The Supply Side:

Training to Work at Home

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PARADOXES OF HEALTH IN AFRICA

• Highest disease burden/lowest density of HWs/popn.

• Health problems differ but HWs profiled as developed countries.

• Training curricula along lines of industrialized countries?

• Majority of HWs serve a minority of the population in urban areas

• Skill mix/span limited by an "anti-mid-level" HW posture

• Fiscal space restricts taking on more HWs.

• ?70% of popn see untrained Traditional HPs anyway

• Health Professionals lost to countries with much better HW density.

• From JLI Africa working Group report
Intervention points?

**Inflows**
- Numbers, cadre types & mixes, costs, skills base

**HR Stock**

**Outflows**

**Work Output & Health production**
Strategy Issues: cadres for work at home

Health Goals Environment & Influences

- Having adequate number of cadres
- Competences appropriate to circumstances
- HR & Support systems
- working Conditions & org context, environment

Economic, Social, Cultural, Organizational

Good quality and coverage of priority health services & Reaching Health Goals e.g. THE MDGS
Supply that Stays

- **Right Numbers**
  - (e.g.: AMOs, COs, MAs) Substitution with reduced "international tradability" and limited International reciprocity/professional lobbies
  - Training linked to *local needs* demand and to support/oversight.

- **Right Competencies:**
  - Country specificity
  - Motivation and professional horizon
  - Training infrastructure,

- **Working Support Systems:**
  - Supervision support and reinforcement
  - Work tools, skills range commensurate with tasks
  - Job significance & career progression

- **Context & Work Environment influences**
  - Advocacy, national & client acceptability
  - Influence on community services uptake
  - Inter-professions acceptability and coherence.
  - Long term implications – changing context and economics.
Critical implementation issues

• Advocacy & building consensus

• (Inter) national configuration & retention

• Regulation & legal frameworks

• Motivation, incentives & career pathways

• Inter-cadre relations (substitutes & substituted)

• Comparisons of quality of care
Implementation Issues cont.

- Comparisons of costs, cost-effectiveness, financing – training, salary, equipping

- Avoiding "Cadre proliferation"

- Avoiding "Wastage" from limited skill span, QoC issues

- Study and understand what works & why
Motivation matters for all cadres
Table 1: Summary: types of substitution

<table>
<thead>
<tr>
<th>Substitution type</th>
<th>Brief description</th>
<th>Examples</th>
</tr>
</thead>
</table>
| 1. **Indirect substitution**: Delegation of some Professional Tasks | Substituting a professional with an existing but different professional (changes scope of practice of another cadre to cope with delegated tasks) | 1. Enhanced midwives' roles in Ghana  
2. Nurse anesthetists  
3. Enhanced abortion management roles for nurses in Zambia and South Africa |
| 2. **Direct substitution**: Delegation of most professional skills      | Substituting an existing profession with a newly created cadre (both cadres may coexist, with overlapping professional functions) | 1. Clinical officers/ medical assistants in Malawi and Ghana  
2. Assistant medical officers and surgical technicians in Tanzania and Mozambique |
| 3. **Intra-cadre skills assignment** or delegation                      | Delegating some specific "specialist" tasks to professionals with less training, in the same profession | 1. Diploma ophthalmologists, psychiatrists, ENT specialists, WAHC  
2. Theatre and intensive care nurses without formal training, in Ghana |
| 4. **Delegation of non-professional tasks**                              | Delegating certain aspects of tasks in order to relieve professionals of unwarranted workload | 1. Health aides in Ghana.  
2. Pharmacy assistants in Ghana |
| 5. **Informal substitution.**                                            | Existing "lower-trained" cadres, especially in remote and rural areas, will carry out tasks in the absence of the appropriately recognized professional | Happens in many rural areas in Africa |
Table 3: Educational structure for "doctor substitutes"

<table>
<thead>
<tr>
<th>Country</th>
<th>Cadre name</th>
<th>Basic schooling</th>
<th>Basic pre-service education</th>
<th>Postbasic education</th>
<th>Specialized education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>Medical assistant</td>
<td>12 years</td>
<td>3 years (nursing)</td>
<td>1 year</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td>Nurse anesthetist</td>
<td>12 years</td>
<td>3 years nursing</td>
<td>none</td>
<td>18 months</td>
</tr>
<tr>
<td></td>
<td>Doctor</td>
<td>12 years</td>
<td>6 years</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Kenya</td>
<td>Clinical officer</td>
<td>12 years</td>
<td>3 years (clinical officer)</td>
<td>1 – 1.5 yrs</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Doctor</td>
<td>12 years</td>
<td>6 years (medical school)</td>
<td>3 yrs</td>
<td>2 yr (AMOs)</td>
</tr>
<tr>
<td></td>
<td>Clinical officer</td>
<td>12 years</td>
<td>2 years</td>
<td>3 years (AMO) (+ 5 years' practice)</td>
<td>3–4 years</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Medical assistant;</td>
<td>10 years</td>
<td>2.5 years medical</td>
<td>1.5 years – surgical/obstetrical technician</td>
<td>3–4 years</td>
</tr>
<tr>
<td></td>
<td>surgical/obstetrical</td>
<td></td>
<td>assistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>technician</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doctor</td>
<td>12 years</td>
<td>6 years (medical school)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>Medical assistant/clinical</td>
<td>12 years</td>
<td>3 years (medical assistant)</td>
<td>1.5 years? (surgery) clinical officer</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>officer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pharmacy technologist</td>
<td>12 yrs</td>
<td>3 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doctor</td>
<td>12 years</td>
<td>6 years (medical school)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td>Clinical officer</td>
<td>12 yrs (O level)</td>
<td>3 years</td>
<td>licentiate 18 months</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doctor</td>
<td>12 years</td>
<td>6 years (medical school)</td>
<td></td>
<td>2 year &quot;clinical officer&quot; anesthetist</td>
</tr>
</tbody>
</table>

Using mid-level cadres as substitutes for internationally mobile health professionals in Africa. A desk review Human Resources for Health June 2004
"substitution"

Table 4: Estimated production: physicians and substitutes in selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Clinical officer/Medical assistants</th>
<th>Assistant medical officer (Postbasic)</th>
<th>Doctors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>30</td>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>Tanzania</td>
<td>300</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Kenya</td>
<td>300</td>
<td>30</td>
<td>200</td>
</tr>
<tr>
<td>Malawi</td>
<td>100</td>
<td>N/A</td>
<td>20</td>
</tr>
<tr>
<td>Mozambique</td>
<td>300</td>
<td>N/A</td>
<td>20–25</td>
</tr>
<tr>
<td>Zambia</td>
<td></td>
<td>20 (CO Anesthetist)</td>
<td></td>
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</tbody>
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