor funding and national budgets through a sector-wide approach (SWAP) or general budget support, rather than project-specific funding."

Developing effective non-financial rewards must be closely aligned with strategic objectives, local and personal norms and values, and circumstances. Failure to recognise this value system risks alienating the health professionals it was intended to attract by creating a disincentive and demotivating effect.

While the importance and potential of non-financial incentives is widely recognised, it is important to note that there are limitations to what can be achieved with non-financial incentives alone. As noted by Mathauer and Imhoff (2006) in their study of non-financial incentives for health staff in Benin and Kenya,

"Non-financial incentives and HRM/QM<sup>1</sup> tools are not a magic bullet that solves the pressing HRH<sup>2</sup> problem and compensates for the lack of investment and the structural deficits that characterize health systems in many low income countries – there is no such magic bullet."

## Career and professional development

What type of non-financial incentives do health professionals appreciate? The literature on incentives almost universally cites the following as being highly valued by health professionals: access to formal and informal education and training; effective clinical and personal supervision and mentoring; and a considered and supportive approach to lifelong learning and personal development.

Professional development, education and training are motivating, and they give health professionals greater confidence in the way they can perform their duties. Used effectively, lifelong learning simultaneously meets both personal and organisational goals by fostering the skill development needed to deliver more effective patient care. It also provides an ongoing personal benefit to health professionals by increasing their value in the labour market (Van Lerberghe *et al.* 2002).

Education and development opportunities are at their most effective when they provide improved career opportunities; are linked to opportunities and benefits through qualifications allowances or other financial benefits; and focus on meeting particular organisational and personal development needs.

Training courses must also be adapted to local circumstances (Mathauer & Imhoff 2006). A training course that creates a personal capacity unmatched by an organisational one can be frustrating and demotivating. For example, health professionals are frustrated when trained to use a piece of equipment that they are then unable to access at their health service workplace. This is also poor use of training funds.

Training that is designed and developed to meet both personal and organisational goals must be practical and realistic. Core training addressing issues of high priority and/or concern must be provided where that is required for safe and effective service delivery. One study reported that health professionals working in areas with a high prevalence of HIV/AIDS in Africa were concerned about the associated risks, and this was a demotivating force. Members of the same group of workers reported that this negative effect was greatly reduced once effective training had been provided (Mathauer & Imhoff 2006).

<sup>&</sup>lt;sup>1</sup> Editors note: Human Resource Management/Quality Management

<sup>&</sup>lt;sup>2</sup> Editor's note: Human Resources for Health

#### **Examples**

- The mentorship/preceptorship initiative for graduate nurses was introduced in Ontario (Canada) in 2004/2005. Seed funding is provided to support the development of programmes for new graduate nurses and those changing health sectors, organisations or roles (Government of Ontario 2007).
- One African nation has established local postgraduate colleges to assist with the
  training of dentists, pharmacists, physicians, registered midwives, registered nurses and
  physiotherapists. Under this scheme specialists receive sponsorship to undertake
  distance education courses while still being able to practise (ICN et al. 2008
  unpublished).
- To improve rural service delivery, a program of providing training to local health workers has commenced in one South American nation. The workers undergo a three-year training programme, after which they return to their local areas to be employed by the organisation that supported the training (ICN *et al.* 2008 unpublished).

## Workload management

Heavy and unmanageable workloads are a common concern among health professionals. They contribute to poor performance, low motivation and burnout; ultimately, they may result in health professionals leaving their current employ or abandoning health sector employment altogether.

Many factors contribute to excessive workloads. Shortages of workers, whether through lack of funded positions or the inability to fill funded vacancies, can result in the remaining workers picking up additional duties, sometimes without the training required to complete them confidently and effectively. Interactions with patients can also become more stressful as a result (Gilson *et al.* 2004). This creates a cycle whereby staff shortages lead to worsening conditions for remaining staff. In other cases, it can simply be a matter of increased local demand or increased patient and community expectations. Implementation of reform agendas, including changes and expansion to work roles, can also result in increased workload, particularly during transition or implementation periods.

If heavy workloads remain unaddressed or are perceived to be unreasonable, staff can feel exploited and demotivated and will be more likely to seek alternative employment. The workload of health professionals remains an issue of concern to professional organisations worldwide. As a result, it is frequently raised in the context of industrial relations negotiations and agreements. Methods that have been used to address workload concerns include:

- Establishment of overtime payments that ensure staff are compensated for additional hours worked, as well as incentives for employers to actively manage workload to avoid liability.
- Incorporation of additional leave or time-in-lieu conditions, or sabbatical
  entitlements that assist in avoiding burnout by ensuring that staff take
  advantage of leave entitlements, even if short term work demands impose
  constraints in scheduling the time off.
- Reviewing and redesigning work roles and responsibilities to ensure the best possible distribution among the available health professionals and other staff.
- Regulating, either formally or informally, the number of continuous hours worked by any given individual; avoiding unreasonable expectations of employers or employees; and reducing the risk that fatigue will result in poor decision-making, increased adverse events and reduced patient safety.

## **Examples**

- Establishment of rural locum programs to provide relief for physicians in areas served by few practitioners (ICN *et al.* 2008 unpublished).
- Establishment of mandatory staff/patient ratios in bed-based settings such as those implemented in California, the USA, and Victoria, Australia (Buchan 2005).

#### Flexible working arrangements

Flexible working arrangements can play an important role in retaining health professionals. These may include offering flexible hours of work, extended or changed leave arrangements (e.g. scheduled periods of leave during school holidays), and arrangements that encourage health professionals to return to the workforce after career breaks. Such approaches are particularly relevant to health professionals balancing work commitments with caring responsibilities (home and extended family), those who have left the workforce for family or other reasons, and older workers who wish to continue employment but may not be willing or able to undertake the same range of tasks or hours of work.

In some countries, combining public and private practice is considered a means by which health professionals such as physicians and dentists can access additional income. Various approaches to this have been taken, but the evidence on effectiveness and the implications for access to care are mixed. In countries where heath services are relatively under-resourced, staff may need to undertake other work to supplement their income. Formalising these arrangements can be a way to retain

the services of these highly sought-after professionals as well as improve the capacity of managers to plan rosters and staff availability.

Meanwhile, in North Vietnam, where health professionals were accustomed to charging ex-gratia payments to supplement their income, co-payments were introduced. This enabled patient charges to be regulated, while generating income the health service needed to increase the salaries of health professionals to a point where outside employment was no longer required to earn a living wage (Dieleman *et al.* 2003).

#### **Examples**

- In Canada, the province of Ontario implemented the Late Career Nurse Initiative in 2004. The initiative applies to nurses over the age of 55 and permits them to spend some of their working hours undertaking less physically demanding roles, such as patient teaching and staff mentoring (Government of Ontario n.d).
- Establishment of nurse banks have enabled nurses to work an additional day a week against payment of a specified allowance (ICN et al. 2008 unpublished).
- In one European country, general practitioners over 60 years of age are given the opportunity to split their patient load with other general practitioners. General practitioners under 60 years of age are required to take care of 1,600 patients (ICN et al. 2008 unpublished).

#### .

#### Positive working environments

Research has shown that a positive working environment is an important element in efforts to recruit and retain staff (Buchan 1999; Gilson *et al.* 2004; ICN 2007a). This includes providing a safe working environment for staff and proactively responding to emerging risks, as well as creating a positive organisational culture. In this sense, every member of an organisation – in the way that they deal with their own work demands, their colleagues and their patients – can play a role in providing a positive environment where people will want to work.

Meanwhile, a range of other factors have been correlated with lower turnover and higher levels of job satisfaction among health professionals. These include decentralised organisational structure, a commitment to flexible working hours, an emphasis on professional autonomy and development, and systematic communication between management and staff (Buchan 1999; ICN 2007a).

Similarly, a poor organisational and management environment can act as a strong demotivating force. For example, Gilson *et al.* (2004 p.18), in their study exploring the influence of workplace trust on health worker performance in South Africa, concluded

that "a key obstacle to treating health workers better remains the tradition of bureaucratic, rule based and authoritarian management in the public sector".

It is therefore important to recognise that all aspects of organisational and sector management have an impact on staff. This is the case whether the management relates to human resources or to aspects of operation such as service models, financial sustainability, access to resources, and corporate and organisational planning. Incentive schemes cannot be viewed in isolation of other areas of management practice. As noted by Mathauer and Imhoff (2006), "HRM and QM measures must be embedded in a good governance agenda".

#### Examples

- Most countries in east and southern Africa have improved working conditions or have developed plans to do so. Measures include better facilities, equipment and security for workers (Dambisya 2007).
- The Magnet hospital program in the United States credentials hospitals that "satisfy a set of criteria designed to measure the strength and quality of their nursing. A Magnet hospital is stated to be one where nursing delivers excellent patient outcomes, where nurses have a high level of job satisfaction, and where there is a low staff nurse turnover rate and appropriate grievance resolution..... The idea is that Magnet nursing leaders value staff nurses, involve them in shaping research-based nursing practice, and encourage and reward them for advancing in nursing practice. Magnet hospitals are supposed to have open communication between nurses and other members of the health care team, and an appropriate personnel mix to attain the best patient outcomes and staff work environment" (Center for Nursing Advocacy 2008).

## Access to benefits and supports

While health services may not always have sufficient income to provide meaningful financial incentives, they may sometimes have access to other assets that can be used to reward staff. Dambisya (2007) cites a number of examples:

#### **Examples**

- Housing in Lesotho, Mozambique, Malawi and Tanzania.
- Transport in Lesotho, Malawi and Zambia.
- Childcare facilities in Swaziland.
- Free food in Mozambique and Mauritius.
- Employee support centres in Lesotho.
- Access to health programmes for health care workers and their families, including
  access to health care and antiretroviral therapy, and medical aid schemes that may
  include private health care.

(Dambisya 2007)

Under ICN leadership, nurses associations have established wellness centres that
provide HIV/AIDS testing, counselling and treatment for health care workers and their
families. This initiative has greatly reduced the stigma associated with HIV/AIDS and
supported health care workers in their efforts to remain in active practice (ICN 2007b).

## WHAT DOES AN EFFECTIVE INCENTIVE SCHEME LOOK LIKE?

The development and implementation of incentive schemes in health care is an emerging field. A wide variety of measures have been implemented using financial and non-financial approaches linked to various performance outcomes and targeting a range of health care professionals.

As yet, rigorous evaluation of the outcomes of these schemes is in relatively short supply. A number of schemes are newly implemented and it is too early to evaluate their impact. Dambisya (2007 p.ii) notes that incentive schemes in some African countries have not been "systematically documented" and that "monitoring and evaluation ranges from a lack of any formal mechanism to periodic reviews, and from performance appraisal at district and provincial levels to more developed monitoring and evaluation in strategic plans". In addition, incentives are often introduced as part of a broader package of organisational, financial, contractual and human resource management reforms. In these cases, outcomes can be difficult to attribute to one particular element of the package. Comparative review is also difficult given the wide variety in approaches and the diversity of national, local and organisational contexts in which these initiatives are developed and implemented.

Nevertheless, the research provides some clear indications of the characteristics of an effective incentive scheme. A conceptual framework developed by Bennett and Franco (cited in Adams and Hicks 2001 p.5), recognises the following factors affecting the personal motivation of health workers:

- *Individual level determinants*: individual needs; self-concept; expectations of outcomes or consequences of work activities.
- Organisational context: salary; benefits; clear, efficient systems; HR management systems; feedback about performance; organisational culture.
- Social and cultural context: community expectations and feedback.
- *Health sector reform*: communication and leadership; congruence with personal values of workers.

Consideration of these factors and the experiences of a range of countries in developing and implementing incentive schemes suggest that a successful scheme for health professionals shares the following characteristics.

#### Table 2. Characteristics of an effective incentive scheme for health professionals

- Clear objectives
- Realistic and deliverable
- Reflects health professionals' needs and preferences
- Well designed, strategic and fit-for-purpose
- Contextually appropriate
- Fair, equitable and transparent
- Measurable
- Incorporates financial and non-financial elements

#### Clear objectives

Incentive schemes should have clear objectives (Petersen *et al.* 2006). This affects an initiative's design as well as how it is targeted (e.g. whether focused on all staff, or on professions or programmes where shortages are particularly acute). Similarly, the incentives may be targeted at achieving a particular service outcome, such as increased immunisation rates, or a particular behaviour among staff (e.g. improved record keeping, reduced absenteeism, improved retention rates).

All of these are valid areas for incentive programmes. Whichever approach is taken, the incentive scheme should strive to find ways in which personal, professional and organisational interests are aligned and simultaneously advanced (Van Lerberghe *et al.* 2002).

#### Realistic and deliverable

The design of the incentive package must be realistic and achievable. An incentive package that is not delivered is no incentive at all. Health professionals will quickly become demoralised and demotivated if promised wage increases do not appear (Gilson *et al.* 2004), if the relative increases or allowances discriminate against certain categories of personnel or if other changes in the broader environment negate or undermine them (ICN *et al.* 2008 unpublished). Similarly, access to places in formal training courses may need to be accompanied by transport and accommodation assistance and, for rural workers, coverage of their work responsibilities so they are free to attend.

Affordability and the source of funding (Dambisya 2007) must also be considered. While some realignment of priorities is inevitable as a population's health status changes over time, incentive schemes need to be considered in the context of broader budgetary implications and what this means for the health professionals already working in the sector.

#### Reflects health professionals' needs and preferences

The key role of an incentive is to influence behaviour, for better or worse. An incentive scheme that health professionals regard as irrelevant to them, counter to their personal or professional values, or actively destructive to either their own well-being or that of their clients will fail in its purpose. At worst, it will actively create a disincentive for continued effective work. In designing an effective incentive scheme, therefore, the values, preferences and aspirations of relevant health professionals must be primary considerations; consulting these professionals is essential.

Historical and cultural context is also important. Individual professionals may have differing interpretations of what 'incentives' mean (Mathauer & Imhoff 2006) and differing experiences of them – both positive and negative. Considering this in the design and implementation of an incentive programme will maximise its effectiveness.

It is also important to recognise that health professionals are not a homogeneous group. They will have different needs, preferences and aspirations depending on their personal and professional backgrounds. For example, DeGieter *et al.* (2006) found that younger nurses in Belgium valued promotional opportunities more highly than did older and more senior nurses. The latter group valued job security and the reputation of their employing hospital more highly.

#### Well designed, strategic and fit-for-purpose

Issues to be considered in designing the nature of the incentive include whether it will assist in advancing long term strategic objectives as well as short term goals. Rigoli and Dussault's (2003) study of health sector reforms, including the introduction of incentive schemes, illustrates the risks inherent in poor design. They found "failure to achieve the expected results, and in many cases, the production of effect quite different from those foreseen by the planners of incentive schemes".

Other important design considerations include whether the incentive program is open to gaming and manipulation, and whether mechanisms for monitoring and evaluation can be incorporated into the scheme. Chaix-Couturier *et al.* (2000), in their review of financial incentives in medical practice, suggest that schemes should be suited to the structure and financing mechanisms of the health care system in question. Schemes should also adjust for quality, productivity and severity of patients treated, and importantly for both implementation and administration, they should be "simple, transparent and direct".

#### Contextually appropriate

Whether financial or non-financial, an incentive scheme must, as far as possible, be appropriate to the local context. This includes the role, function and infrastructure of the health service, the local population's health needs and service delivery priorities. This is particularly true of training and development activities, which must be adapted to local realities, such as the prevailing funding mechanisms and actual conditions and infrastructure that the staff are working with (Chaix-Couturier *et al.* 2000; Mathauer & Imhoff 2006).

Cultural differences may also be apparent. Soeters and Griffiths (2003 p.82) note that "the feasibility of any reform proposal will increase when it is adapted to what is acceptable to society at large". In a cultural context where family allegiances are primary, for example, the population might be more amenable to the introduction of copayment methods than they would be to a 'public service' that is based on stronger identification with a broader community.

## Fair, equitable and transparent

Inequities or perceived inequities in the way incentive schemes are designed and implemented is repeatedly cited as a source of demotivation. As Kingma (2003 p.6) has noted, "although salary was reported to be unimportant (once basic financial needs are met) ... relative salary generates a much more emotional reaction". Inequities may arise from selective access to bonuses (e.g. those available to senior managers only), new programmes or salary incentives being introduced for new staff without existing staff being able to access the same benefits, or simply lack of transparency and accountability in the allocation of opportunity and reward.

#### Measurable

Where the incentive is related to a specific performance requirement, its implementation is intrinsically linked with the accompanying regime by which performance will be monitored and assessed. There are a number of options for this ranging from the establishment of quantifiable performance targets, such as the number of vaccinations performed at a clinic, to the assessment of an individual's overall work performance by a supervisor or other feedback mechanisms such as peer review. Whether subjective or empirical, the performance required could apply at the organisational, team or individual level.

A number of issues must be considered in measuring incentive performance effectively, such as whether the scheme:

- measures a process or an outcome;
- seeks to promote a minimum performance standard or to continuously improve performance;
- needs to incorporate adjustments for differences in infrastructure, access to drugs and therapies, and morbidity of the target population, and if so, how; and
- has a set of indicators that appropriately capture key elements of service, including effectiveness, efficiency and throughput, quality and safety, and equity and access.

Effective performance measurement is a complex subject. It has been established that performance measurement can influence clinical decision-making and behaviour. However, unless there is clarity and transparency about the way performance is assessed, and a high level of confidence among workers that the measures are both fair and valid, their introduction may act as a disincentive, or worse, a perverse incentive (Kingma 2003; Mathauer & Imhoff 2006).

#### Incorporates financial and non-financial elements

There is a long-standing tradition among public sector health workers of commitment to service for its intrinsic value and the personal satisfaction and respect that are derived from providing care and support to clients. None the less, the central importance of financial security and the ability to be remunerated fairly and adequately for one's labour cannot be denied. In developing incentive packages, therefore, financial incentives must be considered, particularly in regions where health workers struggle to earn a living wage and where agencies are competing for workers on national and international labour markets.

Still, the overwhelming evidence from the literature examining incentive schemes in industrialised countries and in those with limited resources is that financial incentives are not sufficient in themselves to fully motivate a workforce or make it feel valued and recognised for its contribution. As noted by DeGieter *et al.* (2006)

"...when establishing the most appropriate and cost-effective reward strategy, managers should therefore not rely only on their limited number of formalized financial reward possibilities, but should also acknowledge the value of non-financial and psychological rewards...".

The evidence suggests that effective incentive schemes will include both these elements.

## **DEVELOPING AN INCENTIVE PACKAGE**

As noted above, the most successful incentive packages are those that are tailored to the particular context in which they will be implemented. For that reason, there is no 'incentives template' that can be easily applied to a given situation. Similarly, there can be no one-size-fits-all approach to the development of a package that will meet the needs of a particular organisation or a particular group of health professionals. Drawing on Bardach's (2000) policy development models, the following table outlines one approach to the development of an incentive package.

Table 3. An example of an approach to developing an incentive package

Development stages	Checklist
Scoping and strategic objective	What are we trying to achieve?
	Who will have access to the package?
	What problem are we trying to solve?
Assembling the evidence: research and	What are the key issues to be addressed?
consultation	What kind of incentives will be meaningful to staff?
	What are the organisation's staff development
	needs and priorities?
	What has worked in other comparable
	circumstances? What hasn't?
Construct the alternatives: designing a	What options do we have?
package	Can we provide financial incentives? What kind?
	What non-financial incentives can we provide?
	Who will implement?
	What financial and non-financial resources do we
	have to support the programme?
	How will we secure the support of staff and
	managers?
	What resources will be required to develop and
	implement?
Select the criteria: how to define success	How will we choose which option is best?
	What outcomes are we seeking?
	How will we measure success?
	Is the proposal fair and reasonable?
B :	Is it sustainable?
Project the outcomes	How long will it take to implement?
	What will it cost?
	Is it fair, reasonable and transparent?
	How will key stakeholders react?
	Will there be any negative effects?
	Is there a different impact in the short term and the
	long term?

Table 3. An example of an approach to developing an incentive package

Confront the tradeoffs	What is the right balance of financial and non-financial incentives? Will all stakeholders be equally affected? If not, how will this be managed? How do the costs and benefits compare?
Decide: stakeholder	Is a preferred option clearly identifiable? Is further information required?  Can all key stakeholders agree on the preferred approach?  What authorisation is needed to proceed?
Tell your story: implementation	Are all affected parties informed? Is there an appropriate change management process in place? Is the process for implementation transparent and clear? Do all parties understand what is expected of them? Do all parties have reasonable expectations of the outcome? Does everyone know how they can get further information?
Evaluation and review	Did it work? Were there any unintended consequences? Do we need to change it?

Source: Development stages adapted from Bardach's *A practical guide for policy analysis: the eightfold path to more effective problem solving* (2000).

## CONCLUSION

Human resources are the key element of service delivery. Even in the most well resourced and technologically advanced countries the interactions between health professionals and their patients remain at the heart of service provision. Accordingly, staff costs dominate health services expenditure and ongoing shortages in the availability of health professionals present a real and direct threat to the continued delivery and development of health care services.

Incentives, both financial and non-financial, provide one tool that governments and other employer bodies can use to develop and sustain a workforce with the skills and experience to deliver the required care. This demands not just political will and continued hard work, but an acknowledgement by all key stakeholders of the commitment, skills and health benefits provided by health professionals worldwide.

A health service's greatest asset is its staff. The implementation of effective incentive packages represents an investment through which that vital asset can be protected, nurtured and developed.

## **Appendix**

This publication was commissioned by the Global Health Workforce Alliance as part of its work to identify and implement solutions to the health workforce crisis. It is a joint initiative of the International Council of Nurses, International Hospital Federation, International Pharmaceutical Federation, World Confederation for Physical Therapy, World Dental Federation and World Medical Association. It is part of a larger initiative to promote work settings that ensure the health, safety and personal well-being of staff, support the provision of quality patient care and improve the motivation, productivity and performance of individuals and organisations, thereby strengthening health systems and improving patient outcomes.

- The International Council of Nurses (ICN) is a federation of 130 national nurses associations representing the millions of nurses worldwide. Operated by nurses and leading nursing internationally, ICN works to ensure quality nursing care for all and sound health policies globally.
- The International Hospital Federation (IHF) is an international nongovernmental organisation supported by members from over 100 countries. As the worldwide body for hospitals and health care organisations, it develops and maintains a spirit of cooperation and communication among them, with the primary goal of improving patient safety and promoting health in underserved communities.
- The International Pharmaceutical Federation (FIP) is the global federation of the national organisations of pharmacists and pharmaceutical scientists. Pharmacists are health professionals dedicated to improving the access to and value of appropriate medicine use.
- The World Confederation for Physical Therapy (WCPT) is a federation of 101 national physical therapy associations and represents physical therapists worldwide. It works to improve global health by encouraging high standards of physical therapy research, education and practice; supporting communication and exchange of information among WCPT regions and member organisations; and collaborating with national and international organisations.
- The World Dental Federation (FDI) is the authoritative, worldwide voice of dentistry with more than 150 member associations in 134 countries around the world, representing more than 900,000 dentists internationally.
- The World Medical Association (WMA) is the global federation of national medical associations representing the millions of physicians worldwide. Acting on behalf of physicians and patients, the WMA endeavours to achieve the highest possible standards of medical science, education, ethics and health care for all people.
- The Global Health Workforce Alliance (GHWA) is a partnership dedicated to
  identifying and implementing solutions to the health workforce crisis. It brings
  together a variety of actors, including national governments, civil society, finance
  institutions, workers, international agencies, academic institutions and professional
  associations. The alliance is hosted and administered by the World Health
  Organization.

#### REFERENCES

Adams O & Hicks V (2001). 'Pay and non-pay incentives, performance and motivation', prepared for the Global Health Workforce Strategy Group, WHO, Geneva.

Bardach G (2000). A practical guide for policy analysis: the eightfold path to more effective problem solving, Chatham House, New York.

Buchan J (1999). 'Still attractive after all these years? Magnet hospitals in a changing healthcare environment' *Journal of Advanced Nursing* vol. 30 Issue 1 pp.100-108.

Buchan J (2005). 'A certain ratio? The policy implications of minimum staffing ratios in nursing', *Journal of Health Services Research and Policy*, vol. 10, no. 4, pp. 239-244.

Caldwell P & Kingma M (2007). 'Incentives and the recruitment/retention of nurses', a paper presented at *National experiences in assessing and reducing shortcomings and negative trends affecting human resources of the health system: an international symposium on health workforce*, Lisbon, Portugal 10-12 October, ICN - International Centre for Human Resources in Nursing.

Center for Nursing Advocacy (2008). 'What is magnet status and how is that whole thing going?', accessed 15 April 2008 <a href="https://www.nursingadvocacy.org/faq/magnet.html">www.nursingadvocacy.org/faq/magnet.html</a>.

Chaix-Couturier *et al.* (2000). 'Effect of financial incentives on medical practice: results from a systematic review of the literature and methodological issues', *International Journal for Quality in Health Care, vol.* 12, no. 2, pp. 133-142.

Croasdale M (2005). 'Physician work force estimates far apart', *AMNews*, 20 June, accessed 15 April 2008 www.ama-assn.org/amednews/site/free/prsa0620.htm.

Dambisya Y (2007). 'A review of non-financial incentives for health worker retention in east and southern Africa,' Equinet discussion paper no. 44, Regional Network for Equity in Health in east and southern Africa, accessed 15 April 2008 www.equinetafrica.org/bibl/docs/DIS44HRdambisya.pdf

DeGieter *et al.* (2006). 'Identifying nurses' rewards: a qualitative categorization study in Belgium', *Human Resources for Health*, vol. 4, article 15.

Dieleman *et al.* (2003). 'Identifying factors for job motivation of rural health workers in North Viet Nam', *Human Resources for Health*, vol. 1, article 10.

Dieleman *et al.* (2006). 'The match between motivation and performance management of health sector workers in Mali', *Human Resources for Health*, vol. 4, article 2.

Disease Control Priorities Project (2006). 'Improving quality of clinical care: incentives for health care workers', DCPP www.dcp2.org.

Eichler *et al.* (2007). 'Performance-based incentives for health: six years of results from supply-side programs in Haiti', Center for Global Development working paper #121, CGD, Washington.

Fort A & Voltero L (2004). 'Factors affecting the performance of maternal health care providers in Armenia', *Human Resources for Health*, vol. 2, article 8.

Gilson *et al.* (2004). 'Exploring the influence of workplace trust over health worker performance. Preliminary national overview report: South Africa', Health Economics and Financing Program working paper 06/04, London School of Hygiene and Tropical Medicine.

Government of Ontario (n.d.). 'The late career nurse initiative fact sheet', Ministry of Health and Long-Term Care, accessed 15 April 2008 <a href="https://www.health.gov.on.ca/english/providers/program/nursing-sec/docs/late-nurse-faq-01-200705">www.health.gov.on.ca/english/providers/program/nursing-sec/docs/late-nurse-faq-01-200705</a> 23.pdf

Government of Ontario (2007). 'Guidelines for application to the Ontario nursing strategy', Ministry of Health and Long-Term Care, accessed 15 April 2008 <a href="https://www.health.gov.on.ca/english/providers/program/nursing-sec/strategy-app-mn.html">www.health.gov.on.ca/english/providers/program/nursing-sec/strategy-app-mn.html</a>

Hongoro C & Normand C (2006). 'Health workers: building and motivating the workforce', in D Jamison *et al.* (eds), *Disease Control Priorities in Developing Countries*, *2nd edn*, Oxford, New York, pp. 1, 309-1,322.

ICN (2007a). 'Positive practice environments: quality workplaces = quality patient care', ICN, Geneva, accessed 19 February 2008 <a href="https://www.icn.ch/indkit2007.htm">www.icn.ch/indkit2007.htm</a>

ICN (2007b). 'Wellness centres for health care workers in sub-Saharan Africa', in *Biennial report 2004-2006, patient and public safety matter: nurses on the front line,* ICN, Geneva, p. 12.

International Council of Nurses, International Hospital Federation, International Pharmaceutical Federation, World Confederation for Physical Therapy, World Dental Federation, World Medical Association (2008 unpublished). 'International survey on retention incentives for health care professionals', record of responses, ICN, Geneva.

Kingma M (2003). 'Economic incentive in community nursing: attraction, rejection or indifference?', *Human Resources for Health*, vol. 1, article 2.

Kingma M (2006). *Nurses on the move: migration and the global health care economy,* Cornell University Press, Ithaca.

Kipp *et al.* (2001). 'User fees, health staff incentives, and service utilization in Kabarole District, Uganda', *Bulletin of the World Health Organization*, vol.79, no.11, pp. 1032-1037.

Kruger E & Tennant M (2005). 'Oral health workforce in rural and remote Western Australia: practice perceptions', *Australian Journal of Rural Health*, vol. 13, no. 5, pp. 321-326.

Kusserow R (1989). *Hospital closure: 1987,* Dept. of Health and Human Services, Washington.

Langenbrunner J & Xingzhu Liu (2004). 'How to pay? Understanding and using incentives', World Bank, Washington.

Leonard *et al.* (2007). 'Getting clinicians to do their best: ability, altruism and incentives', *Journal of Human Resources*, vol. 42, no. 3, pp. 682-700.

Manongi *et al.* (2006). 'Improving motivation among primary health care workers in Tanzania: a health worker perspective', *Human Resources for Health*, vol. 4, article 6.

Manzi et al. (2004). 'Exploring the influence of workplace trust over health worker performance: preliminary national overview report Tanzania,' Health Economics and

Financing Programme working paper, London School of Hygiene and Tropical Medicine, Centre for Health Policy, Johannesburg.

Mathauer I & Imhoff I (2006). 'Health worker motivation in Africa: the role of non-financial incentives and human resource management tools', *Human Resources for Health*, vol. 4, article 24.

Muliira, J (n.d.). 'The nation wide nursing shortage in USA', accessed 15 April 2008 www.case.edu/med/epidbio/mphp439/Nursing\_Shortage.htm.

Naumann TL (2004). *Hospital Pharmacist Shortage Survey* Canadian Society of Hospital Pharmacists, British Columbia Branch www.cshp-bc.com/publications/pharm%20shortage%20survey-report.pdf

Petersen *et al.* (2006). 'Does pay-for-performance improve the quality of health care?' *Annals of Internal Medicine*, vol. 145, no. 4, pp. 265-272.

Record R & Mohiddin A (2006). 'An economic perspective on Malawi's medical "brain drain", *Globalization and Health*, vol. 2, article12.

Reid S (2004). *Monitoring the effect of the new rural allowance for health professionals*. Durban: Health Systems Trust,.

Rigoli F & Dussault G (2003). 'The interface between health sector reform and human resources in health', *Human Resources for Health*, vol. 1, article 9.

Soeters R & Griffiths F (2003). 'Improving government health services through contract management: a case from Cambodia', *Health Policy and Planning*, vol. 18, no. 1, pp. 74-83.

Van Lerberghe *et al.* (2002). 'When staff is underpaid: dealing with the individual coping strategies of health personnel', *Bulletin of the World Health Organization*, vol. 80, no. 7, pp. 581-584.

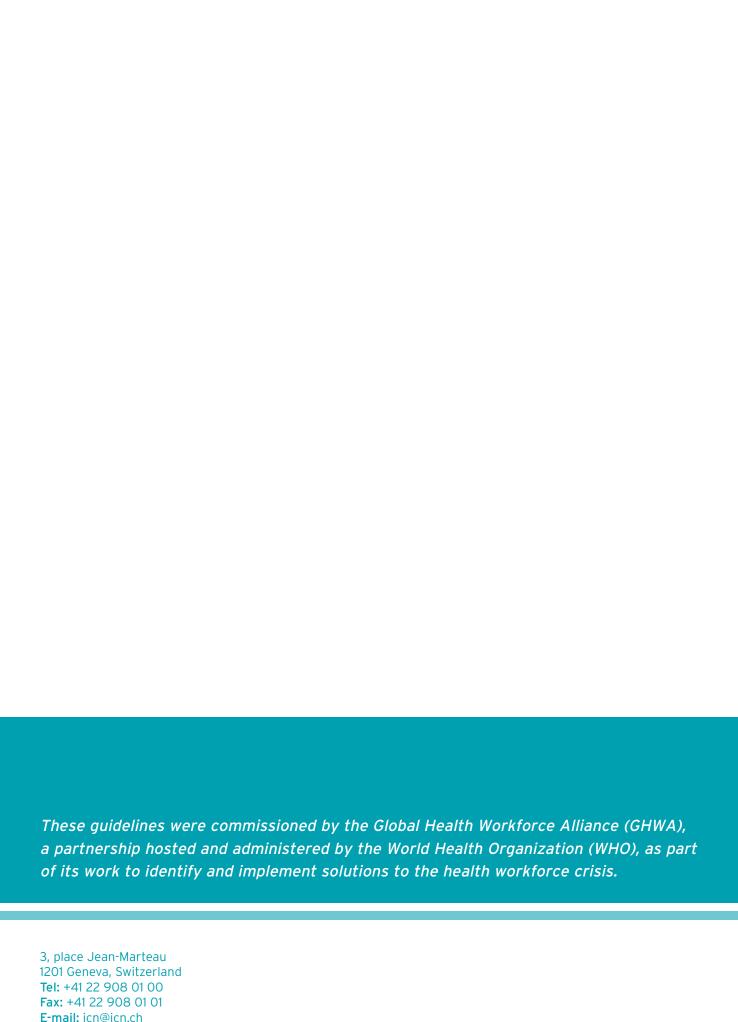
World Health Organization (2000). *The world health report 2000 – health systems: improving performance,* WHO, Geneva, p. 61.

World Health Organization & World Bank (2003). 'Improving health workforce performance,' issues for discussion: session 4: high-level forum on the health millennium development goals, WHO, Geneva.

World Health Organization (2006a). *The world health report 2006 – working together for health*, WHO, Geneva.

World Health Organization (2006b). 'The global shortage of health workers and its impact', fact sheet no. 302, WHO, Geneva, accessed 15 April 2008 <a href="https://www.who.int/mediacentre/factsheets/fs302/en">www.who.int/mediacentre/factsheets/fs302/en</a>

Zurn P, Dolea L & Stilwell B (2005). 'Nurse retention and recruitment: developing a motivated workforce', ICN, Geneva, accessed 15 April 2008 www.icn.ch/global/Issue4Retention.pdf



E-mail: icn@icn.ch Web site: www.icn.ch