

Implementation Plan for a Midlevel Medical Worker for South Africa. A discussion paper.

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Summary

The midlevel medical worker is a new category of health worker for South Africa. Staff shortage, changes in medical education and experiences in other countries are explained as reasons for the decision. This worker will function as an assistant for the doctor in the district hospital. He or she will work in a team and under supervision of the medical doctor and do clinical tasks in the hospital that include patient consultations, counselling, assistance and procedures. Training of the midlevel medical worker will be in medical schools as part of family medicine training complexes. A three-year training programme is proposed with maximum emphasis on skills training. The importance of the whole primary health care team and the need for budgeting, planning and coordination is discussed.

Primary health care has always been challenging. Free primary health care services, the overwhelming impact of the HIV AIDS epidemic and continuous changes for private health funding made the situation even more challenging for primary care workers in the country.

Medical education is going through continuous changes. This include the introduction of the two-year internship, reduction of training time in some medical schools and the development of family medicine

as a specialist discipline for primary health care.

The latest major development is the decision by the National and Provincial Ministers of Health that a midlevel medical worker be introduced for South Africa. Doctors are used to working with nurses as midlevel assistants for many years. Primary health care nurses function as the midlevel medical workers in primary care. In the hospitals doctors share their tasks with nurses.

Now the decision is to have a specifically trained midlevel medical worker as an assistant to the physician in primary care.

The aim of this discussion paper is to inform role players about the decision, to invite comment and to ask for contributions that can guide the implementation of the programme.

Rationale for a Doctor Assistant Programme

There are midlevel workers in most professions who assist professionals to function optimally and deliver services to more clients. In the National Strategy for Human Resources For Health, the Pick report in 2001 recommended the creation of a "multi-skilled mid-level health worker"¹. Nurses function as midlevel medical workers with varied levels of success. With an absolute shortage of nurses, overburdened nursing staff

and increasing health care needs, the new midlevel medical worker should fill the gap as an assistant to the doctor.

Name

A suitable name for the midlevel medical worker has to be found. In Tanzania the name "Clinical Officer" is used while "Physician Assistant" is used in the USA. "Doctor Assistant" may be possibility in line with the other midlevel workers namely "Therapist Assistant" and "Pharmacist Assistant".

Decision by the Ministers of Health

A decision was taken in 2003 and confirmed at a Minmec meeting on 8 January 2004 that a midlevel medical worker programme is implemented for South Africa with the aim of selecting the first students in September 2004 and enroll the first students in 2005.

Drawing on experience in other countries and other midlevel worker programmes.

A midlevel medical worker is an integral part of many health systems in the world, both in the developed^{2,3} and in the developing world. Information from these countries including the USA and Tanzania is used to develop this programme. Experience with other midlevel health

workers in SA has been varied. The Dental Therapist as a midlevel dental worker created numerous difficulties related to supervision and independent practice. Lessons from these programmes must be taken in consideration in the development of the midlevel medical worker programme.

Task Team

A task team is appointed to drive the process. This team is Mrs. Gugu Gumede, Cluster Manager: Human Resource, Planning and Development, National Department of Health, Prof. Jannie Hugo, Medunsa Department of Family Medicine and Primary Care and Dr. Neil Knobel, retired surgeon general.

Approach: Start at the District Hospital.

The plan is to start a midlevel medical worker programme in the district hospitals of the country. This first phase will be fully implemented and evaluated and that will guide future developments.

The district hospital plays a pivotal role in the delivery of primary health care in the district health system. A well functioning district hospital supports the primary care system of clinics and health centres in the district and relieves pressure on secondary hospitals. Support for the doctor at the district hospital should stabilise the work there and free doctors to give more attention to primary care clinics and health centres.

The district hospital is a well-defined and well-understood care system and provides a context that is fairly predictable with a good chance of supervision and team support for the midlevel medical worker.

Placing the physician assistant / clinical officer in the district hospital makes it possible to be specific about the scope and limits for this midlevel worker.

How will the Physician Assistant / Clinical Officer work?

The midlevel medical worker will work in the district hospital as an assistant

to the doctor. He or she will do many of the tasks presently shifted to nurses and much in the same way as an intern or senior medical student. The key is that it is work under supervision and in a team. The exact functioning will depend on the situation, the skills and experience of the assistant and the doctor and the relationship between them.

The work of the midlevel worker will be guided by a primary health care comprehensive approach as is practiced and taught in family medicine and primary health care.

The midlevel medical worker will be part of the team in different units in the district hospital:

Emergency Unit.

Here the physician assistant / clinical officer will assist the doctor when it is busy. She/he will consult patients, initiate resuscitation and do procedures e.g. suturing and application of POP. When it is not busy, he or she will be with the nursing staff and deal with all the patients. When there is uncertainty about a patient, he or she will phone the doctor. Between them they will decide on a management plan and whether it is necessary for the doctor to come.

Maternity Unit

In the maternity unit the midlevel medical worker will function like an advanced midwife. He or she should be able to assess complicated patients, do assisted deliveries and neonatal resuscitation. He or she will also do ward rounds, manage patients and do discharges. This will all be under supervision of the doctor and calling the doctor when necessary.

In theatre the midlevel medical worker will assist the doctor with caesarean sections, anaesthetics, neonatal resuscitation and other procedures.

Outpatient Department.

The Physician Assistant / Clinical Officer will consult patients and deal with them independently where possible. The doctor will be available in the OPD or in the hospital to assist

with complicated and difficult cases. The doctor will deal with the referrals from primary health care nurses and other doctors.

Medical and Paediatric Units

The midlevel medical worker will do regular ward rounds, manage patients and do procedures e.g. putting up drips, doing venesections and lumbar punctures. He or she will discuss patients with the doctor when necessary. The doctor can do a problem ward round daily and a complete round once or twice a week. This should ensure that patients get good ongoing care and that wards are well managed. All of this is done in a team with the nursing staff.

Surgical Unit

In surgery, orthopaedics and gynaecology the Clinical Officer / Doctor Assistant will do regular ward rounds, manage patients, prepare patients for theatre and do small procedures. The doctor will be available for consultation and also be in the ward daily.

In theatre the Doctor Assistant / Clinical Officer will assist the doctor and do small procedures e.g. incision and drainage and evacuations independently. The doctor will be available in the theatre complex most of the time to assist and support.

Regulation

The regulation of the doctor assistant will rest with the Medical and Dental Professions Board of the HPCSA. This will ensure that this profession develops in maximum synergy with the medical profession.

Education and Training

The education of the doctor assistant can be placed in the 8 medical schools of the country depending on the need and approach of each medical school.

The educational approach will be to focus on competence and capability learning.

Context

The context of learning will be best close to the place where the assistant

will function. That means that most of the learning can take place at a district hospital.

Midlevel medical workers can be trained in small units attached to district hospitals. A well functioning district hospital that is situated in a family medicine training complex with teaching and accommodation facilities will be the ideal place. Such situations exist throughout the country.

Curriculum

The curriculum will be guided by the specific outcomes needed for the midlevel medical worker. It will be based on the medical curriculum with the focus on those skills and knowledge necessary for the person to function in a district hospital with close supervision and in a team with a doctor.

Process of learning

The exact process of learning will depend on the university, the situation at the training centre as well as the geographical realities. In general the approach can be small group integrated learning with maximum exposure to real patients. A clear link with the university through internet, telemedicine and blocks of learning at the university must be maintained.

Training based in family medicine

The midlevel medical worker will function in the district hospital, which is the domain of primary care and family medicine. Family medicine training complexes are developed throughout the country in collaboration with departments of family medicine.

Training units for midlevel medical workers can be established within these family medicine training complexes. That will ensure that the training will stay in touch with medical training and it will utilise the resources developed for family medicine training. It will also ensure sustainability, continuous academic development and research.

Size of training units

A class of about 12 students per

year per training unit should be small enough for a unit at a district hospital and large enough for group learning. With a 3-year training programme and some electives and training sessions at the main campus, it means that there will be about 24 students at the district hospital training centre at a time. Several training units can be linked to a university depending on the needs and the facilities.

Length of training

The training is planned to be three years of which 2.5 years can be a training programme and 6 months internship in a district hospital. The final evaluation will be done at the end of the 3 years including an evaluation of performance in the internship. The length of training will also depend on the curriculum and the expected outcomes.

Skills, competencies and capability

To be a clinician is a complex task and requires not only knowledge, skill and competency, but also the capability to adapt to uncertain situations and new conditions. By placing the midlevel medical worker only in the district hospital limits to the amount of uncertainty that he / she has to face to some extent. This means that a limited set of knowledge, skills and competencies can make the person functional in a team and as an assistant, but not as an independent practitioner.

An important competency of the midlevel medical worker is to consult a patient. He or she has to gather the necessary information from history taking, clinical examination and investigation to be able to make an assessment and a plan. Where there is uncertainty, this information is then communicated clearly to a supervising doctor so that together they can make an assessment and plan. Further competencies follow from this and include counselling, prescription and procedures.

Teamwork and communication skills are critical.

A list of competencies of the

midlevel medical worker should be based on the National Norms and Standards for District Hospitals. The list of conditions that the midlevel medical worker must know should be based on national illness profiles with emphasis on common and important acute and chronic conditions.

Numbers needed and trained

The Provincial Departments of Health must assess the needs and suggest numbers needed.

To be practical at the initial stage there will be one training site per province with 12 students per site per year. With attrition it should provide 100 Doctor Assistants / Clinical Officers yearly with the first batch in at the end of 2008. From the experience of the first sites, it will be possible to add more sites. As it is envisaged to develop family medicine training complexes in all 53 districts in the country, it will be possible to develop 53 training sites within 5 years.

Rural or Urban training and working

The biggest need is in the rural areas and the programme will include district hospitals in rural areas. There is however substantial need and training resources in the urban areas and urban areas will be included.

Recruitment and requirements

The aim is to recruit young people who completed matric from rural communities to be trained in a specific province and community to serve that community. Language and culture is important and also to create opportunities for young people who would otherwise find it difficult to get into tertiary training. The provincial department of health and the university will work with local communities to select the best candidates.

Academic qualifications, attitude and social abilities and preparedness to serve will be criteria for selection. It is important to choose people who will be more likely to stay in a career of midlevel medical worker and serve

Table I: Role players and tasks for the midlevel medical worker programme

Role Player	Task / Contribution
National DOH	<ol style="list-style-type: none"> 1. Leadership 2. National Policy on Primary Health Care Team and the Midlevel Medical Worker 3. Creation of a new category of health worker 4. Budget planning 5. Budget Provision and negotiation with Treasury 6. Assessment and decision on salary levels 7. Negotiate with bargaining chamber
Provincial DOH	<ol style="list-style-type: none"> 1. Identify training site in collaboration with University 2. Develop and Sustain Training Site 3. Identify needs in the district hospitals in the province for midlevel medical workers 4. Create posts for midlevel medical workers 5. Create posts for Midlevel Medical Worker Interns 6. Appoint and retain Midlevel Medical Workers 7. Recruit students in collaboration with local communities 8. Give feedback about the functioning of midlevel medical workers
University / Medical School	<ol style="list-style-type: none"> 1. Develop curriculum 2. Register the degree 3. Develop training programmes 4. Develop training sites in collaboration with Provincial DOH 5. Provide training resources: Internet link, books, electives, blocks at university, visiting lecturers 6. Faculty/teacher development 7. Research
HPCSA: Medical and Dental Professions Board Nursing: Nursing Council Nursing Associations PHC nurse training programmes Nursing Schools / Academics	<ol style="list-style-type: none"> 1. Approve training outcomes and curriculum 2. Create category: policy and regulations 3. Accredite training programmes and sites <p>Give input into structuring of the relationship between midlevel medical workers and nurses</p>
Other Health workers in District Hospitals: Physiotherapists Occupational Therapists Nutritionists Speech Therapists Radiographers Pharmacists Emergency care workers	<p>Give input into structuring of the relationship between midlevel medical workers and other health care workers</p>
Department of National Education	<ol style="list-style-type: none"> 1. Register training programmes 2. Contribute to training policy 3. Assist in the assessment of levels 4. Assist with budget allocations
SAQA	<ol style="list-style-type: none"> 1. Accredite qualification and training programmes 2. Assist in the assessment of levels
Department of Labour	<ol style="list-style-type: none"> 1. Registration of the category of worker

local communities rather than those who want to be urban and global citizens.

Recruitment should not be done from existing health care workers. Planning is still needed to develop the most appropriate approach to recruitment and selection.

The Midlevel Medical Worker in the Primary Health Care Team

Health care in a district hospital is all about teamwork. This team consists of different professionals and other health workers. It is important that the midlevel medical worker fits into

this team as a functional team member. Input from professional groups namely nursing, therapy groups, pharmacists, radiographers and laboratory personnel will be crucial for the success.

The whole primary health care team is important and this programme should develop in synergy with the other programmes to staff primary health care.

Budget

The funding of the midlevel medical worker programme is important and complex. It includes the costs to develop the programme, to run the training and fund the posts. The health economic unit in the National Department of Health will work with role players to establish a model of funding.

Planning and coordination

The challenge is to implement this programme in a well-planned and well-coordinated manner. All the role players need to contribute and ongoing planning is needed to ensure success. Refer to **Table I:** Role Players and Tasks

Conclusion

The introduction of a new category of health worker is a major intervention with the potential to contribute positively to health care especially to people most in need in the country. It is important for all the role players to apply their minds and contribute towards the success of this programme. ✨

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