

MAPPING COUNTRY HEALTH WORKER CLASSIFICATIONS

to international standards to inform research, planning, and policy

Background

Many potential sources of human resources for health (HRH) data and information exist:

- Staffing, payroll, and licensing records
- Population censuses and surveys
- Health facility assessments
- Special HRH studies.

The Challenge:

How to analyze and synthesize HRH data across multiple sources to enhance comparability of findings?

- Data on health workers are often not comparable as job titles—e.g., midwife, nurse, medical assistant, pharmaceutical assistant—can have different meanings in different countries and work locations (e.g., a “midwife” in one country might be a “nurse” in another or “birthing coach” in another, even if their job duties are identical).
- To accurately assess health systems performance, one must be able to compare data within and across countries and over time.

The Solution:

Administrators of human resources information systems, such as the open source iHRIS software (www.iHRIS.org), can align their HRH data to the International Standard Classification of Occupations (ISCO)—a tool for organizing occupational information into a clearly defined structured set of occupational groups, titles and codes. Mapping “midwife”, “nurse” or “birthing coach” to the corresponding ISCO group enables more accurate comparisons.

ISCO:

- Uses a hierarchical structure, reflecting the distinction of workforce subgroups according to similarities in skill level and skill specialization required to fulfill the job duties
- Offers guidelines on how workers can be classified into the most detailed groups
- Allows HRH data to be accurately collected, reported and compared.

Using iHRIS, this mapping has begun in Kenya and Uganda. When a health worker enters the system, that person's job information is entered into the iHRIS with the corresponding ISCO code. It is as simple as matching the ISCO description to that particular job function, regardless of title. Countries and researchers can reference ISCO's mapping structure to classify their national and local HRH categories at http://www.who.int/hrh/statistics/Health_workers_classification.pdf.

The Results and Importance:

ISCO is the basis of many national occupational classifications. As part of its updating in 2008 (www.ilo.org/public/english/bureau/stat/isco/index.htm), the International Labour Organization - with support from the World Health Organization and partners - has improved its content and usability with respect to health occupations.

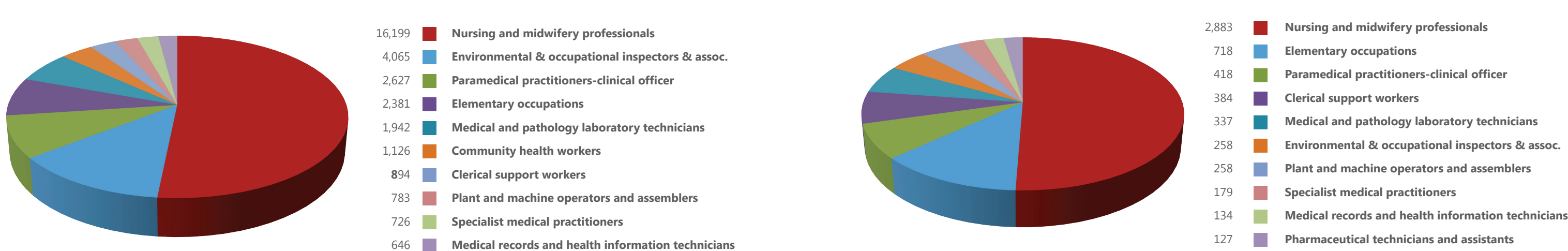
As more ministries of health begin to understand the importance of mapping health worker data to such classification standards and to implement this practice, it will:

- **Facilitate communication** about health occupations
- **Enhance comparability** of HRH data within and across countries and over time
- Strengthen the global evidence base on HRH and make it possible to use health workforce data more effectively for research, planning and policy
- Allow us to gain a greater understanding of, and **develop better solutions for, the global health workforce crisis** based on country needs and gaps.

EXAMPLE 1: These two national health ministries have not mapped their staff titles to ISCO standards. Comparisons are meaningless since the job title in one country may not be the same in the other. A “midwife” might be listed as a “nurse”. The make-up of administrative and support staff is unclear. It is impossible to know if the two different health workers actually share similar job functions.



EXAMPLE 2: The two ministries have successfully mapped their HRH information to ISCO standards. Different local titles for workers with the same skill set and providing the same services have been aligned (e.g. “nurse practitioner” versus “nurse level II”). The comparison is accurate, the reports are easily generated, and we are much better equipped to deal with health workforce needs because of the clean, clear data such comparisons allow.



Occupational titles related to health according to the ISCO, 2008 revisions								
Submajor	Group code		Occupational title					
	Minor	Unit						
22			Health professionals					
			221		Medical doctors			
					2211	Generalist medical practitioners		
			222		2212	Specialist medical practitioners		
					2221		222	Nursing and midwifery professionals
			2222				2221	Nursing professionals
					223		2222	Midwifery professionals
			224				223	Traditional and complementary medicine professionals
					226		2230	Traditional and complementary medicine professionals
			2261				224	Paramedical practitioners
					2262		2240	Paramedical practitioners
			2263				226	Other health professionals
					2264		2261	Dentists
			2265				2262	Pharmacists
					2266		2263	Environmental and occupational health and hygiene professionals
			2267				2264	Physiotherapists
2269		2265			Dieticians and nutritionists			
				2266	Audiologists and speech therapists			
				2267	Optometrists and ophthalmic opticians			
				2269	Health professionals n.e.c.			
32					Health associate professionals			
		321			321	Medical and pharmaceutical technicians		
					3211		3211	Medical imaging and therapeutic equipment technicians
							3212	Medical and pathology laboratory technicians
					3213		3213	Pharmaceutical technicians and assistants
		3214	Medical and dental prosthetic and related technicians					
		322			322	Nursing and midwifery associate professionals		
					3221		3221	Nursing associate professionals
							3222	Midwifery associate professionals
					323		323	Traditional and complementary medicine associate professionals
		3230	Traditional and complementary medicine associate professionals					
		325			325	Other health associate professionals		
					3251		3251	Dental assistants and therapists
							3252	Medical records and health information technicians
					3253		3253	Community health workers
							3254	Dispensing opticians
3255				3255	Physiotherapy technicians and assistants			
				3256	Medical assistants			
3257				3257	Environmental and occupational health inspectors and associates			
				3258	Ambulance workers			
3259	Health associate professionals n.e.c.							
53			Personal care workers					
			532		532	Personal care workers in health services		
					5321	Health care assistants		
			5322		5322	Home-based personal care workers		
					5329	Personal care workers in health services n.e.c.		
			Additional health-related unit groups					
			1342		1342	Health service managers		
					1343	Aged care service managers		
			2634		2634	Psychologists		
					2635	Social work and counselling professionals		
			3344	Medical secretaries				

COMBINED DATA: Since both ministries have now mapped their HRH information to the same standard, we can aggregate the data across countries, looking at a combined pool. With more countries disseminating health labour data mapped to ISCO, we can look at more complete regional and global profiles of the health workforce.

