A report on the changing roles and skill mix of health workers globally by the All-Party Parliamentary Group on Global Health and the Africa All-Party Parliamentary Group

All the Talents

How new roles and better teamwork can release potential and improve health services

Executive Summary

New roles and changing skill mix

"There is a desperate need for health workers in Africa... people die or are disabled without even the simplest help or knowledge."

Dr Francis Omaswa
Director, African Centre for Global Health and Social Development

"Achieving an optimal skill mix... has the potential for the greatest impact in improved health outcomes."

Dr Mubashar Sheikh
Executive Director, Global Health Workforce Alliance

"Using lower skilled workers helps us to reach more people."

Dr Hannah Faal
Consultant Ophthalmologist, Sightsavers, Ghana

"Throughout the NHS we see many examples of skill mix and substitution handled expertly"

Mike Farrar
Chief Executive, NHS Confederation

At a time of health worker shortages and financial constraints it is more important than ever to nurture and develop the talents of everyone working in healthcare – community workers, carers and the professionals – to help them achieve their full potential and thereby improve quality, reduce costs and increase access to health services.

This report reviews how health workers around the world are taking on new roles. Nurses perform tasks previously undertaken by doctors, community health workers and nursing assistants learn new skills, and patients are becoming part of the healthcare team. This skill mix change – or *task-shifting* or *task-sharing* – can have a major beneficial impact on services.

There is a critical shortage of health workers in many lower and middle income countries. This has led to experimentation and innovations in the ways in which health workers are deployed and trained. Some of these are very successful in improving access, quality and costs – with nurses doing caesareans and cataract operations in Africa and community health workers in India, Africa and Brazil offering health advice, treating patients and undertaking surveillance. Others, however, have been much less successful.

In the UK, on the other hand, these changes have been driven by the aspirations of nurses and other professional groups to extend their roles; by legislation which has reduced doctors' working hours; and more recently, by the desire to reduce costs. Examples include nurses and others starting to prescribe and imaging technicians taking X-rays.

Beneficial Impacts

These changes – ***when done well*** – have the potential to improve access to health services, quality and costs as this table shows:

Improved access	Orthopaedic clinical officers in Malawi are seeing 153,000 patients and performing 33,000 bone manipulations each year.[1]
Improved quality	The introduction of nurse practitioners for same day consultations in primary care in the UK has increased patient satisfaction levels.[2]
Improved costs	*Técnicos de cirurgia* in Mozambique undertake 92% of caesarean sections in District Hospitals and do so to the same standards and at 1/3 of the cost of doctors.[3]

1 Professor Chris Lavy in evidence session on March 13th 2012

2 Kinnersley P, Anderson E, Parry K, Clement J, Archard L, Turton P, et al. Randomised control trial of nurse practitioner versus general practitioner care for patients requesting same day consultation in primary care. BMJ 2000;320:1043-48

3 Kruk ME, Pereira C, Vaz F, Bergström S, Galea S: *Economic evaluation of surgically trained assistant medical officers in performing major obstetric surgery in Mozambique*. Br J of Ostet Gynaecol 2007, 114 1253-60

Success factors

This review has identified that there are a number of factors which, in combination, create success when changing skill mix. Many low and middle income countries cannot do all these things all the time – such as provide supervision in remote areas – simply due to lack of resources. The more of these factors that are in place at any time, the more likely any change is to be successful. Governments, professionals and others need to work together to create an environment which allows these factors to operate. The upward spiral below illustrates how these factors can reinforce each other.

Attempts to make change without addressing these factors may well fail and can damage existing health services.

Recognition and teamwork	All health workers should receive adequate recognition for their work and be supported to work in teams with other professionals, lay workers and patients.
Supervision and referral	Supervision and clear referral pathways – involving all groups of health workers – are essential to ensure the best quality of care.
Formal training and progression	Formal training is needed to develop skills, and opportunities for progression can be important in enabling individuals to achieve their potential.
Job design and recruitment	Tasks must be defined and recruitment targeted accordingly.
Leadership and planning	Success is based on careful preparation and planning – with a leader, institution or government taking responsibility for all aspects of planning and implementation.

"Skill mix has to be regarded as part of managing change."

Professor Jim Buchan
Queen Margaret University, Edinburgh

"One needs to think not just about each individual cadre but also about the team… and the support systems…"

Professor Anne Mills
London School of Hygiene and Tropical Medicine

"...midwifery education has to start at the level closest to the women - ensuring traditional birth attendants and community health workers have got the appropriate competencies."

Professor Cathy Warwick,
General Secretary, Royal College of Midwives

"Where it goes wrong …there has been task-shifting onto unqualified people who've not been given even the most rudimentary induction into the fundamentals of nursing care."

Dr Peter Carter
Chief Executive, Royal College of Nursing

There are many examples of successful skill mix change globally

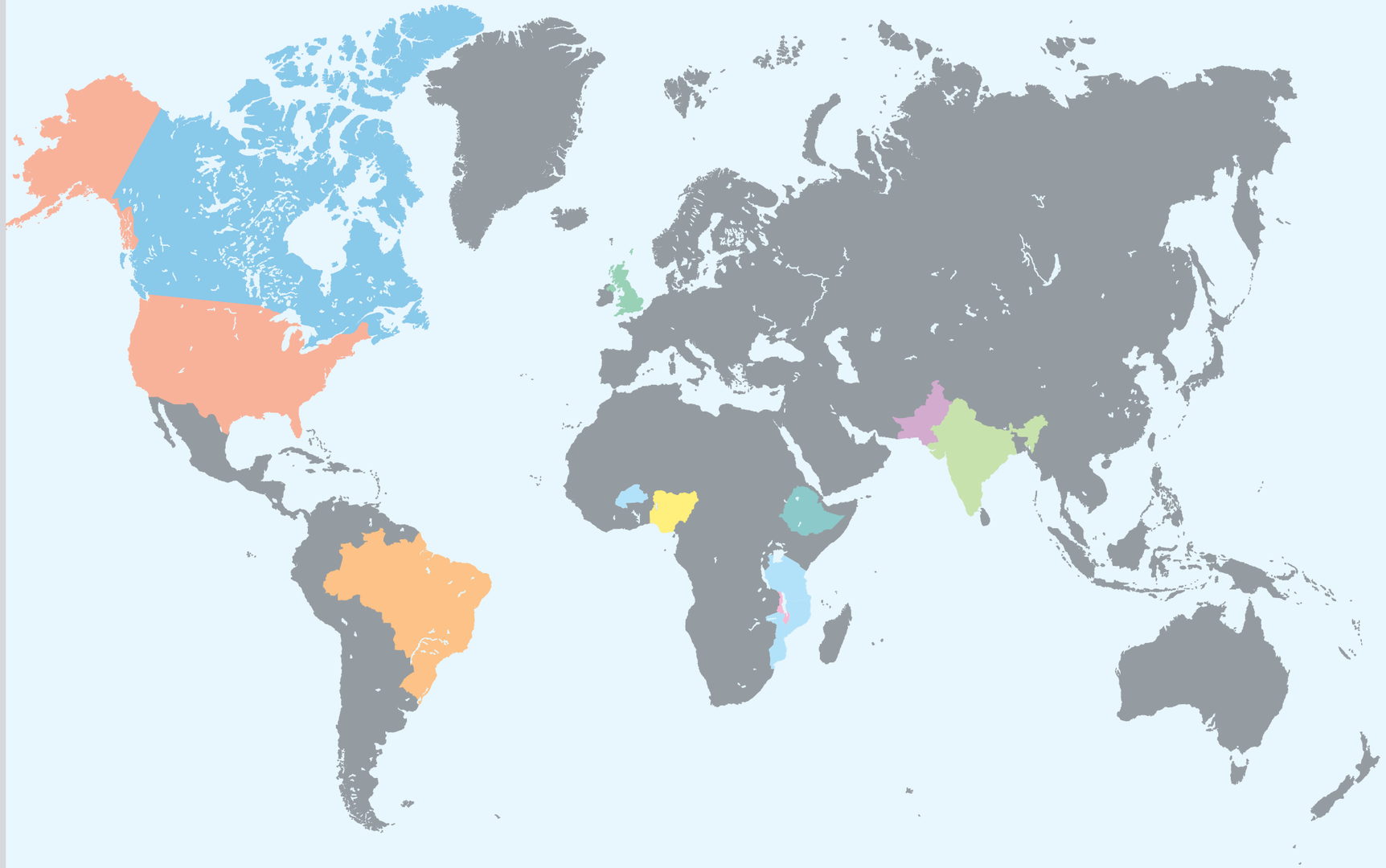
In the **UK, prescribing by nurses** in primary care is associated with higher patient satisfaction with similar health outcomes and number of prescriptions issued compared to general practitioners.

In Ontario, **Canada, nurse practitioners** see patients alongside general practitioners in primary care. Evaluations have shown they lead to improved chronic disease management and improved access to healthcare, especially in more remote areas.

In the **USA, extended scope physiotherapists** assess patients in the emergency department alongside doctors, administering treatments, prescribing drugs and referring to specialists as necessary. Evidence suggests that these physiotherapists have similar levels of diagnostic accuracy and patient satisfaction when compared to doctors.

In **Nigeria, community health workers** trained by Sightsavers have distributed a treatment for river blindness to nearly five and half million people. This approach has been replicated in over 15 African countries, resulting in an extension of treatment to over 75 million people.

The ***Programa Saúde da Família*** **(Family Health Programme) in Brazil** consists of multidisciplinary teams, including a doctor, nurse, nurse auxiliary, and four to six community health workers, who look after the health needs of residents within a geographically defined area. Since its introduction, primary care has become the usual source of care for 57% of Brazilians up from 40% in 1998. In areas with high enrolment in the program, hospitalisation rates for chronic diseases were 13% lower than those with low enrolment.



In **Tanzania, Mozambique** and **Burkina Faso**, mid-level health workers are trained to perform emergency obstetric surgery, particularly caesarean sections in rural areas. Studies found no significant differences in maternal or neonatal deaths compared to doctors.

In **Tamil Nadu, India, the Multipurpose Workers Scheme** gives school-leavers 18 months of basic primary care training. They are then designated as village heath nurses and provide maternal and child health services through regular home visits to the villagers under their care. The maternal mortality ratio in Tamil Nadu is now half of India's average and under-five child mortality halved between 1992/3 and 2005/6.

Ethiopia is posting two **health extension workers** to every village, with nearly 35,000 trained so far. The workers have improved detection and treatment of TB and HIV and in just four years they increased access to public health services from 61% to 87%.

The government of **Pakistan** created the **Lady Health Worke**r cadre in 1994 with the aim of providing essential primary health services in the community. Over 100,000 lady health workers have been trained so far. In Punjab province they have contributed to a reduction in the maternal mortality rate from 350 to 250 per 100,000 live births and in the infant mortality rate from 250 to 79 per 100,000 live births.

In **Malawi**, an innovative programme has been introduced to train **clinical officers in orthopaedic care** in a country with high rate of trauma but just a handful of orthopaedic surgeons. By the 10th year of programme, orthopaedic clinical officers were seeing 153,000 patients and performing 33,000 bone manipulations and 3,700 minor operations per year.

Conclusions

Countries around the world are struggling to deliver ambitious health plans at a time of global recession and health worker shortages. They may want to achieve the Millennium Development Goals, introduce universal health coverage or simply meet their population's demands for improved services. It is therefore essential that they nurture, develop and make the best use of all the talents available - from highly qualified health professionals to community health workers and patients themselves.

All the Talents shows that giving people extra skills, designing jobs that allow them to work up to the limit of their capability, providing better supervision and creating more effective teams **can** bring about enormous improvements. Under the right circumstances nurses **can** prescribe and take on additional roles; nursing assistants and community workers **can** treat common conditions; and patients **can** support one another.

This report describes examples where such changes have greatly increased a population's access to services, improved the quality of a service and reduced costs. It also identifies the features that need to be in place – the success factors – to achieve these benefits. Many different actors – from professionals to governments – can support or impede these changes and between them they need to give a much higher priority to these issues and work together to create an enabling environment.

There are however also risks in making these changes. The changes will only bring improvement if they are planned carefully and implemented well. There have been as many failures as successes with examples of people taking on tasks beyond their competency and without adequate training and support and, as a result, providing poor quality and, even, dangerous care. This can be avoided if the lessons of ***All the Talents*** are learned.

There are examples of successful role and skill mix changes throughout the world. It is noticeable that countries in Africa, Latin America and South East Asia – without the Western world's resources, institutional history and vested interests – have often innovated further and faster. There now needs to be more research and evaluation to strengthen evidence and establish and share best practice.

The most precious commodity in healthcare today is probably a health worker's time and it needs to be used well. This is not just about productivity – and quantity of activity – but about quality and the effective use of time. Doctors and nurses don't need to do things that can be done as well – or better – by others, whilst assistants and care workers of all kinds can take on new tasks and patients can become part of the team. This can often be enabled by appropriate technology.

Recommendations

The primary recommendation is that professionals, governments and institutions alike must give much higher priority to creating the right workforce and developing and supporting the talents of health workers and others so that they can achieve their potential and play their full part in healthcare.

In support of this we make the following recommendations:

Health professionals and local health organisations need to ***lead the changes***	• Review their services to identify what role and skill mix changes can be made • Plan and implement changes using the known success factors and established best practice • Ensure all staff are part of effective teams
Governments and national health systems or institutions need to ***create the enabling environment***	• Set out a vision for the system and its services and the workforce needed to achieve it • Establish or adapt regulatory and inspection systems to support the vision • Ensure educational and training institutions offer programmes that address the vision and provide some national consistency • Create a process or agency to identify best practice in service and workforce design
International bodies including the World Health Organization and development agencies such as the UK's DFID need to ***support countries***	• Assist national governments develop their human resources and workforce planning capacity • Ensure that workforce innovations are mapped and shared
Research funders and institutions need to ***provide the evidence*** needed to fill gaps and support further development	• Invest more in workforce research and develop better metrics, in association with governments and international health bodies • Undertake systematic analysis of the effectiveness of role and skill mix changes
Technology companies need to ***address the technology needed*** to support innovative roles	• Develop technology and applications that support role and skill mix change

We also recognise that there is the opportunity because of current changes in the NHS in England to give much higher priority to developing the workforce and **all its talents** if:

1 Clinical Commissioning Groups give this a high priority in order to improve access, quality and costs.

2 Health Education England develops a far-sighted vision of the future workforce.

3 The UK Sector Skills Council and other training bodies create programmes that support the vision and create national consistency in training for healthcare assistants and other developing roles across both health and social care.

4 The Care Quality Commission inspects the way healthcare assistants and others are trained and developed as part of its wider work.

5 The Quality, Innovation, Productivity and Prevention (QIPP) Programme gives greater emphasis to reviewing roles and skill mix.

"Health care assistants can do many of those tasks perfectly satisfactorily provided they've had the proper induction, training and education."

Dr Peter Carter
Chief Executive, Royal College of Nursing

"(The Ethiopian programme) has been succesful largely because it's seen as a national priority directly addressing MDGs 4 and 5."

Linda Doull
Director of Health and Policy, Merlin

"Effective human resource planning… is critically important."

Dr Neil Squires
Head of Profession Health, Department for International Development

"The amount of money on research that is anything to do with service delivery is very small… and, within that, human resources research is very small."

Professor Anne Mills
London School of Hygiene and Tropical

All the Talents

This review was undertaken by the All-Party Parliamentary Group on Global Health chaired by the Right Honourable Alun Michael MP and Lord Crisp and by the Africa All-Party Parliamentary Group chaired by Hugh Bayley MP. Members who took part in the review included Baroness Armstrong, Viscount Eccles, Baroness Emerton, Pat Glass MP, Meg Hillier MP, Baroness Jolly, Lord Kakkar, Dan Poulter MP, Baroness Prashar, Lord Ribeiro, Lord Sandwich, Lord Swinfen and Baroness Tonge.

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Copies of the full report and transcripts of sessions are available to download at www.appg-globalhealth.org.uk

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