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Reforming Primary Health Care: A Nursing Perspective



Reforming Primary Health Care: A Nursing Perspective

**Contributing to health care reform,
issues and challenges**

developed by

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for the International Centre for Human Resources in Nursing



International Council of Nurses

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ISBN: 978-92-95094-78-9

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Acknowledgements

The authors would like to thank all those colleagues who sent us papers and practice examples on which we have drawn for this report, in particular members of International Conferences on Community Health Nursing Research.

Executive summary

The aim of this report as outlined in the commissioning brief is three fold:

- “To describe the role of the nurse workforce in the development and implementation of primary health care reform at supra-national, national and local levels.
- To critically review the evidence base and identify, from a nursing workforce perspective, key factors in the practice environment which act to inhibit the development of PHC reform or, conversely, have significant potential to facilitate/strengthen it.
- To develop a clearly argued, evidence-based policy brief, including illustrative case study examples, which articulates the important contribution that nurses can make in future health sector reform focused on primary care development/enhancement and the delivery of health equity goals, and contributes to the ongoing dialogue about key drivers in achieving a paradigm shift to primary health care.”

The amount of evidence available which might be used to explore and contribute to this aim is considerable. In this report we draw on the evidence and practice examples providing a summary and guide to approaches and activities which have been shown to support the development, retention and contribution of the primary health care (PHC) nursing workforce to health of communities and reform of PHC.

The first chapter, “Setting the Scene for the PHC Nursing Workforce Development Roadmap”, provides the context for presentation of a guide to support the development and contribution of PHC nursing. Drawing on the WHO Report 2008, it provides an outline of the key factors impacting on global health care: the role of primary health care; the Millennium Development Goals (MDGs); health challenges and availability of human resources for health.

The second chapter, “Delivering effective primary health care nursing”, presents evidence underpinning the PHC Nursing Workforce Development Roadmap.

Review of the evidence shows that effective PHC nursing requires reform and investment in five areas. These areas individually and in combination impact on the ability of PHC nurses to contribute most effectively to the reform of PHC.

The key features of effective PHC nursing and how they interact with crosscutting workforce components are outlined. These five key areas are located within the context of the Positive Practice Environment (PPE) framework and represent the areas of reform, as follows:

1. People centeredness;
2. Public health perspective;
3. Partnering and inter-professional working;
4. Information and communications technology; and
5. Quality improvement.

We envision human resources for health being central to PHC reform with the key features of effective PHC nursing in a stellar formation surrounded by the satellites of workforce components. The workforce component areas are:

- Education;
- Competencies;
- Regulation;
- Incentives;
- Health and safety;
- Leadership and managerial support;
- Skill mix.
-

Within the context of PPE, the workforce components will interact between and with each other and with the key features of effective PHC nursing, to greater and lesser extents in different global health care systems, but all are essential to PHC nursing workforce development.

An overview of evidence relating to each of the workforce components is provided in Chapter 1, and in Chapter 2 each of the areas is discussed drawing on evidence from the relevant workforce components. Research evidence is discussed with presentation of practice examples demonstrating ways in which PHC nurses are changing practice to enable achievement in the particular area, for example, Partnering and Inter-professional working or People centeredness. In each section we provide a discussion of the relevant literature, practice examples and information on tools to enable development of PHC nursing and PHC.

The conclusion provides a summary of the areas for action.

Chapter 1: Setting the scene for the PHC Nursing Workforce Development Roadmap

Introduction

The International Council of Nurses' International Centre for Human Resources in Nursing commissioned this report with the following aims:

- “To describe the role of the nurse workforce in the development and implementation of primary health care reform at supra-national, national and local levels;
- To critically review the evidence base and identify, from a nursing workforce perspective, key factors in the practice environment which act to inhibit the development of PHC reform or, conversely, have significant potential to facilitate/strengthen it;
- To develop a clearly argued, evidence-based policy brief, including illustrative case study examples, which articulates the important contribution that nurses can make in future health sector reform focused on primary care development/enhancement and the delivery of health equity goals, and contributes to the ongoing dialogue about key drivers in achieving a paradigm shift to primary health care.”
- Primary health care nurses (PHC nurses¹) work within the context of multi-disciplinary teams and have a vital contribution to make at all levels of reform of primary health care: at the policy level; at the district level and at the practice level. The authors undertook database and internet searches of the English language literature to identify relevant research, policy and case study material. In addition, emails were circulated to key contacts and the contacts database of International Conferences on Community Health Nursing Research requesting case examples and literature. This material has been analysed and is presented in Chapter 2, the PHC Nursing Workforce Development Roadmap, with supporting references included in the reference list. The Report commences with an overview of the international context impacting on PHC nurses.

Background

The vision of the ICN's Leadership for Change™ programme is that: “Nursing in the 21st century will have nurses at a country and organisational level equipped with knowledge, strategies and strength to lead and manage in health services and in nursing through change and into a healthier future for all populations.” (ICN 2010a). The contribution and leadership of nurses to population health has long been recognised: Mahler in 1985, for example, declared that nurses could “lead the way” in primary health care (Kendall 2008). In a review of the contribution of PHC nurses since 1978, Kendall concluded: “Nurses have accepted the challenge and the opportunity to make a real difference to community health.” (Kendall 2008 p.50) Nurses are the key providers in PHC comprising 60-80% of the total health system

¹ The term *PHC nurses* is used throughout this report to refer to the role of nurses at all levels of influence.

workforce and provide 90% of all health care services (WHO 2008). It is imperative for the reform of PHC that nurses' skills and abilities are harnessed and maximised. How can the PHC nursing workforce be supported to deliver the most effective nursing care for individuals and communities? What factors support/drive effective PHC nursing workforce development? What factors inhibit/restrain such developments? How can PHC nurses be empowered to achieve PHC reform through workforce enhancement? How can workforce enhancement support PHC nurses to contribute to PHC reform?

The Declaration of Alma Ata in 1978 (WHO/UNICEF 1978) arose from a "paradigm shift in thinking about health" (WHO 2008 xii) and focused on the potential of PHC to achieve "health for all". *Primary Health Care Now More Than Ever* (WHO 2008), relaunched PHC as the way forward for health care in all countries of the world. A comprehensive description of PHC is provided in the report (WHO 2008 Box 2, p.xvii,) which identifies the need for reforms to health systems in four areas:

1. universal coverage reforms to improve health equity (and address the ongoing issues related to the inverse care law²) (Tudor Hart 1971);
2. leadership reforms to make health authorities more reliable;
3. public policy reforms to promote and protect the health of communities; and
4. service delivery reforms to make health systems more people-centered (WHO 2008 p.xvi). People-centered primary care³ is the vehicle to achieve service delivery reforms with the PHC team providing the co-ordination of continuous, comprehensive, person-centered care to a defined population networking to other services as necessary.

These are the characteristics of PHC provision identified by Starfield (1999) as providing the highest quality PHC. People-centered primary care features: a focus on health needs; enduring personal relationships; comprehensive, continuous and person-centered care; responsibility for the health of all in the community along the life cycle; responsibility for tackling determinants of ill-health; people as partners in managing their own health and that of their community (WHO 2008 p.43). The PHC Nursing Workforce Development Roadmap aims to help PHC nurses achieve people-centered primary care.

International health care and PHC face a range of challenges in achieving reformed, equitable health care. These include:

- The emergence of new infectious diseases; the ongoing impact of established infectious diseases, including HIV/ AIDS, MDR and XDR tuberculosis, SARS, H1N1, malaria;

² Inverse care law: the availability of good medical [and nursing] care tends to vary inversely with the need for it in the population served (Watt 2002), i.e. people who have greater health care needs have less access to good health care provision – people living in poverty who have greater health care needs have less access to health care provision.

³ Primary care is used in the WHO Report (2008) interchangeably with primary health care. Where we are making direct reference to the Report we have used the term primary care but use this term to encompass the wider meaning of primary health care.

- International growth of long term conditions and the need for preventive action in relation to, for example, obesity, alcohol misuse, heart disease, chronic obstructive pulmonary disease, mental health conditions and cancers;
- Maternal and child health needs including the impact of genetic conditions such as sickle cell disease; and
- The impact of environmental conditions, global warming, poverty, the drug economy, wars and conflicts, unstable, corrupt governments, urbanisation, globalisation and ageing of populations (WHO 2008).

Many of these challenges are encompassed in the Millennium Development Goals⁴ (United Nations 2000) which provide a focus for health reform activity.

Much has been written about human resources for health (HRH) shortages (see, for example, Dussault et al. 2009 and Lane et al. 2009). Sub-Saharan Africa has been reported to have 25% of the world's disease burden cared for by 1.3% of the world's trained health workforce (Joint Learning Initiative 2004). Of the 57 countries reported to experience nurse shortages, 37 of these are in Sub-Saharan Africa where a shortfall of more than 600,000 nurses has been suggested as being needed to meet the health related MDGs (ICN 2004 & 2006). *"The global deficit of doctors, nurses and midwives is at least 2.4 million."* (WHO 2007b). The disparity in the numbers of nurses in different countries is graphically illustrated in Table 1.

Table 1: The human resource crisis: health personnel (nurses and doctors) per 100,000 population

Cadre	Malawi	Tanzania	Ghana	Zambia	Botswana	South Africa	UK	USA
Nurses	25.5	36.6	64	113	241	388	937	1212
Doctors	1.1	2.3	9	6.9	28.7	69.2	256	230

(Source: WHO 2007 HIV/AIDS Programme. *Task shifting to tackle health worker shortages*. Table 1 p.2)

The challenge of lack of personnel in PHC or the location of personnel in parts of a country with unmet needs affects every country in the world, including the USA. One of the aims of the health reforms in that country is to extend access to PHC services to everyone, particularly those in rural areas. On 17 June, 2010 the American government announced new funding of \$250 million to develop the PHC workforce: *"The Obama Administration believes that strengthening and growing our primary care workforce is critical to reforming the nation's health care system. Increasing access to primary care physicians and nurses can help prevent disease and illness and ensure all Americans – regardless of where they live – have access to high quality care."* (US Department of Health & Human Sciences 2010).

There have, however, been successes in global health as discussed by Kendall (2008) and The Gates Foundation argues these successes in improving health in developing countries need to be given greater visibility: *"One obstacle to increasing*

⁴ MDGs: Eight goals to be achieved by 2015: Eradicate extreme poverty and hunger; Achieve universal primary education; Promote gender equality and empower women; Reduce child mortality; Improve maternal health; Combat HIV/AIDS, malaria and other diseases; Ensure environmental sustainability; Develop a global partnership for development.

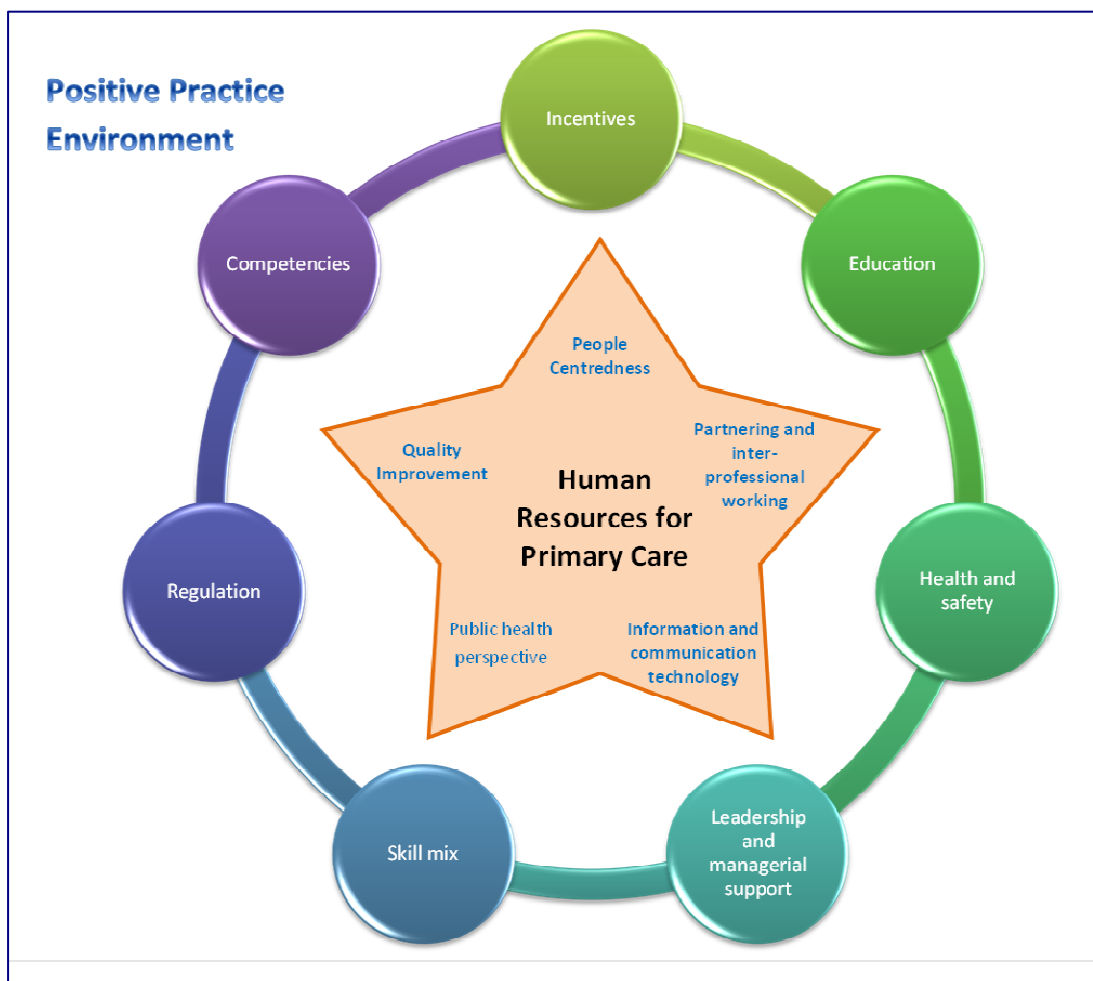
investments in global health is fatigue from numbing statistics about the challenges. According to independent research, policy makers and most of their constituents are not aware of the positive impact global health investments are already having on the lives of millions living in the developing world.” (Gates Foundation 2009 p.4). Such investment is important for the health of communities and for the motivation of PHC nurses, as one of our correspondents commented: “... the practice of community health is fulfilling professionally and should be fostered in order to provide effective PHC delivery to millions of people [in] under-served rural communities.” (Obasohan 2010). In the following we present evidence of the positive contribution of investment in workforce requirements on the delivery of effective PHC nursing.

Chapter 2: The PHC Nursing Workforce Development Roadmap: Delivering effective primary health care nursing

Introduction

In reviewing the evidence for this report it was clear that there is a considerable body of evidence relating to workforce development in many fields of health care. The challenge was to bring this material together in a way that provides guidance for nurses and nurse leaders in PHC nursing. The PHC Nursing Workforce Development Roadmap is a visual representation of the key areas which the literature and practice evidence suggest will enhance the contribution of PHC nurses to current and future health challenges. The Roadmap draws on the WHO (2005) document, *Preparing a Health Care Workforce for the 21st Century. The Challenge of Chronic Conditions*, and the PHC nursing literature. PHC nurses are part of the wider health care workforce and therefore the rationale underpinning the Positive Practice Environments (PPE) initiative, which aims to improve the context of work of all health care practitioners, is as relevant to PHC nurses as to all other practitioners. The Roadmap is therefore set in the context of the PPE campaign and highlights some of the specific elements of the PPE initiative which, the evidence indicates, may be the most relevant for attention in the development of PHC nursing. In the Roadmap the five key features of effective PHC nursing supported by seven cross cutting workforce components are illustrated in Figure 1. The key features of effective PHC nursing are shown in a stellar formation surrounded by the satellites of workforce requirements. The key features and workforce components are set in the environmental context of a practice environment informed by the PPE campaign. The workforce components will interact between and with each other and with the key features of effective PHC nursing, to greater and lesser extents in different health care systems, but all are essential to PHC nursing workforce development at all levels. In the following discussion we consider the PPE context followed by definition and discussion of the workforce components which underpin the key features of PHC nursing. The five elements of effective PHC nursing are each informed by the workforce components which contribute to the outcomes of effective PHC nursing in, for example, terms of quality improvement or public health. Application of the workforce components within the context of PPE should enable the most effective PHC nursing.

Figure 1: The PHC Nursing Workforce Development Roadmap



The context for effective PHC Nursing: Positive Practice Environments

The literature about survival of organisations indicates that the effectiveness of any organisation is contingent upon its ability to recruit and retain high quality staff (Prosser 2005; Torrington et al. 2011). With the continuing global health workforce crisis work environments have shown a direct relationship between human resources for health (HRH) behaviour and patient care outcomes (Van Bogaert et al. 2009). Positive practice environments (PPE) have been promoted and supported by ICN and other international organisations since 2008 as an approach to developing the nursing workforce and have been cited by Baumann et al. (2006) as one of the five priority interventions or strategies relevant to recruitment and retention of HRH. Positive Practice Environments are settings that support excellence and decent work, where employees are able to meet organisational objectives and achieve personal satisfaction in their work. The PPE Campaign has provided a comprehensive checklist to guide those seeking to improve workplace environments (see Appendix 1). In particular, they strive to ensure the health, safety and personal wellbeing of staff, support quality patient care and improve the motivation, productivity and performance of individuals and organisations (WHPA 2008). According to Stichler (2009) healthy work environments are a result of good leadership that determines the character and culture of health organisations and provide work settings where

employees are able to meet organisational objectives and achieve personal satisfaction in their work. The benefits of PPE have been documented in the literature. According to Adams and Kennedy (2006) these can be assessed on organisational performance and health service delivery, health worker performance, patient outcomes and innovation. The implementation of the PPE Campaign began in 2008 building on work which had tested the PPE elements, for example, that reported by Adams and Kennedy (2006). A search of evidence has not yielded any research evidence to date regarding the impact of PPEs *specifically* on PHC nursing. However, the *general* benefits of PPE are identified in Box 1 below (WHPA 2008).

Box 1: Benefits of positive practice environments

- Positive changes in the work environment result in a higher employee retention rate, which leads to better teamwork, increased continuity of patient care, and ultimately improvements in patient outcomes.
- Positive practice environments demonstrate a commitment to safety in the workplace, leading to overall job satisfaction.
- When health professionals are satisfied with their jobs, rates of absenteeism and turnover decrease, staff morale and productivity increase, and work performance as a whole improves.
- Maintaining a level of autonomy over their work allows staff to feel that they are respected and valued members in their places of employment.
- Research demonstrates that nurses are attracted to and remain at their place of employment when opportunities that allow them to advance professionally, gain autonomy and participate in decision-making, while being fairly compensated exist.

Source: (WHPA 2008)

In contrast to such positive environments many PHC nurses, especially those working in low resource environments and in remote rural areas, experience poor or absent support and supervision, minimal monitoring and evaluation by managers and state officials, excessive workloads, poor infrastructure, with lack of electricity and running water, poor transport and indifferent communication systems. Staff turnover is often high, both a characteristic and a consequence of a poor working environment. Providing a PPE in such settings requires leadership and use of tested strategies. For example, the introduction of wellness centres for health staff in Sub-Saharan Africa has positively enhanced the practice environment:

Box 2: Wellness Centres for Health Care Workers

Nurses in Sub-Saharan Africa have taken a particular approach to person-centered care by putting the nurses and midwives themselves at the centre of health care. The commitment is to ensure that those who take care of people are also taken care of. This has developed into the Wellness Centres for Health Care Workers where nurses and midwives with HIV/AIDS and other life threatening diseases can receive treatment and support in a separate environment to their patients. The underlying philosophy is that by focusing on the care of nurses and midwives themselves, value is placed on the work they do with patients. It would appear that by introducing the wellness centres some of the difficulties of meeting strategic goals at country level can be overcome. According to Health Exchange News (2009), one of the most promising outcomes to date, is that the president of the Swaziland Nurses Association reported no cases of nurse migration during 2007-2008. Achievements to date include:

- Significant reduction of migration
- Nurses feel cared for, valued and importantly so do members of the community
- High demand of wellness centre services. These are now being rolled out to other regions.
- Ever-increasing number of health care workers enrolling to programme.

(Thabsile Dlamini, President, Swaziland Nurses Association 2008)

In a study by Teasley et al. (2007), four intervention strategies to promote PPEs in a rural Kentucky hospital were developed. The first was to establish a shared decision-making body where nurses participated in governance issues in health facilities. These included the development and standardisation of policies for employee tenure, promotion and working conditions. The second focused on staffing issues in relation to distribution, capacity building and placement to ensure adequate coverage for service delivery. Utilisation of all nursing categories was reviewed and increased, allowing those with other skill sets to coordinate care and evaluate outcomes. The third intervention strategy, focused on ensuring adequate managerial support and supervision, and the fourth on improving communication systems between disciplines within the health system, families, community and key stakeholders in and outside the health system. Evidence from this study suggests that implementation of the four strategies may promote positive work environments in any setting, urban or rural, primary health care clinic or hospital. However, this suggestion needs to be tested with research on the impact of PPEs, specifically on PHC nurses which is currently lacking. Additional tools and reports of progress in implementing PPE are available on the PPE web site, for example, reports on progress in implementation in Uganda (Matsiko 2010) and Zambia (Ngulube 2010). Developing a PPE is an important part of developing the PHC nursing workforce. Important aspects include development of policy frameworks that are focused on recruitment and retention initiatives, strategies for facilitating ongoing learning, adequate employee remuneration, a safe working environment, adequate supplies and employee recognition programmes. It seems quite clear from the evidence and examples that global health care systems should work towards developing such environments in a sustained effort to not only recruit and retain PHC nursing

workforce but also to improve quality of care and patient outcomes. It is within this context that the other key elements for primary care nursing reform are located. It is hopefully self-evident how these key factors both inter-relate and interact with the PPE.

Crosscutting workforce components

A brief outline of the human resource and workforce components that impact on the work of PHC nurses is given and application of the components to the key features of effective PHC nursing underpins the discussion of each of the five key features which follows. As discussed above many of the workforce aspects identified form part of the PPE campaign but are highlighted here, with reference to PHC nursing literature and examples, as being areas of particular concern in the reform of PHC nursing.

1. Education

The preparation of people to work in PHC nursing starts with their initial nurse education (which may or may not include dual qualification as a PHC nurse) through to access to continuing professional development, based on the need for life long learning. Preparation for generalist practice needs to equip all nurses to work in PHC but access to specialist and advanced practice preparation in PHC nursing is also needed. The importance of education in PHC is cited by Heunis et al. (2006) in their study in which they argue that, if responses to health needs are to be reconciled with development of human capacity and integrated health systems, then PHC services have to be prioritised as the health sector's contribution in overcoming inequities. A report by the Joint Learning Initiative Africa Working Group in 2004 (Dovlo 2007) and others (Laurant et al. 2010) have confirmed that trained health workers influence health outcomes. Dovlo (2007) recommends that the education of PHC nurses should enable them to provide "one-stop" PHC facilities.

The initial preparation of nurses faces a wide range of challenges including attracting sufficient recruits, ensuring recruits have the requisite standard of educational preparation, the cost of education to the individual and the country and the impact of models of nurse education from, for example, the USA and UK on other parts of the world. In addition, in some countries including South Africa, PHC nursing is a post registration qualification which has to be undertaken while the nurse is working. The nurse has to be released from work and many employers cannot afford this. This therefore reduces the number of registered nurses who are qualified in PHC nursing. Many employers, therefore, allocate registered professional nurses without post registration community qualifications to PHC clinics, based on their basic training, which includes a component of community health nursing, so that most of the nurses who work in PHC settings in Africa are generalists. Hlahane et al. (2006) studied generalist nurses allocated to PHC facilities and found that they perceived their ability to render comprehensive PHC as limited, dependent on their skills which in turn were dependent on the initial training they had received. While they were competent in assessment, diagnosis and management (including treatment) of patients with a variety of health problems they were often frustrated when they lacked skills in preventive and promotive care, treatment of common skin conditions, management of pregnancy or care of babies. Thus the majority of nurses working in low resource settings lack the necessary skills to provide the most effective PHC nursing care.

The debate concerning the initial preparation of nurses for practice in PHC is widespread. In Canada a task force enabled Schools of Nursing to prepare student nurses on first registration programmes to meet Canadian Community Health Nursing Standards (Valaitis et al. 2008). In the UK from the 1960s to the 1980s dual qualification as a general nurse and community/public health/PHC nurse was possible at initial registration but changes in regulations mean that qualification as a PHC nurse is now only possible following registration as a nurse or midwife. As found in South Africa, programmes of initial preparation of generalist nurses enable the development of some of the skills needed for PHC practice but fail to equip nurses with the full range of skills needed for the type of independent, community-aware practice illustrated in Figure 1. Such findings argue for revision of the curriculum of initial nurse preparation to ensure that those completing these programmes are competent in the preventive, promotive, treatment and leadership aspects of PHC nursing. Leaders in PHC nursing need to be active in ensuring that programmes leading to initial registration provide nurses with the skills required for 21st century PHC practice.

Life long learning and continuing professional development have the potential to add to the skills that generalist nurses already possess or to develop additional specialist skills to support the delivery of high quality PHC care. Continuing professional development has the potential to improve patient care and to provide for more fulfilling careers for nurses. In addition, schemes which support nurses to access further education have been shown to increase PHC nurses satisfaction, perception of support from managers and thus retention (Gene-Badia et al. 2007)

2. Competencies

An effective PHC nursing workforce needs to be based on clarity concerning the competencies of practitioners at different stages in their careers and at different levels of provision. In the UK the development of the Knowledge and Skills Framework (Department of Health 2004) provides a shared competency framework for all health practitioners including PHC nurses. Internationally, WHO (2007) has produced a detailed competency framework of skills for different groups of health care workers in the field of HIV/AIDs. In relation to the worldwide nursing workforce ICN has provided competency standards for all levels of nursing practice for decades. These were most recently updated in 2008 in the *Nursing Care Continuum Framework and Competencies* (ICN 2008a). Evidence points to the need to collect information on the competencies of members of the current workforce prior to initiating activities to enhance their skills: it may be that there are people in the present workforce with the requisite skills already (Bryar 1994). Recognition of the different skills that nurses bring to the promotion of population health and to prevention of ill health has led to development of the role of the Nurse Practitioner, defined by the ICN International Nurse Practitioner/Advanced Practice Nurse Network (ICN 2010b) as: *“A Nurse Practitioner/Advanced Practice Nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A master level degree is recommended for entry level.”* These advanced nursing roles enable nurses with these competencies, including competencies in prescribing, to work in independent practice contributing to the skill mix in PHC

(Laurant et al. 2010). An effective PHC workforce is one which includes in the PHC team nurses with generalist, specialist and leadership skills.

3. Regulation

Regulation of PHC nurses is important from professional, governmental and community perspectives. From the professional perspective, regulation may be seen to support or inhibit development of PHC nursing. For example, in Japan the amendment of the Act on Public Health Nurses, Midwives and Nurses 2009 extended the period of education of public health nurses from six months to a year. In addition to provision of a postgraduate qualification for nurses in public health nursing this Act also provided for combined initial education leading to qualification as a nurse and a public health nurse. The Japan Academy of Community Health Nursing (2010 p.2) commented: "... *the extension of the education period was essential when considered based on the expansion of their role demanded by duties such as abuse prevention, health crisis management and the prevention of life-style diseases.*"

PHC nurses in government and policy positions have important roles to play in ensuring regulation of PHC nurses and nursing practice to ensure safe and effective practice for individuals and communities. Evidence of widespread differences in regulation and preparation of, for example, nurse practitioners is provided by the ICN International NP/ANP Network which found that education levels ranged from certificate to master's level and the requirement for license or registration varied widely (Pulcini et al. 2008). Nurse prescribing has become an important area of PHC nurse practice in a number of countries requiring changes in regulations applying to nursing and to administration of medication (ICN 2009). Differences in approaches at the national level may be seen in the UK where, since 1986, there has been research and development of prescribing courses. Nurses who have achieved the prescribing competencies can prescribe the full range of drugs within their area of competence (Department of Health 2010). In contrast, in Finland legislation to enable appropriately qualified nurses, employed in a health centre and who have written authority from a physician to prescribe, only passed through legislation in 2010 (Hahtela & Holopainen 2011).

Regulation may also have a significant impact on migration of nurses between different countries, for example, regulations in the European Union enable nurses to work in the different countries of the EU. Ethical migration policies such as the WHO Code of Practice on the International Recruitment of Health Personnel (WHO 2010) have the potential to support retention of PHC nurses in their home country (van den Heuvel et al. 2009).

4. Incentives

There is an extensive literature on the factors which motivate nurses who work in PHC, for example, summarised in *Guidelines: Incentives for Health Professionals* (ICN 2008b) and in a systematic review of motivation and retention of health workers in developing countries (Willis-Shattuck et al. 2008). Ross et al. (2009 p.16-17) identified the following factors which motivate community nurses: "... *love of the work, doing a good job, making a difference to people's lives and their health outcomes, good relations with service users, using one's clinical skills, autonomy, flexibility, role clarity, challenge, supportive leadership and supportive collegueship, feeling valued by managers and colleagues, regular supervision and a decent work-*

life balance.” These features reflect characteristics of nurses who are drawn to work in PHC, the environment in which they work and the type of support that is available. In contrast, factors which demotivated these nurses included: “... *heavy workload ... low morale, high rates of sickness and attrition ... rapid pace of imposed change, the burden of governance imperatives and paperwork within cumbersome and bureaucratic management, failure of policy initiatives ... fragmented services.*” These driving and inhibiting factors also apply to PHC nursing in countries worldwide such as India (Senior 2010).

Studies of nurses in Ethiopia, Kenya, Rwanda, South Africa and Thailand show that nurses are motivated to work in PHC for a variety of reasons including: intrinsic motivation to work in poor communities, origins in rural areas, influence of faith-based organisations (Serneels et al. 2010), access to health insurance, continuing professional development or rural allowances (Blaauw et al. 2010). These examples illustrate the range of financial and non financial factors which incentivise nurses to work in PHC (see Appendix 2).

5. Health and safety

Shortages in human resources for health are impacted by PHC practitioners concerns about health and safety. These may relate to a wide range of issues including quality of premises and equipment; handling contaminated needles, other body fluids and materials from patients who, when seen at this level, are largely unscreened (Akinleye & Omokhodion 2008), and safety in undertaking visits to communities and homes. Strategies that address these issues will provide support to PHC nurses and encourage them to work in these settings.

It has been reported that countries with people-centered policies suffer the least workforce attrition and provide the most positive health care delivery, and governments, through Health Ministries, have to commit to enhance the working lives of all employees (Baumann et al. 2006). According to Baumann et al. (2006) the National Health Service Plan in the UK was intended to make the NHS an exemplary employer by formulating policies which provide childcare support, flexi-time, opportunities for lifelong learning for employees and a zero tolerance on violence against staff. The policy also provides for a workplace that is free from infections. Provision of such policy direction is important because the safety of PHC nurses, especially in remote areas, is often compromised by poor infrastructure, inadequate supplies, violent communities and poor management strategies. In the same report the authors describe the nationwide initiative implemented in Canada to promote and maintain healthy workplace practices intended to retain its workforce. These practices include enhancing career planning, increasing diversity and supply in health care providers and improving infrastructure and management in health facilities (Baumann et al. 2006).

Other factors also impact on the health of the workforce. The ageing workforce and levels of communicable disease in a community have implications for the health of the workforce. In her study of the work of rural nurses in Tasmania caring for people with chronic health conditions Spinaze (2010) identified that these nurses themselves often have chronic health conditions and many are caring for their own family members who have these conditions, impacting on the health of these nurses.

In Sub-Saharan Africa it has been reported that life expectancy has dropped in 17 of the 48 countries due to the rising incidence of communicable diseases and the impact of HIV/AIDS. The occupational risk and lack of protection against HIV/AIDS and tuberculosis, poor availability or lack of protective gear, and inadequate welfare, security and other benefits to health professionals during employment and after retirement are seen as push factors in nurse migration and impact negatively on the health and safety of, especially, African health workers. A South African study also reported that 16.2% of health workers were treated for stress related illness because 50% of those interviewed were worried about contracting HIV through work-related activities (Dovlo 2007). Reduction in such stress may be achieved through attention to environmental and personal protective measures making the environment of care safer. Stress management training may also provide support to PHC practitioners through development of their ability to manage their own stress. These measures appear to reduce stress in the short term but the evidence of benefit for such training over the longer term is lacking (van Wyk & Pillay-Van Wyk 2010).

6. Leadership and managerial support

Effective leadership and management in PHC are fundamental to delivery of PHC nursing. The need to develop the management and leadership abilities of nurses is emphasised in evidence from around the world, for example, identified by WHO (2008) as critical to implementation of the vision of PHC reform – without a critical mass of PHC nursing leaders the capacity for change in PHC will be severely limited; by ICN in provision of an advanced leadership programme within the Global Nursing Leadership Institute (www.icn.ch), and these attributes form an important element in curricula for programmes leading to initial and continuing development of PHC nurses (Valaitis et al. 2008; Welsh Assembly Government 2009).

The ICN Leadership for Change (LFC) programme has the following stated vision: *Nursing in the 21st century will have nurses at a country and organisational level equipped with the knowledge, strategies and strength to lead and manage in health services and in nursing through change and into a healthier future for all populations.* In order to put this vision into action, a programme of training at country and regional level has been made available to nurse leaders, including “train the trainer” courses. The challenge for PHC nursing is to tailor the training to enable PHC nursing leaders to develop the skills, knowledge and confidence to effectively negotiate, lobby and strategically manage change in the PHC setting. The evaluation of LFC showed that the programme has been very effective at the individual micro level but not so effective at the meso level. This would suggest that for PHC special attention and resources must be addressed to realise the objectives set by LFC at the meso level:

- Influence health policy and decisions.
- Be effective leaders and managers in nursing and health services.
- Prepare other future nurse managers and leaders for changing health services.
- Influence changes in nursing curricula, so future nurses are prepared appropriately (ICN 2011).

Valaitis et al. (2009) in a study in Canada further demonstrate how the PHC nursing workforce needs to value and develop their political and organisational skills and knowledge in order to contribute to the ‘scaling up’ of the HRH. For workforce

planners to ensure the most effective and cost effective outcomes for public health, the PHC nursing component should consider:

- Effective use of population data to plan nursing workforce;
- Geographical working arrangements in PHC teams;
- The PHC component of programmes leading to initial nursing registration;
- Specialist education at the post-registration level that includes public health theory and inter-professional learning;
- Integration of beliefs and values about PHC at the organisational, team and individual levels;
- Development of PHC nursing leadership that can ensure a vision and implementation of values and actions into the workforce; and
- Political awareness and commitment to PHC.

Given the tensions that have been evident between an effective person centered, public health model of primary care and the acute hospital based model of health care, the challenge for leadership will be to steer the PHC reforms in a direction that meets the health needs of communities and contributes to meeting the MDGs within the available health care resource and health care provision.

Research supported by Queens Nursing Institute (QNI) Scotland by Cameron et al. (2010), entitled *Leadership in Community Nursing*, has found that the leadership perceptions of nurses in community settings are different to those of nurses in hospital settings. These nurses work in relative isolation and have low visibility as their work is in individuals' homes or in other community settings. The nurses expressed a need for care, support and nurturing and described leadership of their team in terms of a quasi-family. These researchers conclude: *"This is the first time to our knowledge that a 'family model' of leadership has been identified, and this requires further exploration."* (Cameron et al. 2010 p.13).

Laurant et al. (2010) argue for clear role definitions, lines of accountability and reimbursement systems that support inter-disciplinary practice while Spinaze (2010) identifies the ageing nursing workforce (ICHRN 2007) as bringing with it additional issues for managers.

These issues are amongst many that present challenges for managers and leaders of PHC services. Gilbert et al. (2010) provide an overview of the range of managerial approaches that may be used to support effective nursing practice. They have investigated the impact of elements of organisational citizenship behaviour on emotional exhaustion and burnout amongst nurses in parts of Canada. These behaviours are those which are not normally rewarded by health care employers and include altruism, sportsmanship, civic virtue, conscientiousness and courtesy. They found that empowerment of staff was related to exercise of these behaviours indicating different ways in which staff may be supported by the working environment. Acknowledgement of these attributes and significant leadership abilities may be provided by awards to PHC nurses, such as those provided in the UK through the award of the prestigious title of Queen's Nurse by the Queen's Nursing Institute (www.qni.org.uk).

People centered PHC nursing requires national and organisational leadership and commitment to the beliefs and values that underpin putting the person (including patients, clients and practitioners) at the centre of PHC delivery. Workforce planners and policy makers could enable a transformation towards people-centered PHC nursing by drawing on Hagenow's approach (see p. 26) and informed by the workforce components identified in Figure 1.

7. Skill mix

It has been reported that it takes 60% longer in rural health facilities than in urban facilities to fill nursing posts, and the inherent shortage of staff is worsened by retirement with inadequate replacement as recruitment and retention of younger nursing professionals is still a challenge (Teasley et al. 2007). Nursing shortages and issues related to an ageing PHC nursing workforce are highlighted in the UK in the annual nursing labour market review carried out for the Royal College of Nursing (see for example Buchan & Seccombe 2006). While, as Buchan and Seccombe (2006) comment, there are many gaps in the data concerning the nursing workforce even in a high income country such as the UK, it is evident that in PHC a skill mix team approach is required. Skill mix is concerned with the mix of grades of staff in an organisation (Buchan & Dal Poz 2002).⁵ Development of skill mix teams may be seen in public health nursing in the UK where health visitors head up teams including nursery nurses, who have expertise in child development and play, staff nurses who have expertise in immunisation, screening and health promotion and health visitors with expertise in public health, health promotion and safeguarding (Coverdale 2010).

Discussion of the preparation of people to work in PHC needs to consider, in addition to skill mix, the issue of task shifting between different professional and non-professional groups, including community health workers, and the promotion of self-care. Task shifting has been identified by WHO as a means of addressing the shortfall of health care practitioners through delegation of specified tasks to less specialised health workers (WHO 2007). For example, in HIV/AIDS the "Treat, Train, Retain" approach addresses the impact of the infection on health workers, training of new health care practitioners and the health care workforce issues which help to keep people in practice (UNAIDS 2007). Another example of task shifting is found in the UK Careers Framework for Health which identifies competencies of practitioners from initial entry into health care at level 1, through development into support workers, senior health care assistants and assistant practitioners at level 4 before progression to registered practitioner qualification at level 5 (Skills for Health 2010). The health care workers who meet the competencies at levels 1-4 take on increasingly complex aspects of PHC practice. For example, Petrova et al. (2010) found that health care support workers in general practice, under the supervision of PHC nurses, were undertaking tasks including blood pressure checks, body mass index calculations, new patient registration medicals, suture removal and spirometry readings amongst others. In addition to providing additional PHC practitioners, development of these roles also provides a route into PHC practice for those who may have left school without traditional educational qualifications but have gained PHC work experience, expanding the pool of recruits for PHC programmes, including PHC nursing.

⁵ Skill mix is defined as: '...the combination or grouping of different categories of workers that is employed for the provision of care to patients.' (ICHRN 2010b p.1)

Professor Uta Lehman, in a report of a meeting concerning task shifting, argues that task shifting should not be seen as poorer quality care for poor communities (Stevens et al., 2008). Systematic reviews of trials provide some evidence that lay health workers/community health workers increase the immunisation rates of children and adults, improve the diagnosis and treatment of some infectious diseases, increase the number of women who breast feed and increase the number of people with tuberculosis who are cured (Lewin et al. 2008 & 2010).

Skill mix in relation to generalist and specialist PHC nursing roles also needs to be considered. For example, a systematic review of studies of home visiting found that public health nurses with the necessary skills and competencies improved health outcomes (Elkan et al. 2000). These findings are similar to those which show that a greater number of qualified nurses (in a skill mix team) is linked to reductions in patient mortality, rates of respiratory, wound and urinary tract infections, number of patient falls, incidence of pressure sores and medication errors (WHPA 2008). A systematic review by Laurant et al. (2010) similarly provides a firm basis for the extension of the nurse practitioner role (that is a nurse with advanced skills) in the provision of nurse-led PHC. The authors suggest that to enhance the success of developing and introducing nurse practitioners (or other role revisions) the following factors need to be addressed to successfully achieve this change:

- Clear definition of the functions, level of autonomy, lines of accountability and levels of experience and qualifications of professionals working in revised roles.
- Development of training programmes for professionals working in revised roles.
- Systems for accreditation and licensing of professionals working in revised roles.
- Revision of regulations regarding the scope of practice of professionals working in revised roles, for example, extending prescribing rights.
- Professional indemnity insurance for professionals working in revised roles, coupled with clarification of the vicarious liability to employers.
- Excellent change management skills to address professional resistance to change.
- Payment systems that provide sufficient reimbursement to encourage multidisciplinary working and collaboration between non-physician clinicians and physicians (Laurant et al. 2010 p.ix –x).

Key features of effective primary health care nursing

In Figure 1, The PHC Nursing Workforce Development Roadmap, five features of effective PHC nursing are identified. These features are core elements of PHC practice as identified by Starfield (1999) and WHO (2008). If nursing is to make its full contribution to the reform of PHC then workforce strategies must be put in place to enable nurses to fulfil and demonstrate these key aspects of PHC. Each of the five features will now be discussed with reference to relevant literature and case examples. As mentioned above, the workforce components interact with the features to support effective PHC nursing and these inter-relationships will be referred to in the discussion below.

1. People centeredness

WHO (2008) argues the importance of *'putting people first'* to bring about promotion and prevention, cure and care together in a safe, effective and socially productive way. Person centeredness is one of the key features of putting people first: *'Insufficient recognition of the human dimension in health and the need to tailor the health services' response to the specificity of each community and individual situation represent major shortcomings in contemporary health care, resulting not only in inequity and poor social outcomes, but also diminishing the health outcome returns on the investment in health services'* (WHO 2008 p.42). Five key themes differentiate people-centered primary care from conventional medical care: (1) focus on health needs; (2) enduring personal relationships; (3) comprehensive, continuous and person centered care; (4) responsibility for health of all in the community along the life cycle and responsibility for tackling determinants of ill health; (5) people are partners in managing their own health and that of their community (WHO 2008 p.43).

Box 3: Involving the community in preventing dementia in older people in Japan

Katsuko Kanagawa and a group of community nursing colleagues in Japan have developed a family and community based approach to help in the identification and primary and secondary prevention of dementia in people over 65 years. They have developed a check list of the early signs of dementia that can be used by family members to help them if they are concerned about deterioration in a family member. To support families and the older person they have a programme to encourage and develop volunteers who work with the older people. The volunteers run computer clubs, reminiscence groups and popular singing groups in which the older people revisit songs from their childhoods. This approach to community based management of dementia demonstrates the features of people-centered primary care: *'...anticipatory education of the population concerning dementia, development of a method of early detection of dementia using a check-list and a means of secondary prevention via the activities of a group of volunteers (Ichigo Kai).'*' (Kanagawa et al., 2006 p.314).

The ICN definition of nursing (Appendix 3) embodies many of these themes and Kendall (2008) has shown how PHC nursing has made a positive contribution since the Declaration of Alma Ata to several of these themes, notably health needs, responsibility for the community and people as partners. For example, Concepcion et al. (2007) and Woodside et al. (2001) in studies of family centered care (a form of person centered care) found that respondents placed great value on person-centered care from school nurses which, while directed at the needs of a school aged child, through involvement of the parents helped meet their needs and the needs of whole family. In Norway, person-centered care is demonstrated in the Learning and Mastery Centres which have been established to provide community based education to help people address lifestyle conditions such as obesity (Knutsen & Foss 2011).

Work on person-centered care in fields outside PHC is relevant and could be adapted to primary care settings. For example, Talerico et al. (2003) argue that person-centered care is an important approach for the 21st century and discuss

studies that have shown that person-centered care is associated with quality improvement and improvements in health outcomes. However, they comment that there has been organisational resistance to the implementation of the approach and suggest there is evidence that health care systems such as those in the United States fail to reward high quality person-centered care and reinforce financially standardised care. Wunderlich and Kohler (2001) consider successful implementation of person-centered care must address: *'organisational, individual and staff factors. Inadequate staff numbers, lack of staff education and training and high turnover have also been identified as barriers to implementation of person-centered care'* (cited by Talerico et al. 2003 p15). The challenges of implementing person-centered care have also been addressed by Hagenow (2003) who argues that there are two main barriers: *focus* and *culture*. She maintains that the focus of any health care system should be on the patient rather than the business and that the culture of the work environment must encompass a set of shared values and beliefs about the concept of person-centered care; values that also embrace the workforce itself.

Hagenow (2003 p. 205) also discusses cultural transformation in the health care organisation to achieve a shift in health care delivery improvement that values the person at the centre and also the workers. Thus her desired state for person-centered care would be one of:

- Teamwork;
- Lack of a blame culture that is more concerned with improvement;
- A win-win environment;
- A network structure rather than bureaucratic structure;
- Effective communication and relationship building;
- A focus on care as the core product;
- Freedom, creativity and transparency;
- Collaboration rather than competition;
- Being pulled by the vision rather than driven by directives.

Consistent with many other commentaries and guidelines this cultural transformation requires strong nursing leadership that can drive the vision forward at country level, political awareness within nursing leaders and the nursing workforce, an evidence-based curriculum that can demonstrate productivity as well as clinical effectiveness and professional belief and values that support people-centeredness.

2. Public health perspective

International PHC policy (WHO 2008) identifies the need for PHC teams to have responsibility for a well-defined population. In PHC systems where the provider takes responsibility only for the individual attending a consultation, there is a danger that those members of the community who are excluded from access to care or feel unable to seek care when they need it will not benefit from the services being provided. There is a need for the integration of public health and primary care. Good primary care therefore needs to take a population based or public health approach that can address local determinants of ill-health, be they social, environmental or work-based as well as the generation of health (salutogenesis). A primary care team which is responsible for a well-identified, geographically defined population will provide a wide portfolio of care including prevention and promotion of

health in the wider community, schools and the workplace, working with volunteers, self-help groups and community health workers.

In 1996 Starfield argued the case for linkages between primary care and public health in the context of the need for health care reform in the USA that would enable the privately funded, managed care environment to work much more closely with public health, drawing on the key concepts of primary care (WHO/UNICEF 1978; WHO 2008). The attention Starfield pays to the importance of data and how it can be used and monitored, to the principles of both primary care and public health, the employment of nurses to work in a geographical area to manage community health needs, the need for equity and a community orientated approach are all features of the case-studies described below. These demonstrate the ways in which countries are developing the PHC nursing workforce and integrating it with public health, and PHC teams and provide direction for workforce planning for PHC nursing.

In Canada, researchers have been undertaking a programme of work, entitled Strengthening Primary Health Care (Valaitis & Martin-Misener 2009). They have undertaken a systematic review of the integration of public health into primary care and environmental scans of three provinces in Canada looking in detail at the whole system within the province and how this might enable or prohibit such integration. For example, in their scan of Nova Scotia they have identified a range of enhancing and inhibitory factors (see Box 4).

Box 4: Enhancing and inhibitory factors (Nova Scotia)

Enhancing:

- Establishment of the Department of Health Promotion and Prevention (HPP) and responsibility centres with new provincial funding and political commitment provide a mechanism for greater emphasis on prevention and health promotion.
- Recognition of the multiple sectors involved in this work.
- Collaboration and coordination between the Primary Health Care Division in the NSDOH and Public Health Division in the Department of HPP.
- Direction for better integration of public health activities at the provincial and District Health Authority levels, which is important for infection prevention and control, emergency preparedness, mental health, addiction services, and chronic disease prevention and management.

Inhibitory:

- Training primary care and public health care professionals remains discipline-specific.
- There are currently no programs that create multiple and sustained opportunities for inter-professional training.

(Meagher-Stewart et al. 2009)

In the UK, public health has been an integrated part of PHC for many years with health visitors (public health nurses) being part of the primary care team and community-based school nurses, working very closely with primary care teams. In

fact, the principles of health visiting that were established originally in 1977 demonstrate the public health commitment.

Health visitors should be concerned with:

- The search for health needs;
- The stimulation of an awareness of health needs;
- The influence on policies affecting health;
- The facilitation of health enhancing activities.

(CETHV 1977)

These principles have been applied in UK nursing regulation to support the more generic roles of specialist community public health nurses (SCPHN). The principles are built into the SCPHN educational curriculum to enable health visitors, school nurses and others to develop the skills and knowledge they need to develop evidence-based public health practice.

Box 5: A public health approach to childhood asthma management

In 2010, Kendall and colleagues evaluated a model of public health nursing leadership that was concerned with the management of childhood asthma in one geographical area of the Midlands, England.

Emphasis was on the whole school population:

- promotes the education and awareness of asthma across the NHS and education systems to improve respiratory health and prevent acute asthma attacks and child mortality from asthma.

The school nursing service, led by a school health co-ordinator, developed and implemented a strategic policy for asthma management within 110 multiple schools across one geographical area. They established collaborative multi-agency working between health, education and the voluntary sector. The strategy was implemented by a team of school-health advisors (most of whom were also registered school nurses). Each was responsible for a number of schools to ensure the development and implementation of an asthma policy in each school. The advisors also trained and worked closely with link workers (community health workers) within the schools. The co-ordinator and advisors carried a caseload of 'high need' children as well as having a school based policy role.

Professionals identified strong benefits from the leadership and specialist knowledge of the coordinator. The model was faced with constraints by potential re-organisation and the complexity of multi-disciplinary working but succeeded through designing a public health strategy that would meet local needs that included the involvement of young people in the awareness campaign.

Outcomes

At the individual level:

- Confidence (self-efficacy) in managing asthma was good.
- Breathlessness was relatively low: 55% of the young people reported that they were rarely or never breathless, while only 9% were breathless every day.
- Mood and general health was positive: when asked how they would score from 1 to 10 (high) on the best possible life the majority (55%) scored 8 or 9.

At the population level:

The Asthma UK review of hospital admissions for childhood asthma (Asthma UK 2007; 2008) showed the case study site Kendall et al. studied had made major reductions in child emergency admissions since the introduction of the strategy for asthma management

- The school wide strategy has enabled users to access a well co-ordinated service.
- The model is 'invisible' to the user but seamless in provision.
- Nursing education, leadership, navigator role and vision were key to success.

(Kendall et al. 2010)

The UK case study below demonstrates how a well-defined public health orientated primary care system can, if underpinned by political and organisational commitment, leadership, vision and strong educational input, lead to positive health outcomes and also a workforce with well developed teamwork skills and the ability to work across multiple agencies. Key to the success of this strategy was also the involvement of children and young people in the asthma awareness campaign, emphasizing the positive benefits of **assessing community health needs** from the perspective of its members.

Box 6: Scaling up primary care and public health collaboration

In 2009, Valaitis and colleagues investigated the systemic, organisational and interactional factors that foster or hinder collaborations between primary care and public health. They explored structures and processes required to build and maintain successful collaborations between primary care and public health. Their analysis of 70 interviews revealed numerous factors at the systemic, organisational, interpersonal levels which impact on collaboration between primary care and public health.

Policies and politics:

Clear mandates in place
 Clinical practice guidelines
 Political readiness
 Leadership at Ministry level

Organisational factors:

Practice approaches
 Models of care
 Approach to prevention
 Population health

Communication & decision making:

Voices heard; expertise is recognised
 Dialogue for problem-solving;
 all parties at the table

 Same language (lexicon)

 Communication skills

Individual vs. population health
 approach
 Staking organisational territory and
 trust
 Recognition for work and activities of
 each sector
 Trust between sectors

Role clarity:

Good knowledge of each other's world
 Valuing the other's role
 Agreement on roles
 Feeling respected & appreciated

Setting tone and creating boundaries

(Valaitis et al. 2009)

This example demonstrates the value of a whole systems approach linking public health and primary care together and with other organisations (see Appendix 4). This UK experience of implementing a public health approach by school nurses is complemented by the Canadian work on public health and primary care integration. Whilst there are common elements shared by the two countries that emerge (for example, the importance of leadership and education), the Canadian example also provides further evidence of the layers and levels of factors that are involved in reforming PHC in this way.

3. Partnering and inter-professional working

Developing the PHC nursing workforce through partnership is central to global health sector reform. WHO (2008) refers to the notion of PHC networks comprising all the PHC team members including PHC nurses networking with health and other sectors in their area. This approach to sector reform places PHC at the hub of coordination between it and all the specialist and referral points in the health system. This enables PHC to take responsibility for a fully coordinated and comprehensive service, based on a population approach. This should enhance co-operation between the services and institutions and shift the balance from a pyramid model where the hospital is at the pinnacle and other parts of the system refer to this higher authority, to a network of services that is community-based, bottom-up and working co-operatively. The co-operation extends beyond health services to social care, voluntary organisations and the community itself. The WHO report suggests that where PHC teams can take such a coordinating role their work becomes more rewarding and attractive and health outcomes will be improved. The PHC nursing workforce is and should be part of the development of such reforms in collaborative and coordinated working. In some parts of the world this is already happening and the experience and knowledge, as well as the political commitment for change, should be transferable.

For PHC nursing to make its true contribution to meeting the MDGs, countries and national organisations should work in partnership in order to share resources, education, people skills and knowledge as illustrated in the following case studies. The first involving Bangladesh and Scotland demonstrates the potential benefits that can accrue for all partners. The requirements for partnership at country and organisational level illustrated in this case are:

- Charismatic and inspirational leadership;
- Shared goals and vision;
- Long-standing relationship between partners;
- Excellent communication;
- Experience and knowledge that is transferable;
- Organisational commitment;
- Funding and other resources in place; and
- Preparedness to 'go the extra mile' by both partners.

This partnership is not without challenges but overall is an example of how nursing organisations globally can overcome challenges and work in partnership for PHC.

Box 7: Bangladesh: The Grameen Caledonian Nursing College, Dhaka

The Grameen Caledonian College of Nursing has been established in Dhaka Bangladesh as part of Glasgow Caledonian University's agreement with the Nobel Peace Prize winner, Muhammad Yunus. He has set up 52 primary health clinics and plans to develop a hospital, a medical school and a number of nursing colleges throughout Bangladesh. He realises that for the 52 clinics to work effectively in Bangladesh rural areas he needs well prepared nurse-midwives who can provide an effective service. GCU is supporting the development of the first of these colleges; Professor Barbara Parfitt has been asked to act as the founding Principal of the first college being set up in Dhaka, and GCU is also providing volunteer teaching staff, and is assisting with financial support, research and evaluation.

The aim of developing the Colleges is to provide an opportunity for young women in Bangladesh from the poorest families to not only have the opportunity to access higher education but also to study as nurses and make a contribution to the health of their communities. It is hoped that the College will assist in developing nursing and midwifery in Bangladesh to an international standard and prepare nurse leaders in Bangladesh for the future. The opening of the College is seen as a step towards addressing the imbalance between the number of doctors and nurses in Bangladesh and high maternal and child mortality rates.

NIKE foundation is also a key partner, providing infrastructure funding. Other partners include the Greater Glasgow and Clyde Health Board [which] has submitted a joint bid with ourselves to allow clinical nurses from the board to visit as volunteers and assist the teachers in updating their nursing knowledge and supporting clinical staff in the clinical areas to provide appropriate mentorship to our students. The community is also a key partner. The students are recruited from the Grameen borrowers' families, the poorest in the community. They have sent their daughters hoping **that** this project can make a difference to them as a community by improving their health and providing the opportunities for their young women.

A research project will follow through the first cohort of students to evaluate the impact of girls studying at higher education in nursing on the poverty levels of the family and community.

Whilst the above case study illustrates a particular example of country to country partnership, the overall concept is not constrained to this approach. Partnership for PHC reform can also be conducted at the local organisational level and at the service delivery level. In Canada, McPherson and McGibbon (2010) have shown how inter-professional PHC (IPHC) can be both developed and sustained within rural communities of Nova Scotia:

Box 8: Nova Scotia PHC Reform

In Nova Scotia PHC reform was stimulated by federal funding in the form of a Primary Health Care Transition Fund, which directed money out to the Canadian provinces (Health Canada 2007a, 2007b). The Nova Scotia Department of Health used the opportunity to develop three transitional initiatives to support the provincial vision for PHC:

- Implementation of enhancements to PHC services and creation of new ways to develop sustainable PHC networks or organisations.
- Support for costs associated with change that encourages collaborative groups of PHC professionals to work in new or strengthened PHC networks.
- Support for the PHC system transition to an electronic patient record.

One of the responses to this provincial commitment to PHC reform was the identification of the need to undertake research and develop the evidence base for IPHC teams in the rural context. One component of the partnership approach was to establish a research team from Nova Scotia, Ontario and Alberta, together with system decision makers from within Nova Scotia. This pan-Canadian research team posed the research question: *How are rural IPHC teams developed and sustained?* McPhearson and McGibbon (2010) define IPHC teams as partnerships between two or more health and human service professionals who collaborate to achieve a) shared decision making according to client centered goals and values; b) optimisation of the team's knowledge, skills and perspectives; and c) mutual trust and respect among all team members (Orchard et al. 2005; Jansen 2008). Their extensive review of the literature to initiate the research programme identified many interpersonal, organisational and systemic factors that contribute to the development and sustainability of such teams. They concede that there is little existing empirical research that specifically addresses either IPHC development or the rural context of this, therefore the literature review was based on wider concepts and contributes significantly to our knowledge in this area.

The authors identify the following themes that are common across many studies:

- Respect for team members;
- Communication;
- Roles and responsibilities clarification;
- Inter-professional education; and
- Power hierarchies.

This Canadian team is progressing the research agenda in Canada to provide further evidence of what builds and sustains rural PHC. This work will provide invaluable lessons for PHC nursing globally.

The factors (above) are pertinent to the development of the nursing workforce within IPHC and are consistent with themes identified across other sections of this report. Partnership at the service delivery level is also critical to the way in which people access and receive care. For example, Munns (2010) describes a bottom up model of partnership between a community, community health workers and PHC nurses which has led to community based parenting support being fully accessed and

accepted by an indigenous community that has often been marginalised and disenfranchised in the past.

The partnership approach is consistent with global PHC reform; it brings potential rewards and satisfaction for nurses that will attract them to PHC and reduce attrition, consistent with the notion of PPEs. It also improves access and outcomes for people and communities.

Teamwork, education, leadership and communication are significant factors in developing a nursing workforce that is able to deliver PHC goals 'on the ground'. Education and training within a curriculum that promotes PHC and public health is also more likely to develop the skills of partnership and collaboration than a curriculum focused on an acute model of illness. Education and practice based experience in PHC that enable recognition and respect for roles and responsibilities are more likely to enable nurses to challenge traditional power hierarchies.

4. Information and communications technology

The use of information and communications technologies (ICTs) including mobile phones and the internet is now widespread throughout the world. These technologies have great potential in supporting PHC nurses in 'working smarter' to make best use of the PHC nursing workforce resource and to better connect with individuals and communities. WHO (2008 p.51) comments that: *"Information and communications technologies enable people in remote and underserved areas to have access to services and expertise otherwise unavailable to them, especially in countries with uneven distribution or chronic shortages of physicians, nurses and health technicians or where access to facilities and expert advice requires travel over long distances."*

ICTs provide or support many of the requirements for the full realisation of the potential of PHC nursing. The internet provides access to education; journals, guidelines, evidence to support evidence based practice; communication between communities of PHC nurses and others to enable effective clinical practice, sharing of best practice and support and providing information for patients and their families, increasing knowledge and self care. Computer technology enables email communication; collection of data to support quality monitoring and improvement; recording and sharing of patient records. Telecommunication technology, mHealth, provides rapid communication, particularly in remote areas; access to expert advice; alerts to patients and delivery of diagnostic information. The importance of having access to all these types of information is reinforced in the PPE Campaign document: *Meeting the information needs of health professionals* (PPE Campaign 2010).

Education: ICTs can be effective in addressing the shortage of qualified PHC nurses as shown in the partnership between the African Medical and Research Foundation (AMREF), the Nursing Council of Kenya and others.

Box 9: AMREF Virtual Nursing School Kenya

The **eLearning Project** was set up in 2005 to upgrade 22,000 enrolled community health nurses to registered nurses. These enrolled community health nurses all work in PHC settings which are largely isolated from other health care workers. The eLearning project aims, through increasing their knowledge to the level of a registered nurse, to give them additional skills to provide a wider range and depth of PHC nursing in largely rural settings.

The eLearning programme is revolutionising health-care by creating an electronic infrastructure for the accelerated learning.

Flexibility: enables students to learn anytime anywhere, while they work, with minimal interference to health service provision.

Interactivity: facilitates nurses' acquisition of IT skills.

Accessibility: provides access to courses at times related to the student's work schedule, regardless of that schedule, through learning centres, that are open 24 hours a day/7 days a week (AMREF 2010).

AMREF plans to use the programme as a model for other African nations struggling with critical nursing shortages similar to Kenya.

Today the Virtual Nursing School located in Nairobi is upskilling over 200 nurses from across Kenya to registered status to improve general standards of nursing care in Kenya and help meet health-related MDGs. Nurses in Africa are arguably the most important health care workers available in most Sub-Saharan nations, as they perform a broad range of tasks and often work in settings where no other health care workers, including physicians, are available. (www.amref.org)

Evidence based practice: At the national and regional level, IT systems can support quality assurance processes, the collection of data on PHC nursing effectiveness and sharing of patient records amongst members of health and social care teams. However, achieving the greatest level of efficiency from use of IT based systems requires systems to be shared or compatible, an issue that is repeatedly highlighted in studies of PHC nursing. For example, Ross et al. (2009 p.3) recommended installation of: '*...a single, efficient and generic recording system that meets the criteria for all health and social services and uses compatible IT software to avoid duplication of records*' in a study of the factors which impacted on the work of primary care nurses with people with complex conditions.

The quality of PHC nursing needs to be based on best evidence and research. Communication via the internet enables PHC nurses, with such access, to link with nurses and organisations producing and disseminating guidelines and research outputs. The Cochrane Collaboration (www.cochrane.org) provides world leadership in the production and dissemination of evidence-based health care producing systematic reviews of evidence for use by practitioners and patients. In nursing, the Joanna Briggs Institute, based in Australia, provides a range of evidence based practice guidelines and resources and has partnerships with 90 organisations throughout the world (www.joannabriggs.edu.au). In the UK, the National Institute of Health and Clinical Excellence (www.nice.org.uk) through its practitioner and

scientific panels produces evidence reviews and guidelines, which are all available on the internet for implementation into the NHS. In addition, NICE International (www.nice.org.uk/aboutnice/niceinternational) has worked with many countries, for example Columbia, Estonia and Thailand, to help develop capacity in international guidelines development.

Effective clinical practice: While ICTs appear to have great benefit for communities and health practitioners, these technologies require investment and ongoing support. The pressures placed on PHC nurses when communication systems are fragile is illustrated by one nurse in a study of the experiences of nurses working in rural South Africa: *'...I fear when there is no telecommunication, what might happen if an emergency case needing transport to hospital was to come...'* (Mohale & Mulaudzi 2008 p.63). It is therefore important that research is undertaken to provide evidence of the benefits or difficulties of using such technologies, for example, text messaging is not an option in communities with low literacy. In Ghana, a study of Mobile Technologies for Community Health (MoTECH) aims to explore the issues around using these technologies in low income communities and to assess the benefits of ICTs in improving health outcomes. Mechael (2009) provides a review of a large number of initiatives that are supporting the WHO Three Delays Model for the improvement of maternal and child health through the use of mHealth or mobile health technology.⁶ The potential for mobile communication to help in these situations is illustrated in an example from the work of two community health workers, a supervisor and a lady health worker in Pakistan, which in addition illustrates the type of partnership work between the community and PHC services described in key feature 3 on page 31.

Box 10: Telehealth

'The lady health worker saw that the woman had symptoms of eclampsia but the family of the woman held the misconception that a spirit had possessed her and refused to take her to hospital. After that visit the LHW called me on my mobile phone and requested me to come urgently to the home of that family. I took a doctor from the Basic Health Centre to the family home. I convinced the family that this woman was seriously ill and needed urgent treatment.'

(Farzana Sadiq, personal communication)

Another example is provided by the 'wired mothers' project in Tanzania which links pregnant women to PHC centres using mobile phones. Other mHealth applications include data gathering, for example in areas of disease outbreaks, health promotion for people at risk of HIV/AIDS and making contact with individuals with less common conditions for example cleft lip (United Nations Foundation 2010).

Communication: ICTs can enhance **communication** between nurses and nurse leaders at the supra-national level. The ICN project on the development of a shared language for nursing, the International Classification of Nursing Practice®

⁶ WHO Three delays model: 1) delay in deciding to seek medical care; 2) delay in reaching a place where care is available; and 3) delay in receiving appropriate care.

(www.icn.ch) is one example of this potential. Another example of the value of ICTs to international communication, collaboration and sharing of best practice in PHC nursing is provided by International Conferences on Community Health Nursing Research (www.icchnr.org) which aims to demonstrate the value of community health nursing research to improving the quality of PHC nursing care.

Looking to the future, ICTs have the potential to make a considerable difference to the health of communities, to the utilisation of the PHC nursing workforce throughout the world (Wootton et al. 2009) and to improving care for patients and clients, for example, by advanced practice nurses (Garrett & Klein 2008). Currently the majority of ICT applications in PHC nursing may be voice based technologies such as the mobile phone but, as Iluyemi and Briggs (n.d.) observed in a number of projects in parts of Africa and Peru, increasing access to quality, affordable, broadband and internet connections will allow wider use of data exchange and video based applications. Home automation systems are increasing the potential of “smart homes” making use of ICTs worn by individuals or sensors in the home. These types of systems have already been shown to enable district nurses to provide better support to people with chronic conditions (Nilsson et al. 2010) but the full impact of these technologies on the quality of PHC nursing care and nursing workforce utilisation has yet to be fully explored and exploited (Helal et al. 2009).

5. Quality improvement

The aim of reforming PHC nursing is to enable the provision of the highest quality care to communities throughout the world. *‘...quality improvement requires the healthcare workforce to be clear about the outcomes they are working towards; to know what changes would lead to improvements; and to know how to evaluate their efforts’ (Berwick 1996). In addition, it requires them to translate evidence from their own improvement efforts, and those of others, into practice.’ (WHO 2005 p.33).* The following examples illustrate quality improvements by PHC nurses and highlight the aspects of support that are needed to achieve change.

Box 11: Comprehensive Health Centre, Nigeria

The Comprehensive Health Centre (CHC), Zungeru was an initiative of the Federal Centre Bida Niger State, Nigeria, which was aimed at improving health care delivery to rural communities lacking effective PHC structures. The initiative took off ten months ago (in 2009) with the transformation of an abandoned missionary hospital referred to as “asibiti fada”.

The challenges at the onset were: poor utilisation of the PHC facility by residents of the localities because of inadequate awareness, poor accessibility, presence of unqualified health care providers in the community, diversion of patients to ill-equipped private practice outlets and poverty.

However part of our strategy as a medical team was consultation and advocacy through community leaders, public enlightenment campaign to restore confidence of the rural populace in the quality of health care services at our centre and continuous health education and communication at the beginning of every clinic activity.

On the part of the qualified personnel, the management of Federal Medical Centre, Bida has continued to deploy trained personnel at the centre. The centre now has two medical doctors on the ground with a consultant visiting the centre at least once a week. There are also trained nurses, midwives and community nurses.

Training and retraining of nurses and other health workers on the essential components of PHC and its effective implementation has been emphasized and given priority because of its importance in ensuring sustainable quality health care delivery.

We are supporting the community in actualization of the health related MDGs, which we have integrated as one of our objectives. The result of our intervention and as nurses in improving PHC at CHC Zungeru has been gratifying. The local community is grateful for the quality of services rendered. Individuals and families are better informed on personal hygiene, environmental sanitation and infectious diseases prevention.

(Mrs Dorcas Nike Obasohan, Nurse/Midwife, CHO, BSc (Pub.Admin), Matron-in-charge, CHC, Zungeru, Niger State, Nigeria, Personal communication)

Box 12: Aims and objectives of Yanan Ngurra-ngu Walalja, Australia

'The aim is to create an environment fostering empowerment of parents by offering peer support and encouragement of the kind that allows parents to take positive control over their own lives and that of their children. It also endeavours to advance community partnerships and development within the Halls Creek community.'

'The key features of the Halls Creek Community Families Programme are based on evidence-based research and practice from the Community Mothers Programme (Miller & Hughes 1999; Johnson et al. 2000).' '*Yanan Ngurra-ngu Walalja* is maintained on a daily basis at Halls Creek by an Indigenous project leader. This strategy is designed to ensure short-term and long-term sustainability of the parenting support, while the WA [Western Australia] Coordinator is not present and for when the educational programme has ceased. It is anticipated that long-term support will continue through video-conferencing. The WA coordinator currently travels to Halls Creek every two months to undertake education sessions, with the visits lasting four to five days. Videoconferencing is used between visits.'

'Community child health nurses and midwives have worked in partnership with the community care workers, attending educational sessions where possible, supporting their work and encouraging the families to accept involvement in the programme. They have provided significant assistance, consequently being able to verify the efficacy of the home visiting and the diverse range of issues being managed by the community care workers, as well as providing suggestions for the progress of the program.' (Munns 2010 p. 19)

(Ailsa Munns, RN, RM, CHN, Master Nursing, Lecturer, School of Nursing and Midwifery, Curtin University, Perth; Coordinator, Community Mothers Programme, Western Australia).

These two examples illustrate many of the requirements for delivery of high quality care by PHC nurses:

- Assessment of the local needs and challenges to meeting those needs;
- Partnership working with the community;
- Evidence based service development;
- Clear service aims;
- Teamworking amongst the health practitioners;
- Communication: internal and external;
- Management support;
- Trained staff with access to ongoing development;
- Support from expert leaders;
- Face-to-face contact with expert lead;
- Use of technology to support front line staff, e.g. videoconferencing;
- Ensuring short and long term sustainability;
- Evaluation of processes and outcomes;
- Academic – practice partnerships; and
- Completion of the quality cycle (development of new aims).

To achieve quality improvement in PHC nursing there is a need for evidence of the effectiveness of nurses in meeting individual and community health needs (see p. 34

regarding the use of internet resources to access information for evidence based practice) and tools to enable the development of high quality PHC nursing services. There are a range of change management approaches that may be used to enable PHC nurses to develop their roles and the services that they deliver. Bryar and Griffiths (2003), when they were in PHC service leadership roles, brought together evidence regarding the factors needed to support change in community/PHC nursing (see Appendix 5).

Many national and local health service organisations have developed quality assurance tools which help nurses and others to apply quality assurance principles in their work. For example, the National Health Service in the UK has a website containing a suite of quality and service improvement tools (NHS Institute for Innovation and Improvement 2010) as does the Rural Assistance Centre set up by the US government to help meet the needs of the 49 million Americans living in rural areas whose ‘...one common bond is the need to receive quality health care.’ (Rural Assistance Center 2010). The introduction of quality improvement processes may be supported by action learning which has been used extensively in East London in the development of nurses and managers in PHC services: *‘Action Learning Sets are structured group sessions, usually held in a regular series, in which individuals are given time to explain, uninterrupted, an issue that they are finding challenging. The other group members are then invited to ask questions which clarify, for themselves and/or for the individual, the issues raised, with a view to facilitating the individual’s discovery of their own solutions. The individual draws up an action plan, and reports on progress at the next session.’* (Abbott 2007 p.1).

Nurses have been central to the development of many quality improvement tools. For example, the guide on the nursing care of patients with tuberculosis was written by nurses for nurses (Williams 2008). The guide makes use of standard setting, the audit cycle and evaluation of service improvements. The development of the guide, the model of education through train-the-trainers, used to develop nurses’ skills in using the guide, provide a model for other service areas, including PHC nursing, facing a growing workforce crisis (ICN 2010c) to develop wider capacity and skills in addition to skills in quality improvement. Using tools such as these to identify clear PHC nursing goals, to support nurses in making changes to service organisation and delivery has the potential to enhance the working environment and the sense of satisfaction of PHC nurses in their work.

Conclusion

This report has brought together evidence and case examples concerning ways in which the PHC nursing workforce can be supported by HRH approaches to respond to global health reform. Challenges and issues that continue to face the PHC nursing workforce have also been identified, not least of which are the under-resourcing of PHC nursing, the subsequent shortages and also the mal-distribution of nurses within countries, not only in less developed countries, but also in the industrialised world. These shared challenges provide a locus for global discussion and joint strategy for the future development of the PHC nursing workforce. International nursing organisations should work together through ICN and ICHRN to promote PHC and the PHC nursing workforce in a united effort to confront the MDGs and global health care reform in line with the World Health Report (WHO 2008). To facilitate nurses working in PHC and in their own organisations we have brought together the evidence in the form of a roadmap to support future workforce development. Drawing on previous work by WHO (2005) and some key workforce components, we have outlined the map for developing HRH in PHC nursing (see Figure 1). The context for the road map is the Positive Practice Environment; this must be seriously considered at national policy level and resourced in order for the workforce reforms to be effective. The evidence so far would suggest that PPEs do prevent migration of nurses and have a positive impact on patient outcomes. Each element of the star (effective PHC nursing) is surrounded by the satellites (workforce components) and each feature will interact to a greater or lesser extent with these satellites depending on the country and the health care system that the PHC nursing team is operating in. Thus in some settings the development of people-centeredness may be more dependent on education than incentives, whereas in other settings quality improvement will depend heavily on leadership and managerial support. We have reviewed each feature to demonstrate effective current practice in a range of different settings as well as the evidence base for some of the assumptions and arguments put forward for enhancing the PHC nursing workforce. The documented evidence shows that nurses often hold the power to change their circumstances through political awareness, the development of PPEs that provide the stimulus for nurses to stay, partnerships that can help foster good relations across countries and organisations to help develop the resources needed, and people centeredness to provide the care that people really need. Small shifts in nursing curricula to put emphasis on public health and a workforce based on people rather than diseases and ways in which quality can be improved through practice based approaches are essential.

PHC nurses can be empowered to stay within the workforce and to give it their very best personal commitment if they feel valued and supported themselves. Thus, work that is being undertaken around caring for the carers, keeping nurses safe and well at work, ensuring good leadership and managerial practice, and rewarding nurses at levels commensurate with their workload and responsibilities, can all be important in enabling nurses to be recruited to the workforce and stay there for longer. In particular, we have found some signs that putting value on the work PHC nurses do and developing the practice environment can help to slow migration of the nursing

workforce, one of the biggest problems facing the global pattern of nursing employment today. Alongside these issues we have discussed the importance of information and communication technology. The modern, globalised environment is predicated on the inter-connectiveness that communication through new technologies can provide. Multinational organisations have taken advantage of globalisation to build their empires, widen their profit margins and develop the economies of some less developed countries. Health care systems and health care organisations that emerge in response to the policies that provide those systems, should think more expansively about how ICTs could be better exploited to increase the health workforce, especially in PHC. Thus by viewing health as a product that is necessary for the economy of countries and for the survival of its people, the PHC nursing workforce becomes a necessary component in the production process. ICTs are essential in providing information, education, skills and competencies, research and communication, that are all central to the delivery of patient care, patient outcomes and quality improvement.

Use of the PHC Nursing Road Map will support PHC nurses and PHC nurse leaders to focus on the main HRH issues to enable the type of effective PHC nursing described in the model. Lessons from future work will accumulate to strengthen PHC nursing and the evidence in relation to each of the five features of effective PHC nursing.

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www.eldis.org

Institute of Development Studies:
sharing the best in development
policy, practice and research

www.gatesfoundation.org

Bill and Melinda Gates Foundation

www.globalhealth.org

Global Health Council

www.who.int/workforcealliance/

Global Health Workforce Alliance

www.healthcareworkforce.nhs.uk

Workforce Planning Resource, 6 Steps
Approach

www.hrresourcecentre.org

Human Resources for Health Global
Resource Centre

www.ichrn.org

International Centre for Human
Resources in Nursing

www.icn.ch

International Council of Nurses

www.icn-apnetwork.org

Nurse Practitioner/Advanced Practice
Network

www.2010iynurse.net

2010 International Year of the Nurse

www.juliantudorhart.org

Julian Tudor Hart

www.ppecampaign.org

Positive Practice Environments
Campaign

www.qni.org.uk

Queen's Nursing Institute

www.beta.undp.org/undp/en/home/mdgoverview.html

UN Millennium Development Goals

Appendix 1: Key characteristics of Positive Practice Environments for health care professionals

Source: World Health Professions Alliance

Background

Poor quality workplaces are a feature of many health systems around the world. Such environments weaken an employer's ability to meet the organisation's performance targets and make it more difficult to attract, motivate and retain staff. Unrealistic workloads, poorly equipped facilities, unsafe working conditions and unfair compensation feature among the many factors affecting the work life and performance of today's health care professionals and health care workers.

There are key elements in the workplace that strengthen and support the workforce and in turn have a positive impact on patient outcomes and organisational cost-effectiveness. These factors, when in place and supported by appropriate resources (both financial and human), go a long way in ensuring the establishment and maintenance of effective health care professional workforce and ultimately the overall quality of health systems. These factors constitute the matrix of positive practice environments (PPE).

Establishing positive practice environments across health sectors worldwide is of paramount importance if patient safety and health workers' wellbeing are to be guaranteed. All health sector stakeholders, be they employer or employee, private or public, governmental or non-governmental, have their respective and specific roles and responsibilities to foster a positive practice environment. They must work in concert if **Quality Workplaces for Quality Care** is to be achieved.

The following presents a checklist of key characteristics of quality workplaces for health care professionals. The checklist is intended for use by employers, professional organisations, regulatory bodies, government agencies as well as health sector professionals. It is designed as a reference tool to enable these groups to assess the quality of their practice environment, identify any deficiencies and develop strategies to address priority gaps. Each of these characteristics implies a set of rights and responsibilities for the concerned stakeholders, whether they be employers, employees or managers. Mutual respect and consideration are basic components of the organisational climate that must be established and rigorously maintained.

Positive practice environments for health care professionals:

Professional recognition

- √ Recognise the full range of competencies provided by health care professionals and provide the autonomy for these competencies to be fully utilized.
- √ Promote professional autonomy and control over practice and pace of work.
- √ Recognise and reward employee contribution/performance.
- √ Regularly assess employee satisfaction and act on outcomes.

Management Practices

- √ Commit to equal opportunity and fair treatment.
- √ Provide adequate and timely compensation commensurate with education, experience and professional responsibilities.
- √ Maintain effective performance management systems.
- √ Offer decent and flexible benefit packages.
- √ Involve employees in planning and decision making affecting their practice, work environment and patient care.
- √ Encourage open communication, collegiality, team work and supportive relationships.
- √ Foster a culture of mutual trust, fairness and respect.
- √ Adopt policies and procedures that positively encourage the reporting of professional misconduct or violation of laws/regulations.
- √ Provide clear and comprehensive job descriptions/specifications.
- √ Promote transparency in decision making processes (where applicable).
- √ Ensure effective grievance/complaints procedures are in place.
- √ Demonstrate effective management and leadership practices.

Support structures

- √ Invest in health and work environments.
- √ Foster strong employment relationships between and among employer/employee/co-workers/patient.
- √ Adhere to regulatory frameworks that ensure safe working conditions.
- √ Provide access to adequate equipment, supplies and support staff.
- √ Engage employees in continuous assessment and improvement of work design and work organisation.
- √ Promote healthy work-life balance through policies and programmes that support fair and manageable workloads and job demands/stress, and flexible work arrangements.
- √ Offer employment security and work predictability.
- √ Ensure employees practice under an overarching code of ethics.
- √ Communicate clearly and uphold standards of practice.
- √ Regularly review scopes of practice and competencies.

Education

- √ Support opportunities for professional training, development and career advancement.
- √ Offer thorough orientation programmes for new hires.
- √ Foster effective supervisory, mentoring and peer coaching programmes.

Occupational Health and Safety

- √ Adhere to safe staffing levels.
- √ Adopt occupational health, safety and wellness policies and programmes that address workplace hazards, discrimination, physical and psychological violence and issues pertaining to personal security.

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Appendix 2: Types of incentives

Source: ICN (2008) Incentives for Health Professionals, Table 1 p.12: Adapted from Buchan *et al* (cited in Adams & Hicks 2001); Caldwell & Kingma 2007; Dambisya 2007)

Financial

Terms and conditions of employment

- Salary/wage
- Pension
- Insurance (e.g. health)
- Allowances (e.g. housing, clothing, child care, transportation, parking)
- Paid leave
- Performance payments
- Achievement of performance targets
- Length of service
- Location or type of work (e.g. remote locations)
- Other financial support
- Fellowships
- Loans: approval, discounting
- Non-financial
- 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 break

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

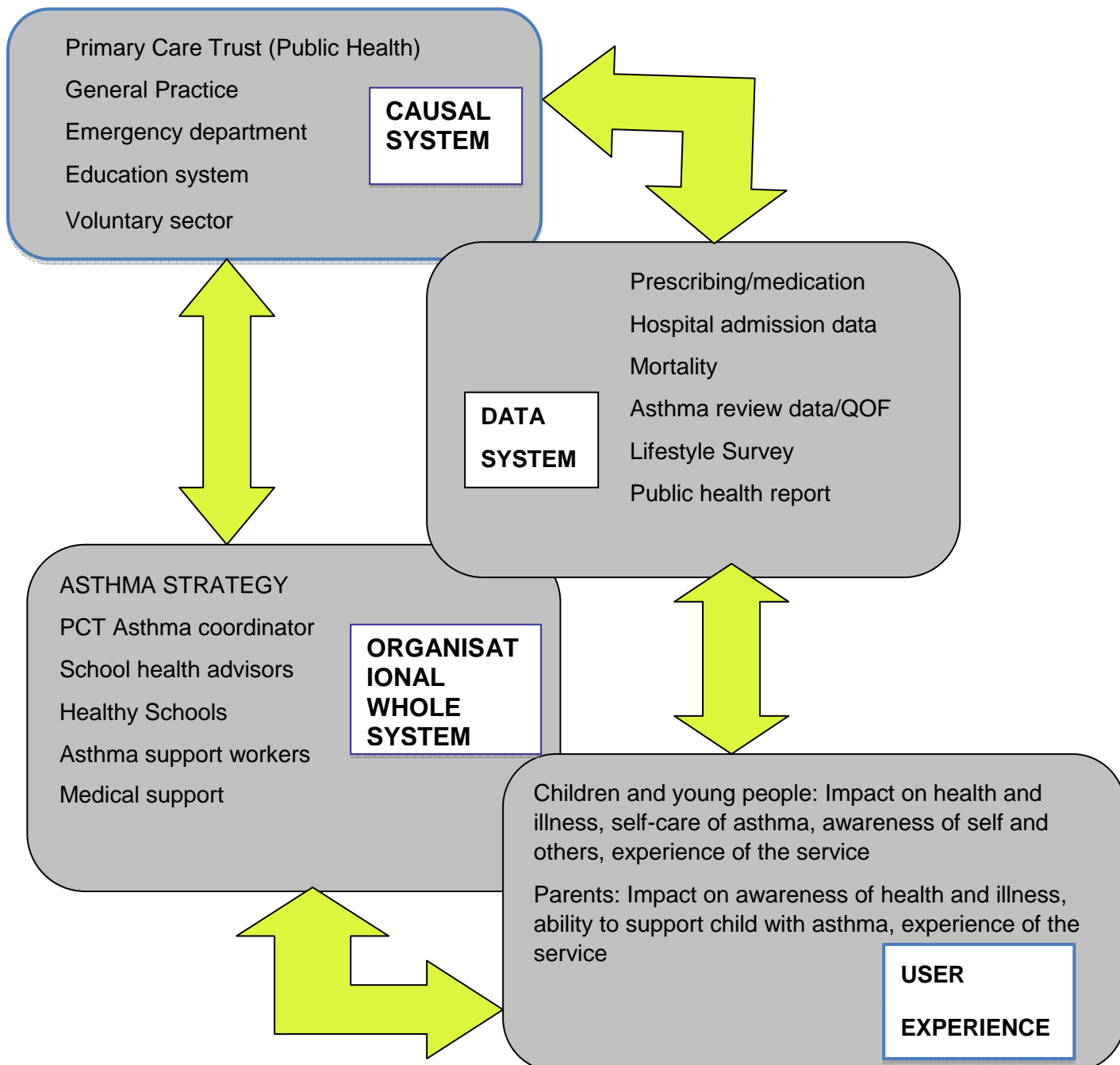
Appendix 3: ICN definition of nursing 2003

Source: www.icn.ch

The ICN Definition of Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles.

Appendix 4: The public health model: whole systems approach

Source: Kendall S, Wilson P, Procter S, Brooks F, Bunn F and McNeilly E (2010). *The Nursing Contribution to Models of Chronic Disease Management*. Report to NIHR Service Delivery and Organisation Programme, England, p.86.



Appendix 5: Lessons learned about developing community nursing practice

Source: From Bryar RM and Griffiths JM (Eds) (2003). *Practice Development in Community Nursing: Principles and Processes*, Hodder, London.

Planning is essential
Identify potential barriers
Identify your resources
Secure the support of the organisation
Search the literature and critique the evidence
Appoint a facilitator
Include all staff from the outset
Work as a team
Involve and empower users and carers
Address the needs of the local community
Evaluate!
Use visual tools where possible
Be realistic
Disseminate



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