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Policy Brief: Nurse Retention

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INTRODUCTION

There is growing recognition that the achievement of health systems objectives, including sustaining effective delivery of UHC, requires an adequate and effective nurse workforce. This includes dimensions of effectiveness related to access to quality services, which in turn requires effective retention and geographic distribution of scarce nursing skills, within a sustainable workforce.

This policy brief summarises the key points about what is known about effective policies on nurse workforce retention, with the aim of informing National Nursing Associations (NNAs) and policy makers.

A starting point is to note that there is no shortage of publications and views on nurse retention. An online search using “nurse retention” as key words generates literally millions of hits. This gives some indication of just how widespread interest in the issue is. However much of this material is localised, and either descriptive or opinion based; relatively little is devoted to reporting on evaluated impact of well-designed policy.

This does not mean that much of the available material has no value, but in order to provide overall guidance, this current brief draws selectively from the evidence. The aim is to have global relevance and provide policy makers and NNAs with a synthesis of key findings and policy pointers.

Given that each organisation, health system and country have its own nurse retention priorities and challenges, the brief does not attempt to prescribe specific “off the shelf” universal solutions. Policy makers and NNAs must develop an understanding of their own situation and priorities and identify the best mix of policies to address their own nurse retention challenges.

This brief has a practical focus. It synthesises key aspects of the evidence base in order to present a policy analysis framework for nurse retention, and to highlight tools and indicators that can be used to help monitor the impact of policy interventions aimed at improving nurse retention. It is in four further sections:

Section One reports on why a policy focus on nurse retention is so important

Section Two synthesises the evidence base on nurse retention factors

Section Three sets out a frame for identifying and implementing policy interventions on nurse retention

Section Four summarises key points

Throughout the report, illustrative examples of key evidence and policy pointers are highlighted in Boxes.

Section One: Why nurse retention is important

Every time that a nurse leaves a health care organisation (also often reported as “turnover”¹), there is an impact on the nurse, on the health care organisation, and on the client population of the organisation. Not all nurse “leavers” are doing so because of negative experiences in the organisation, and not all the impact of a nurse leaving is necessarily negative. Not all turnover is “voluntary”², as some nurses will leave a job because of unplanned reasons. Finally, not all turnover will be nurses leaving the profession- many nurses will be moving between jobs or organisations^{3,4}. It is important that any examination or analysis of nurse leavers and turnover maintains a constant definition. Even so, irrespective of measurement unit, and destination of leavers, there is the likelihood of organisational costs being incurred, and the potential for a negative impact on patient care.

Impact on costs and productivity

When a nurse leaves, the organisation has to respond to the skills gap that is created. Normally this will involve some interim solution, to cover the time required to find a replacement, who may take some time to reach the same level of contribution (e.g. arranging cover from other staff, postponing some work, using an agency nurse etc.). This “lost” contribution is likely to manifest itself in reduced continuity of care, disruption to services, and a drop in overall productivity. If the organisation can keep (retain) the nurse, then, none of these costs are incurred.

Where there is a longer time lag between the nurse leaving and being replaced, perhaps because of skills shortages or funding difficulties, then these negative impacts can become magnified. Where the number of nurse leavers is high, compared to overall nurse staffing, and where the pace of nurse turnover is rapid (sometimes called “churn”⁵) then the negative impact can become even more damaging to patient care and organisational costs.

As noted above, clarity is required about which measure of turnover is being reported- all nurses leaving the organisation, or only nurses leaving who are also leaving the profession. A survey of 23,000 nurses working in medical and surgical hospital wards in 10 countries⁶ (Belgium, Finland, Germany, Ireland, Netherlands, Norway, Poland, Spain, Switzerland and UK) reported that overall, 33% intended changing jobs in the next year, whilst 9% of the nurses intended to leave their profession. This “leaving the profession” turnover rate varied from 5 to 17% across the 10 countries.

There have been a range of studies that have focused on estimating the costs of nurse turnover. These studies examine the various impacts when nurses leave the organisation, such as temporary replacement costs, cost of hiring a replacement, and lost productivity, and attributing a financial value to each element. At aggregate level, the turnover costs to a health care organisation can be significant.

One US study⁷ estimated that total turnover costs for a hospital system employing 5000 employees was between \$US17 and \$29 million per year. Another US study,⁸ estimated that the cost of the turnover of each staff nurse fell between 0.75 and 2.0 times annual salary. A European Union-wide review⁹ emphasised the need to build the “business case” for health workforce retention, arguing that “better retention means better access, which in turn means better health outcomes and savings on inappropriate service utilisation”. There have been more recent studies from a range of high income countries which have reported similar findings^{10 11 12 13} (See Box 1. below).

Box 1. Assessing and comparing nurse turnover costs.

A recent study compared nurse turnover rates and costs in four countries (Australia, Canada, New Zealand, and the US), using the same costing methodology. The study highlighted that measuring and comparing the costs and rates of turnover was difficult because of differences in definitions and methodologies. Results were standardised in US dollars. The study noted that Australia reported significantly higher turnover costs (\$48,790) due to higher termination (~50% of indirect costs) and temporary replacement costs (~90% of direct costs). Costs were almost 50% lower in the US (\$20,561), Canada (\$26,652) and New Zealand (\$23,711). Turnover rates also varied significantly across countries with the highest rate reported in New Zealand (44.3% followed by the US (26.8%, Canada (19.9% and Australia (15.1%. The study concluded that a significant proportion of turnover costs are attributed to temporary replacement, highlighting the importance of nurse retention¹⁴.

Whilst each of these studies has used its own protocol, the overall findings suggest that the negative impact to the organisation of a nurse leaving will be at least the equivalent of several months’ pay, and considerably more if the nurse has specialist skills. Using a nurse turnover costs checklist is one method of identifying and assessing the impact of low retention. (Annex 2 gives details of the approach).

Impact on care quality

As well as the likely negative effect on organisational costs and productivity, a low level of retention, as indicated by higher nurse turnover, can also contribute to negative impacts on care quality. There is relatively little research on the complex connection, which requires data on turnover patterns, staffing levels, staffing costs and nursing sensitive quality or care outcomes, but some studies have been published, most notably the persuasive and growing evidence related to magnet hospitals (see Box 2 below).

Box 2. Magnet hospitals: the link between effective nurse staffing practices and care outcomes.

The genesis of the research on magnet hospitals was a study published in 1983¹⁵ which identified the organisational characteristics of hospitals that “serve as magnets for professional nurses: that is, they are able to attract and retain a staff of well-qualified nurses and are therefore consistently able to provide quality care”. The key characteristics of magnet hospitals include participatory and supportive management style, “adequate” nurse staffing, flexible working schedules, clinical career opportunities, professional autonomy and responsibility, and emphasis on in-service/continuing education. More recent research on magnet hospitals has included studies reporting that nurse turnover and vacancy rates in the magnet hospitals were significantly lower, and reported nurse job satisfaction higher, than in the comparator hospitals and that mortality rates in magnet hospitals were lower than the control hospitals^{16 17 18 19 20 21}. Magnet hospitals are now accredited by the American Nurses Credentialing Center (ANCC). There are over 400 magnet institutions accredited, with the vast majority being in the USA, and several in other countries: Australia, Belgium, Canada, Lebanon, Saudi Arabia²².

Another study examined the relationships among licensed nurse turnover, retention, and rehospitalization of nursing home residents²³ and reported that homes with increased retention had a 0.2% lower rehospitalization rate (which was equivalent to two fewer hospitalizations per home annually). Another study examining the effects of registered nurse (RN) turnover on unit-acquired pressure ulcer rates in over 400 US hospitals²⁴ found that for every 10 percentage-point increase in RN turnover in a quarter, the odds of a patient having a pressure ulcer increased by four percent in the next quarter. Higher RN turnover in a quarter was associated with lower RN staffing in the current and subsequent quarters.

This vicious cycle of high leaving rates of nurses impacting negatively on care quality, raising organisational costs and increasing the workload of remaining nurses is recognisable in some health care organisations in all countries. The challenge for policy makers and NNAs is to decide how best to act to improve nurse retention (also sometimes defined as workforce stability) by reducing unnecessary nurse turnover, and therefore impact positively on care outcomes and organisation costs. The overall aim is to sustain the so-called “nurse retention, quality of care and patient satisfaction chain”²⁵. Put simply, improved nurse retention enables and supports improved care.

The Impact on the nurse (workload and working conditions)

The age profile of the nursing workforce along with the fact that the vast majority of nurses in most organisations are women will also be factors to consider when looking at patterns of turnover, and appropriate policy responses.

The work environment can be an important factor in the retention of nurses (see Box 3), but if workload is too high and the working environment is problematic, this can adversely affect retention, and it can also influence the quality of care. Work characteristics affect individual nurse satisfaction, the balance between work and family life which often will include responsibilities for child care or elder care^{26 27}, in-service training/continuous development, and the organisational culture²⁸.

Poor work environments and unsustainable heavy workload can contribute to medical errors and has been related to stress and nurse “burn-out”²⁹, nurse absenteeism³⁰ and high levels of staff turnover. This in turn can compromise the quality of care. In contrast, improved work environments can contribute to reduced stress, improve nurses’ ability to provide quality care, and can encourage nurses “to stay at the bedside”³¹.

Box 3. Assessing nurses work environment and turnover.

The Practice Environment Scale of the Nursing Work Index (PES-NWI)³² is an evidence-based tool that can be used to assess the state of nursing practice environments. The 31-item PES-NWI draws from nurse job satisfaction literature, research on magnet hospitals, and theory on the sociology of organisations, occupations, and work. The PES-NWI consists of five subscales: Nurse Participation in Hospital Affairs; Nursing Foundations for Quality of Care; Nurse Manager Ability, Leadership and Support of Nurses; Staffing and Resource Adequacy; and Collegial Nurse-Physician Relations. Several US organisations have recommended the PES-NWI as a measure of the quality of the nursing practice environment, including the National Quality Forum (NQF) and the Joint Commission. The PES-NWI has been modified for 10 practice settings in five countries and translated into three languages³³.

One recent study across nine European countries suggested that evidence-based investments to support nursing workforce well-being were associated with reduction of hospital deaths³⁴. Another publication from the same researchers³⁵, covering 12 European countries, reported that more than one in five nurses (11-56% in different countries) were dissatisfied with their jobs in most of the countries, and dissatisfaction was pronounced with respect to wages, educational opportunities and opportunities for advancement. Sizable percentages (19-49%) of nurses intended to leave their jobs. Nurse concerns with workforce management and adequate resources were reportedly widespread. Nurses reported that important nursing tasks were often left undone because of lack of time and indicated that adverse events were not uncommon.

A third publication³⁶, focusing on a survey of 23,000 hospital nurses in 10 countries in Europe reported that overall, 9% of the nurses intended to leave their profession, varying from 5 to 17% between different countries. Seven factors were associated with intention to leave the profession: nurse–physician relationship; leadership; participation in hospital affairs; older age; female gender; working fulltime; and burnout). The level of relevance of these factors differed in the individual countries.

Section Two: Nurse Retention: What the evidence tells us

As noted in the introduction, there is no shortage of information and opinion about nurse retention; indeed, the sheer scale of the available sources can be a confounding factor when trying to focus on identifying what will work to improve nurse retention in a specific organisational or system context.

This section provides a brief overview of the published evidence. It focuses primarily on internationally oriented systematic (English language) reviews, which give a broader, and sometimes deeper assessment of the available evidence. Several systematic reviews covering aspects of nurse retention have been published in recent years. Some focus on a specific intervention, others cover either a segment within the nursing workforce, or a specific type of care environment. In combination they provide an overview of the lessons from the available published evidence, as well as a pointer to major continuing evidence gaps. A range of these systematic reviews published in the last 10 years is summarised in the Box 4 below, in chronological order.

Box 4. A review of reviews.

- A systematic review of the effectiveness of approaches to retaining newly graduated nurses³⁷ reported that the highest retention rates were associated with retention strategies that used a preceptor model.
- A systematic review identifying which factors were successful in recruitment and retention of nurses in aged care identified a range of factors: careful selection of student nurse clinical placements and their ongoing supervision and education, training for skills, leadership and teamwork for new and existing nurses, increased staffing levels, pay parity across different health settings and family friendly policies³⁸.
- A systematic review examining links between nurse retention and nurse management leadership practices³⁹ reported that managers who practiced relational leadership (a behavioural approach in which the leader focuses on the satisfaction, motivation and the general well-being of team members) and ensure quality workplace environments are more likely to retain their staff.
- A realist review of factors that helped retain attracting nurses and other health workers in rural areas reported three key conclusions: 1) retention in rural practice is improved when training included a rural-focused curriculum, when there were recruits with a rural background or interest in rural practice; 2) professional and social isolation, which can hinder retention of health workers is reduced through educational, financial incentive, and personal and professional support interventions; and 3) financial incentives will only contribute to improved retention if they outweigh the opportunities of private practice in urban areas, and if they are offered in combination with non-financial incentives⁴⁰.
- In a review of factors related to retention of emergency care nurses in Canada⁴¹ nursing management, professional practice, collaboration with physicians, staffing resources and shift work emerged as significant influencing factors for nurse engagement, which plays a central role in emergency department nurses intention to leave.

- A systematic review that focused on retention of nurses in rural areas,⁴² identified two studies that showed that financial-incentive programs had improved nurse distribution and three other studies that highlighted supportive relationships in nursing, information and communication technologies support and rural health career pathways as factors influencing nurse retention.
- A review of “positive practice environments” for nurses concluded that their creation enhanced nurse retention and facilitated quality patient care, but that there was a need to more fully evaluate practice environments using a validated tool to guide and evaluate interventions^{43 44}.
- A systematic review examining which interventions improved retention of experienced registered nurses reported that team work and individually targeted strategies including mentoring, leadership interest and in-depth orientation increased job satisfaction produced higher retention results⁴⁵.

Key points from the reviews

What can be concluded from the evidence review on nurse retention? There has been a steady growth in the evidence base on nurse retention in recent years. The findings of different reviews overlap, but several key points emerge.

Firstly, the published research reviews identify a wide variety of factors related to staff retention but most of it focuses on hospital based nurses in high income countries, and much of it has a specific but narrow focus. This can limit the generalisability of findings and any related policy recommendations.

Secondly, there are various definitions of “retention” used in these reviews. Some focus on turnover, some on retention, some on stability, some on staff engagement⁴⁶, and some on other related measures such as “attrition”⁴⁷, “job embeddedness”⁴⁸ or “intent to leave”⁴⁹.

Thirdly, the factors that contribute to nurse retention, by triggering nurses’ intention to leave or stay in an organisation, may be complex and multi-dimensional, but are usually influenced both by organisational and individual / demographic factors.

Fourthly, a range of organisational factors are often identified as impacting negatively on nurse satisfaction, turnover or retention. These include work environment, working relationships, and working conditions; pay, other financial and non- financial incentives; flexibility and so called “family friendly” policies; career opportunities and access to education; productive working relationships with other staff and teams; responsive management, effective supervision and focused mentoring; and job mobility and relative job opportunities in different organisations, sectors, regions and countries.

The challenge for any NNA or policy maker who is trying to understand what to do about nurse retention in their own sphere of interest and influence is to decide what to make of the evidence base. Much of the evidence findings highlighted earlier in this brief may resonate, but most will be drawn from a different context or country and may also have been developed for a different purpose or with a different perspective. How can the relevant contextual issues be identified, and how can the most effective policies be implemented so as to improve retention? This will be considered in the next section.

Section Three: Nurse Retention: Developing and using a frame for policy

In developing a frame for policy interventions on nurse retention, the first point to note is that retention should not be examined or addressed in isolation from other features of the working lives of nurses, as there are important interconnections. One obvious connection is that “retention” is often coupled with “recruitment”- a recognition that recruitment and retention are both critical aspects of workforce policy. Another is that retention is often considered in the context of improving geographic or sectoral “distribution” of the workforce so as to improve population access to health care- a critical aspect of achieving UHC. The retention/ distribution focus is often on how to improve retention in rural and remote areas.

A second dimension is that nurses at different points in their career will have greater or lesser potential to be geographically and organisationally mobile; nurses of different ages and generations may have different work and life priorities⁵⁰, and nurses in different organisations and systems will have varying levels of opportunity to move to jobs in other systems and countries. Not all job mobility is bad for the nurse or the employing organisation, but there is a need for each organisation and system to be able to assess what are the patterns and trends of nurse stability and/or turnover.

Nurse retention: what’s the problem?

In order to identify which interventions may be effective at addressing nurse retention issues, policy makers and NNAs must have access to data and information which helps diagnose the extent of the problem, assess if it is variable across the organisation or system, and pin-point what are the causal factors.

Any analysis should take account of the age and gender profiles of the nursing workforce under examination, as well as their working hours and patterns. Monitoring and analysis of nurse retention related data can then enable the identification of trends in retention and can also identify variations in the level of retention in different parts of the organisation, system or country (see Box 5 below).

Box 5. Using a survey to reveal regional differences.

A survey of over 2000 nurses in Portugal, examining “engagement” noted “Despite the high mean levels of engagement, the differences observed between regions, hospitals and services reveal the importance of organizational conditions in explaining this phenomenon” ⁵¹.

This assists with identifying where, and to what extent, nurse retention is most problematic (see Box 6 below), and where a focus on policy interventions may be most appropriate. There are various methods of defining and measuring nurse turnover and stability; each has strengths and limitations but it is important that a consistent approach to monitoring is applied (see Annex 1 for full details on different retention indicators).

Box 6. Analysing turnover data to examine associations with other factors.

A national study of turnover and retention for registered nurses, licensed practical nurses, and certified nursing assistants in nursing homes in the USA also examined the associations between management tenure, organisational characteristics, local economic conditions, turnover, and retention. The overall annualized turnover rate for registered nurses was reported to be 56%. Director of nursing tenure, registered nurse hours per patient day, and certified nursing assistant hours per patient day show the most consistent associations to lower turnover and higher retention⁵².

Causal factors may be more difficult to assess systematically, but there is scope to use data on where leaver nurses move to (“destination”) to highlight patterns of leaving. One issue to clarify is the extent to which nurse turnover is caused by nurses leaving a job (organisational turnover) versus leaving the profession (professional turnover)⁵³. In addition, the views and experiences of nurses can be obtained through the use of interviews, focus groups staff surveys. These can highlight which factors are contributing to retention problems.

Retention (problems in context)

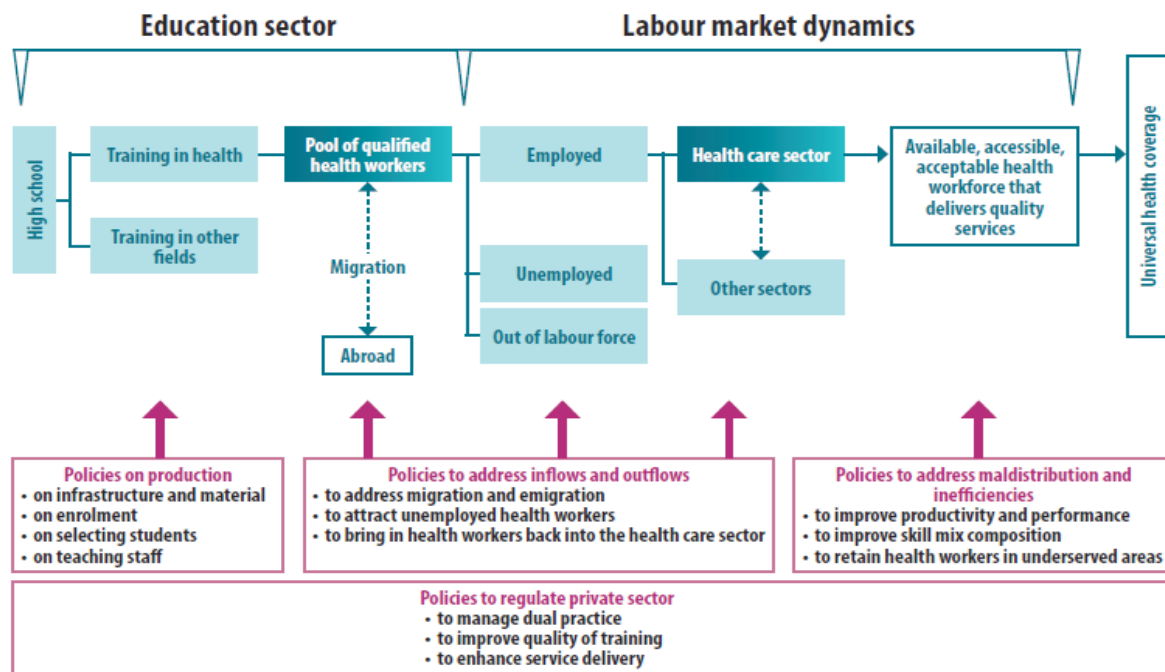
Analysis alone cannot improve nurse retention; there also needs to be action and policy intervention. And, as noted above, nurse retention should not be addressed in isolation from other aspects of nurse workforce policy and planning. There should be an overall strategic focus on the nursing workforce.

Every organisation, health system and country should have developed and agreed a sustainable, strategic approach to the nursing workforce. This must have a clear driving vision, be aligned with broader health systems plans and priorities, take a patient/ consumer centred perspective, involve nurses and NNAs as key stakeholders, and be informed by evidence and analysis, without being rigid or set in stone- it must be flexible and adaptive⁵⁴.

One example is the World Health Organization Global Strategy on Human Resources for Health: Health Workforce 2030⁵⁵. It uses a labour market frame of reference which emphasises the dynamic nature of health workforce mobility⁵⁶, and it places the issue of retention, and policy solutions for retention, in a broader national policy context.

This frame can be adapted for use by policy makers and NNAs; it highlights that whilst much policy effort must focus on the “production” of new staff, there also needs to be a policy emphasis on retention and distribution (see Figure 1 below). It assists policy makers and NNAs to identify potential “entry” points for different types of policy, and the likely interconnection of different policies as they are applied.

Fig 1: The Health Labour Market Context



Source: Sousa et al, 2013, Bulletin of the WHO. Adapted from Vujicic 2006 and 2012.

The labour market frame reinforces the need to develop a good overview of nurse labour market dynamics in order to be able to develop effective policies on flows of nurses, including retention, and optimal distribution of nurses: flows of new students into nurse education, flows of new nurses from nurse education into employment, flows between different sectors, countries and types of employment status.

The key point is to be clear that addressing retention of nurses should not be undertaken without consideration of connected aspects of nursing workforce policy and planning. Policy makers and NNAs must have an understanding of the nursing labour market context.

Framing policy interventions on nurse retention

Having clarified the nurse retention problem(s) and delineated the nurse work-force context, how can the most effective policies be implemented so as to improve nurse retention? One approach is to apply a framework which draws from the evidence base on nurse retention but focuses on the context and on practical implementation.

A starting point is for policy makers and NNAs to categorise potential policy interventions to improve retention. The aim is to provide a structure to systematically identify the options for intervention that appear to meet the identified nurse retention problems, are appropriate to context, and can therefore be considered for implementation. The table below summarises the categorisation of potential policy interventions that have been used in recent evidence-based reviews of health workforce retention (some also focus on recruitment and/ or distribution).

Each of the reviews has developed a framework of 4- 6 headings: “Staffing,” “Education,” “Infrastructure,” etc.

Whilst there are some differences in titles and categorisation, in each case the typology that has been developed usually covers education, regulation, incentives (financial and non-financial, regulation, and professional/ personal support. Using one of these frames gives policy makers and NNAs a structure to identify specific policy interventions.

Table 1: A summary of typologies used In different reviews on health workers

BUCYX ET AL 2010 ⁵⁷ (RETENTION)	WHO 2010 (REC AND RETENTION) (ALSO ARAUJO AND MAEDA 2013 ⁵⁸ , BARIBELL ET AL 2015 ⁵⁹)	DIELEMAN ET AL, 2011 (RETENTION) ⁶⁰	MBEMBA ET AL, 2013 (RETENTION) ⁶¹
Staffing	Education	Education	Education and Continuous Professional Development
Infrastructure	Regulation	Compulsory Service	Regulation
Remuneration	Financial Incentives	Financial Incentives	Financial Incentives
Workplace Organization	Professional and Peer Support	Personal and Professional Support	Personal and Professional Support
Professional Environment			
Social, Family, and Community Support			

As highlighted above, one notably influential and relevant framework is the one developed by the WHO which sets out evidence based recommendations on improving access to care in remote and rural areas, by improved retention of the health workforce⁶² (second column in the table). The WHO recommendations were based on a global review of the evidence, building on previous studies^{63 64}.

Which frame?

The WHO report set out 16 specific evidence-based interventions for consideration, emphasising that no single one is likely to have sustained impact on its own. These 16 recommendations were grouped into the four areas of intervention: education, regulation, financial incentives, and professional and personal support (see Figure 2 below).

Each of the 16 intervention examples, A1 to D6, represents one possible option for consideration. The WHO report sets out the relative strength of evidence of each, and also provides additional decision support guidance to policy makers.

Figure 2: The framework for WHO evidence-based recommendations on recruitment and retention

Category of intervention	Examples
A. Education	A1 Students from rural backgrounds
	A2 Health professional schools outside of major cities
	A3 Clinical rotations in rural areas during studies
	A4 Curricula that reflect rural health issues
	A5 Continuous professional development for rural health workers
B. Regulatory	B1 Enhanced scope of practice
	B2 Different types of health workers
	B3 Compulsory service
	B4 Subsidized education for return of service
C. Financial incentives	C1 Appropriate financial incentives
D. Professional and personal support	D1 Better living conditions
	D2 Safe and supportive working environment
	D3 Outreach support
	D4 Career development programmes
	D5 Professional networks

Source: WHO, 2010.

The 16-point evidence-based framework on retention developed by WHO has been applied in various countries and contexts. One multi country review of its application highlights both its potential, and the need to think through implementation and evaluation (See Box 7 below).

Box 7. Lessons from a multi country study using the WHO evidence framework on retention.

A multi-country study took a joint learning approach to assessing the scope for the use of WHO's 16 recommendations on health workforce retention in five countries in Asia: China, Lao People's Democratic Republic, Sri Lanka, Thailand and Viet Nam. A policy analysis tool was used to map existing and potential retention strategies – from formulation to implementation – and to assess or predict outcomes. The aims were to scale up the policies that worked well and either scale down the other policies or minimize the barriers to their effective implementation. A review of the work highlighted that policy makers must recognise the issues of interconnectedness and sequencing of policies on retention, and that there was a need for a multi-stakeholder approach in the design, implementation and impact evaluation of interventions.⁶⁵

Policy “Bundles”

One key message for policy makers from the evidence review in Section 2 was that there is scope to improve nurse retention in all health systems, but many policy options may have potential impact. The analytical frame set out in the previous section illustrated some of these options, and highlighted the need to look at aligned or coordinated policy intervention.

This latter point requires emphasis: sustained success in improving nurse retention is likely to be related to planned, and perhaps sequenced, multi-policy intervention- so called “bundles” of linked policies, rather than single interventions^{66 67 68}. A recent review focusing on health workforce retention noted that “While single R&R [recruitment and retention] interventions on their own have little impact, bundles of interventions are more effective. Interventions backed by political and executive commitment benefit from a strong support base and involvement of relevant stakeholders”⁶⁹ (This can include patients: see Box 8 below).

Box 8. Involving patients in improving nurse retention.

A hospital in England is collaborating with patients' representatives⁷⁰ to determine how the retention rate of registered nursing staff in the hospital can be improved. The focus is on the collaborative development and use of an evidence-based nurse retention model, known as TRACS (“supporting Transition at key career junctures, building Resilience, facilitating Authentic nurse leadership throughout the organisation, securing Commitment to support changing work practices and providing on-going Support for staff”). The evidence-based approach focuses on key factors known to impact on nurses' intention to stay and is reportedly using a collaborative ‘bottom-up’ approach to engender staff empowerment.

Similar conclusions have been reached in other reviews- that nurse retention can be improved in many health systems, but “bundles” of linked policies are required⁷¹

^{72 73 74} The realist review of factors that contributed to retaining nurses and other health workers in rural areas⁷⁵ concluded that “Bundled approaches are more successful than single interventions”. The systematic review examining which interventions that improved retention of experienced registered nurses reported “Retention was highest when multiple interventions were used”⁷⁶.

Identifying the most effective balance of policies to improve retention of nurses is in part about understanding the profile of the workforce and developing the evidence base on the work experiences and motivations of the nurses. This can be achieved through surveys, exit interviews, focus group feedback, and consistent analysis of labour market indicators in order to help prioritise interventions (see Box 9 below).

Box 9. Using surveys of nurses to help identify policy priorities.

One survey in South Africa reported that strategies aimed at improving job satisfaction and retention of primary healthcare nurses in rural South Africa should rely not only on financial rewards and improved work conditions but also on adequate human resource management⁷⁷. Another, using discrete choice methods, assessed nurse's preferences for different human resource policy interventions in three countries and reported that these varied significantly between the three countries. The authors concluded that in Kenya and South Africa, better educational opportunities or rural allowances would be most effective in increasing the uptake of rural posts, while in Thailand better health insurance coverage would have the greatest impact⁷⁸.

Another, simpler approach to promoting the “bundling” of interventions aimed at improving retention is to compile descriptive guide-books or reports based on good practice examples. This case study approach can be a relatively straightforward method of disseminating positive experiences, such as the use of so called “family friendly” flexible policies within a system or country (see Box 10 below).

Box 10. Developing practical guides on how to improve nurse retention.

The National Health Service (NHS) in England has recently published a national guide on health workforce retention⁷⁹. Based on work in 92 NHS organisations using the ‘plan, do, study, act’ (PDSA) cycle, the guide summarises various key components, including looking at data in depth, developing organisational values and culture, supporting flexible working, and development and career planning. Another UK based guide was developed by nurse directors in teaching hospitals⁸⁰ and features several case studies describing best practice strategies employed by these hospitals to improve nurse retention. Strategies range from facilitating staff engagement to fostering a culture of recognition and reward.

Evaluation of the impact of interventions aimed at improving retention should be an integral part of any policy framework, but is often a relatively weak, or non-existent component. The standard data items discussed earlier in this section and set out in greater detail in Annex 1 can provide the basis for assessing change as a result of the implementation of retention policies. Other approaches to evaluation can include applying costing assessments^{81 82} or “before and after” surveys. Evaluation can provide feedback to policy makers so that future interventions become better aligned and more effective (see Box 11 below).

Box 11. Learning from the evaluation of multiple programmes on nurse retention.

An evaluation of seven nursing retention and recruitment programs in Alberta, Canada⁸³ reported that the programs led to perceived improvements in nurses' confidence, greater control over their work environment, decreased stress levels, increased energy and morale and perceived improved ability to provide high-quality care. However, no formal implementation plan had been developed or made available to assist employers with implementation of the programs. The authors highlighted the need for more effective communication and evaluation of initiatives, and recommended that “key performance indicators, baseline data, monitoring mechanisms and an evaluation plan need to be developed prior to implementation”.

Section Four: Summary of key points

This policy brief summarises the key points about what is known about effective policies on nurse workforce retention, with the aim of informing National Nursing Associations (NNAs) and policy makers by presenting a synthesis of key findings and policy pointers. The brief presents a policy analysis framework for nurse retention, and highlights tools and indicators that can be used to help monitor the impact of policy interventions aimed at improving nurse retention.

Why nurse retention is important. The brief highlights that every time a nurse leaves a health care organisation there is an impact on the nurse, on the health care organisation, and on the client population of the organisation. Organisational costs will be incurred, and there is the potential for a negative impact on patient care. The brief summarises three types of impact: Impact on costs and productivity; Impact on care quality; and the impact on the nurse, related to workload and working conditions. It highlights the compelling evidence on magnet hospitals, and provides links to a costing nurse turnover checklist.

Nurse retention: What the evidence tells us. The brief then provides an overview of the published evidence, focusing primarily on internationally oriented systematic (English language) reviews. It reports on the findings of systematic re-views published over the last ten years and concludes that there has been a steady growth in the evidence base on nurse retention. It also notes that there limited scope for generalisability of findings, that various definition of “retention” are used, and that a range of organisational factors are often identified as impacting on nurse satisfaction, turnover or retention. The challenge for any NNA or policy maker who is trying to understand what to do about nurse retention is to decide what to make of the evidence base, and how to identify the relevant contextual issues

Nurse Retention: Developing and using a frame for policy interventions. The brief then focuses in more detail on developing a framework approach for policy interventions on nurse retention. It stresses that retention should not be examined or addressed in isolation from other features of the working lives of nurses, as there are important interconnections. It sets out a sequence of four aspects of policy analysis and implementation:

Nurse retention: What’s the problem?

In order to identify which interventions may be effective at addressing nurse retention issues, policy makers and NNA’s must have access to data and information which helps diagnose the extent of the problem, if it is variable across the organisation or system, what are the casual factors, and which policy interventions may be most appropriate. There are various methods of defining and measuring nurse turnover and stability which can be used, and these are detailed in Annex 1.

Retention (Problems) in Context

It is clear that analysis alone cannot improve nurse retention. There is a need for an analytical underpinning, but if a retention problem has been identified there also needs to be policy intervention. Every organisation, health system and country should have developed and agreed a sustainable, strategic approach to the nursing workforce. One example is the WHO Global Strategy on Human Resources for Health: Health Workforce 2030 which uses a labour market analytical approach which can be adapted for use by policy makers and NNAs.

Framing Policy Interventions

Policy makers and NNAs can apply a framework which draws from the evidence base but focuses on the practical implementation. The aim is to provide a structure to systematically identify the options for intervention that appear to meet the identified nurse retention problems, are appropriate to context, and can therefore be considered for implementation. The brief summarises the categorisation of potential policy interventions that have been used in recent evidence-based reviews of health workforce retention. Using one of these frames gives policy makers and NNAs a structure to identify specific policy interventions.

Policy “Bundles”

There is scope to improve nurse retention in all health systems, but many policy options. Sustained success in improving nurse retention is likely to be related to planned, sequenced, multi- policy intervention- so called “bundles” of linked policies, rather than single interventions. Identifying the most effective balance of policies to improve retention of nurses is in part about developing the evidence base on the work experiences and motivations of the nurses, through surveys, exit interviews, focus group feedback, and consistent analysis of labour market indicators in order to help prioritise and link interventions. Evaluation of the impact of interventions aimed at improving retention should also be an integral part of any policy framework.

These key steps are summarised in the Box 12 below.

Box 12: How to achieve sustained impact on nurse retention

NURSE RETENTION: WHAT'S THE PROBLEM?	DIAGNOSE AND ANALYSE:
<p>Policy makers and NNAs must have access to data and information which helps diagnose the extent of the problem, assess if it is variable across the organisation or system, identify what are the causal factors, and decide which policy interventions may be most appropriate.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Use standard definitions of retention or turnover [See Annex 1] to assess trends and benchmark variation <input type="checkbox"/> Use staff surveys, focus groups, exit interviews to identify causal factors and highlight variations <input type="checkbox"/> Identify impact on nurses of work environment e.g. the practice environment scale of the nursing work index <input type="checkbox"/> Analyse patient satisfaction, quality and outcome data, and turnover cost data [See Annex 2] to highlight organisational and patient care impact
RETENTION (PROBLEMS) IN CONTEXT	UNDERSTAND THE LABOUR MARKET AND STRATEGIC CONTEXT
<p>Develop a sustainable strategic approach to the nursing workforce.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Ensure that there is accurate and complete data on the nursing workforce, ideally using a computerized information system and "minimum data set" [See Annex 1] <input type="checkbox"/> The WHO Global Strategy on Human Resources for Health: Health Workforce 2030 uses a labour market analytical approach which can be adapted for use
FRAMING POLICY INTERVENTIONS	DEVELOP A POLICY FRAME FOR INTERVENTIONS
<p>Develop and apply a framework which draws from the evidence base but focuses on the practical implementation of policies aimed at addressing nurse retention.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Develop a framework which categorises potential policy interventions and gives a structure to identify specific policy interventions <input type="checkbox"/> The WHO 2010 Framework⁸⁴ is one to consider, others are highlighted in Section Three
POLICY "BUNDLES"	ALIGN POLICY IMPLEMENTATION INTERVENTIONS
<p>There are many possible policy options. Their interventions need to be aligned or coordinated for maximum impact.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Sustained success in improving nurse retention is related to planned, sequenced, multi-policy intervention- so called "bundles" of linked policies <input type="checkbox"/> The most effective balance of policies to improve retention of nurses will be driven by a clear understanding of the work experiences and motivations of nurses <input type="checkbox"/> Evaluation of the impact of interventions should also be an integral part of the approach

Annex 1: Indicators of nurse retention

Several workforce indicators can be used to make some assessment of nurse retention, ideally collected on a regular basis in some type of human resource information systems (HRIS). (See the WHO Handbook⁸⁵ and recent review of health workforce attrition^{86 87} for more details on analytical approaches and their limitations).

Strengths and limitations of different indicators

The table below sets out the commonly used indicators that can relate to nurse retention, how these indicators are calculated, and the main strengths and limitations of each indicator as applied to an assessment of nurse retention.

INDICATOR	COMMON FORM OF CALCULATION	STRENGTHS/ LIMITATIONS
TURNOVER	<p>Turnover, and the alternate terms of "attrition"⁸⁷ or "wastage"⁸⁸, is usually expressed in terms of the % of nurse staff of a particular workplace or system who have left the organisation (or have moved jobs) within the last 12 months. This is sometimes called the "crude" annual turnover rate:</p> <p>THE NUMBER OF 'LEAVERS' DIVIDED BY THE AVERAGE NUMBER OF STAFF IN POST IN THE YEAR.</p> <p>Other measures include: survival probabilities⁸⁹; median survival (years), survival analysis, attrition in first years after graduation.</p>	<p>The nurse turnover rater, however measured, is the most common measure of "retention" (or lack of it). Voluntary and involuntary turnover must be differentiated; internal and external destinations of voluntary "leavers" should be differentiated.</p>
STABILITY	<p>Examining nurse workforce stability focuses on the same underlying issue of retention of nurses but takes the perspective of focusing on those who stay rather than those who leave. High levels of staff stability, or retention, are the opposite of high turnover, and may be positively associated with the level and quality of healthcare available⁹⁰.</p> <p>STABILITY INDEX 1 – THE PERCENTAGE OF STAFF WHO WERE IN SUBSTANTIVE POSTS AT THE BEGINNING OF YEAR 1 AND WHO WERE STILL IN SUBSTANTIVE POSTS IN THAT ORGANISATION A YEAR LATER.</p>	<p>The choice to stay, when there is an option to leave, may indicate that the work environment is meeting nurse workforce needs. Stability may be a helpful indicator of positive retention but assumes that there is a "choice" being made by the nurse to stay or leave.</p>

<p>ABSENCE</p>	<p>Nurse workforce absenteeism has been reported as a barrier to improvement of health outcomes in low and middle-income countries^{91 92}. Reasons for absence from work can include remoteness and difficult access to health centres, poor infrastructure and transport, poor or unsafe working conditions. In some cases absence from the main place of work can be related to the need to generate income from other sources to achieve a living wage, participate in "dual practice"^{93 94}.</p> <p>"CRUDE" ABSENCE RATE: TIME LOST DUE TO, OR ASCRIBED TO, ABSENCE AS A PERCENTAGE OF CONTRACTED WORKING TIME IN A DEFINED PERIOD.</p> <p>Other measures in use include the average duration per spell of absence, and the average duration of absence per person.</p>	<p>Absence rates can be simple to calculate; analysing absence rates by different staff groups, department or function can help to identify particular problem areas. A main limitation is that the comparison of absence rates in different units can give rise to false conclusions if basic measures such as number of absences and duration of absences, are not also provided.</p>
<p>APPLICANTS</p>	<p>NUMBER OF "SUITABLY QUALIFIED" APPLICANTS FOR DESIGNATED NURSE JOBS/POSTS</p>	<p>This indicator of "attractiveness" of posts can be used to assess "fill rate" - the % of posts that are filled by suitably qualified nurse personnel. The % rate may be compared with other parts of the health system to assess the relative "problem" of recruitment in specific areas e.g., rural/remote areas.</p>
<p>VACANCIES</p>	<p>If funded nursing jobs/posts are left unfilled, this may reflect that the post is not attractive to workers, because of working conditions, geographical location, or if the recruiting organisation has a poor reputation. The rate of vacant posts may be an indicator of relative attractiveness and unattractiveness of different jobs, locations and organisations, and such the vacancy rate has scope to be used as an indicator.</p> <p>THE NUMBER OF FUNDED POSTS THAT ARE UNFILLED EXPRESSED AS A PERCENTAGE OF TOTAL POSTS- E.G. A % VACANCY RATE.</p>	<p>Some organisations deliberately leave nurse jobs/posts vacant to save on recruitment costs which undermines the use of vacancy rates as a shortage indicator; If vacant posts cannot be filled they may be removed, "hiding" the problem of the shortage.</p>

References: (see ^{96 97 98} for more detail)

These commonly used indicators of nurse retention are, at best, of partial utility in assessing nursing workforce retention, and have to be used and interpreted with caution. All require some frequency of use if they are to be used to track trends, which are much more useful than single “point in time measures”. Many have optional methods of calculation which can constrain comparison if different measures are used in different sites or at different times.

These methodological limitations can also be compounded by constraints in interpreting the data as clear-cut indicators of nurse workforce behaviour. For example, low nurse turnover may just reflect an absence of alternative employment for nurses rather than high job satisfaction; high nurse absence may reflect travel access problems rather than a lack of motivation; maintaining a high level of nurse job vacancies may be a deliberate cost cutting exercise.

Minimum Data Sets (MDS) and National Health Workforce Accounts (NHWA)

Policy makers, analysis and planners must consider how best to support analysis by the establishment of regular HRH data collection, ideally using a system wide standard HRIS which is based on an agreed national minimum HR data set. There are current WHO recommendations for a national health workforce account (NHWA)⁹⁹ and minimum data set (MDS) for health workforce registry¹⁰⁰ which would contain various elements that are relevant to this area of policy support action.

Annex 2 Nurse Retention: Tools

A turnover costs checklist

The evidence review reported in this brief highlighted that there had been several studies examining and assessing the costs of nurse turnover. These studies used variants of a turnover costing checklist approach to estimate the overall cost of replacing a nurse. Research on nurse turnover costs usually identifies four components of the process: separation of the nurse leaver, temporary replacement, recruitment and selection of a replacement nurse, and induction of the new nurse. The objective in applying the checklist is to identify direct costs and apportion indirect costs related to the leaving and joining process.

Four Elements of a Nurse Turnover Checklist

1. SEPARATION: The first stage of the nurse turnover process encompasses estimating any costs incurred by the worker leaving the organisation. These costs could include time spent in processing paper work, conducting exit interviews and preparing references.

2. TEMPORARY REPLACEMENT is the second stage in the process and reflects the cost implications of the methods used by the organisation in "covering" the nursing post vacancy until it is filled. This could include temporary staff and overtime costs.

3. RECRUITMENT AND SELECTION is the third stage. It could include advertising the vacant post, time spent checking applications and references, interview time, relocation costs related to moving the new nurse recruit to the work location.

4. INDUCTION AND TRAINING. This covers the costs incurred as the replacement nurse enters the organisation until she or he reaches the same level of expertise and productivity as the leaver. An attempt is made to estimate the cost of the productivity "lost" until the replacement is working as effectively. This is a complex issue relating partly to clinical expertise but also to physical orientation in the new work environment and to integration with a new work group.

Nurse turnover costs will also vary depending upon the replacement strategy being adopted (e.g. replacing an experienced nurse with a less experienced nurse is likely to lead to lower productivity, in the short term at least) and are likely to vary according to the clinical setting. 'High tech' areas, and other specialities demanding a high level of post basic nursing skills and expertise, are likely to incur greater turnover costs than other specialities where replacement staff of a similar calibre to leavers may be easier to recruit. For a more accurate estimate, an organisation would have to apply the nurse turnover checklist methodology to its own employment situation, and use this self-generated data to inform its own decisions.

There are a number of ways that the overall impact of worker turnover costs at organisation level can be illustrated, such as: percentage of paybill; cost per patient day; cost saving of reduction in turnover.

iHRIS Retain

CapacityPlus and the World Health Organization developed iHRIS Retain, an open source tool to cost various health worker interventions and develop retention strategies to be implemented at the district, regional, or national level¹⁰¹. It has reportedly been applied in several countries to support management, policy makers and other stakeholders in developing more effective approaches to health workforce retention¹⁰². It is intended to support the decision-making process about the most appropriate cost effective retention strategy to pursue in specific contexts. It was structured according to the 2010 WHO Global Policy Recommendations for Increasing Access to Health Workers in Remote and Rural Areas through Improved Retention.

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