Task Analysis: Adaptation and Application in Africa, Asia and the Caribbean for Health Workforce Strengthening

Global Maternal Newborn Health Conference
Mexico City
Wednesday, October 21st
Presenters and Country/Region of Focus

- Leah Hart  Lesotho
- Tegbar Yigzaw  Ethiopia
- Thida Moe  Myanmar
- Lastina Lwatula  Zambia
- Judith Fullerton  Caribbean

Catherine Carr  Moderator
Definition

- A descriptive research methodology
- Wide application in the health professions
- Particularly useful in assessment and definition of the knowledge, skills and behaviors that define the scope of practice of a health profession or occupation.
The Task Analysis Process

- Feedback is solicited from a cohort of interest, e.g.
  - recent graduates
  - health care staff members

- A task list is developed from
  - relevant and available national/international documents—
    - national treatment guidelines
    - curricula
    - job descriptions
    - scope of practice statements
    - regional and international clinical practice guidelines.
Response Variables

- **Frequency** [how often the task is performed]
- **Criticality/impact** [what effect there would be on patient or community health if the practitioner was not able to perform the task]
- **Ability to perform** [self-rated competency]
- **Where educated/trained** to perform the skill
Approaches to Data Analysis

- A combination of frequencies and cross-tabulations are applied to the data
- Results can be aggregated by groups of interest, for example,
  - by health center
  - educational institution
  - geographic region
  - educational level of health care providers
The nature of the quantitative data lends itself to higher analytical approaches, as relevant to the study interest.

A qualitative inquiry can be used to obtain additional task information, e.g., *Is there any task that you are required to perform for which you feel you have not been adequately prepared?*
Exploring the Data

- The most informative results of the task analysis study came from analyzing combinations of variables:
  - frequency and criticality
  - criticality and performance.
Use of Task Analysis to Transform Education of Medical Licentiates in Zambia

Presented by Lastina Lwatula
Zambia
Presentation outline

Introduction
  Background
  Country profile
  Human resource for health (HRH) situation
Who are the Medical Licentiates
Task Analysis
  Objectives of task analysis
  Results
Government response to task analysis results
  Immediate
  Long term
Background and country profile

Population – 14,638,505
Maternal Mortality – 398/100,000
IMR – 45/1,000
HRH – 47% (53% deficit in 2010)
Doctors – 911
Nurses – 7,669
Midwives – 2,671
Clinical Officers – 1,535
Medical Licentiates – 116
Who are the Medical Licentiates (ML)

• Critical HRH shortage
  • especially doctors,
  • prompted the government to formulate potential solutions
  • especially peri-urban and rural areas
• Introduced training of Medical Licentiates in 2002
  • globally known as Associate Clinicians
  • intended as a stop gap measure
Medical Licentiates Scope of Practice

- Primarily clinical officers educated at diploma level
  - Additional training in surgical skills and internal medicine
  - Provide primary to critical surgical health services at district level facilities where there are no doctors
  - Positioned to serve in low-resourced settings via task sharing and task shifting
- Regulated by the Health Professions Council of Zambia
Rationale for Task Analysis

- National Training Guidelines (NTG) stipulated curriculum revision every 5 years
- ML curriculum had not been revised since 2002
- Trends in disease and treatment were not covered
- Many tasks had been shifted to ML without due training to prepare them for changed roles
- Task Analysis enabled review of
  - gaps in pre-service curriculum
  - opportunities for role expansion
  - need for upgrade of qualification
Results – Educated but not Practiced

- Midwifery specific tasks – maternal and child health services
- Patient nutrition
- Care of equipment
- Data entry
Results - Practiced but not Educated

• Administration and management –
  • ML assigned to some district hospitals were managing the facilities in addition to other duties

• Basic sciences –
  • Depth of content did not adequately prepare ML to take on some of the tasks they were undertaking especially surgical procedures
Results - Practiced but not Educated

• Surgery –
  • hysterectomy, repair of fistula, rectocele, other surgical emergencies

• Emergency medicine –
  • tracheostomy, intubation

• Anaesthesia –
  • local, spinal and (rarely) general anaesthesia
Government response

- Government and stakeholders incentivized to make decisions towards closing the identified gaps:
- Immediate revision of ML curriculum:
  - 2-year bridge course to upgrade practicing ML
  - New 5-year direct entry curriculum
  - Strengthening basic sciences and surgery courses
  - Elective courses in radiology & ultrasonography, mental health, ophthalmology, otorhinolaryngology, community health, urology, dental hygiene
  - Mandatory anaesthesia course within the ML training
  - ML qualification upgraded to Bachelors degree
Lessons and Conclusions

- College was given tool for advocacy use with stakeholders and policy makers
- ML services ranged from primary to advanced for rural population
- ML identified as appropriate cadre for task shifting for advanced care
- ML committed to serving their patients despite not being fully prepared for the roles they undertook
- Led to upgrade of qualification in recognition of level of practice