# CapacityProject knowledge sharing

March 2008

## workshop brief

Capacity Project

## **Health Workforce Planning Model Workshop**

December 13-14, 2007, Washington, DC

#### **Background**

In many countries, improved workforce planning is needed to ensure the proper recruitment, education, deployment and retention of health workers, but few developing countries have strong planning systems in place. Although workforce planning models have been available for many years, they have not been easy to use. Most require a high level of training and expertise in workforce planning and in using data. In order to strengthen health workforce planning, the Capacity Project has proposed developing a software tool that will guide planners in effectively using workforce planning models, determining data inputs and presenting projections. This software will be developed with Open Source technologies so that it can be offered free, without licensing fees, to countries that want to use it.

#### **Workshop Description**

The Capacity Project facilitated a Health Workforce Planning Model Workshop in December 2007. Sponsored by the Capacity Project, United States Agency for International Development (USAID), World Health Organization (WHO) and World Bank, the workshop was held at the World Bank in Washington, DC. The goal was to bring together health workforce planning experts from all over the world to select a standard workforce projection model that will be the basis for the easy-to-use software being developed by the Capacity Project. Workshop participants selected a model and agreed upon a set of high-priority features for the first releases of the software. Finally, the group identified a multiorganization technical advisory team comprised of participants that can continue to advise on the software development.

#### **Participants**

Twenty-three global leaders in health workforce planning represented the following organizations: Asia-Pacific Action Alliance on Human Resources for Health; Finland Ministry of Labor; Finland Ministry of Social Affairs and Health; Global Health Workforce Alliance; Institute of Hygiene and Tropical Medicine; IntraHealth International; Keele University; New University of Lisbon; Pan American Health Organization; Training Resources Group; Uganda Ministry of Health; University of California-San Francisco; University

of New South Wales; USAID Office of HIV/AIDS; World Bank; and WHO.

#### The Workforce Projection Model

On the first day of the two-day workshop, participants reviewed several workforce projection models. The participants agreed that the WHO Human Resources for Health (HRH) Workforce Projection Model should serve as the model for the Capacity Project's workforce planning software.

The model was originally developed by Thomas L. Hall, MD, PhD (Institute for Global Health and Department of Epidemiology and Biostatistics, University of California at San Francisco) and further refined by Peter Hornby (Centre for Health Planning and Management, Keele University, UK), both of whom participated in the workshop. The WHO commissioned Dr. Hall to develop this model in 1992. It was originally designed to assist countries with the development of long-range (20 to 30 years) strategic HRH development plans. Later, another model was added to help planners with intermediate-range (five to 15 years) projections and policies. The model permits planners to develop alternative scenarios as to how health services could change in the future, and to determine the effects these changes could have on health personnel supply and requirements.

Workshop participants chose this model because it remains the most powerful and best-known workforce projection model, especially in developing countries. It is also the only detailed model specifically aimed at the health sector. However, participants agreed that the model could be improved in subsequent iterations of the software. They agreed to recommend this as the preferred model for health workforce projection and improve it gradually, rather than create a new model.

The group suggested an incremental approach to developing the software, beginning with the simplest workforce planning methodology that still yields meaningful results. John Dewdney, MD (School of Public Health and Community Medicine, University of New South Wales) presented the WHO-RTC Health Workforce Planning Workbook—a simple workforce planning model that he originally developed



Dr. John Dewdney presenting his simple workforce planning model

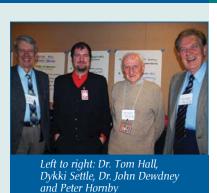


Dr. Piya Hanvoravongchai (Asia-Pacific Action Alliance on HRH) and Dr. Eddie Mukooyo (Uganda Ministry of Health)



Workshop participants engaged in group work







The Capacity Project IntraHealth International, Inc. 6340 Quadrangle Drive Suite 200 Chapel Hill, NC 27517 Tel. (919) 313-9100 Fax (919) 313-9108 info@capacityproject.org www.capacityproject.org

The views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

for use in Pacific Island countries with limited workforce planning resources. It has subsequently been used in formulating national health workforce plans in sub-Saharan Africa, East Asia, Europe and the Caribbean. This model was proposed as the basis for the initial iteration of the software. Dr. Dewdney's model requires a minimum amount of data, produces results quickly and is intended to introduce decision—makers to underlying workforce planning concepts and assumptions. It will be most useful as an introductory or training tool for workforce planners with the objective of quickly developing credible workforce policies.

In further iterations of the software, additional features of the WHO HRH Workforce Projection Model can be added as modules in order of importance, as determined by the technical advisory team. The user will have the option of inputting more data if available, and will be guided by the software to make credible assumptions when data are lacking. The software will include detailed help, which will clearly explain what each input or assumption means, and will check for possible errors. The resulting outputs will be more sophisticated and detailed health workforce scenario projections.

#### **Priority Software Features**

The targeted users for the software are health workforce planners and decision-makers within the Ministry of Health or a governing body at the national level in developing countries. The workshop participants determined that the most important software features to focus on initially are robust short-term (three to five years) planning in conjunction with less-detailed, long-term projections. It is critical for the software to link staffing and training projections to costs to test their economic feasibility.

Participants agreed that a simple, user-friendly interface is essential for making workforce modeling accessible to targeted users. Guided help will be a vital feature in ensuring that the software is easy to use. The help will appear on screen as the user interacts with the software;

it will teach planners not only how to use the tool, but will also educate them in the processes employed in effective workforce planning. A map to the model integrated with the software will orient users to each step in the planning process. The technical advisory team will review and validate this on-screen documentation.

The presentation of results will be a crucial component of the software. The software will produce graphical projections for each year in the modeled timeframe, which can be disaggregated by cadre. The projections will visually demonstrate the effects if different actions are taken to influence the health workforce or if no action is taken. They will help decision-makers prioritize policy changes by demonstrating which changes have greater or lesser impact. The ultimate output will be a national strategic workforce plan to help decision-makers focus on the path to take to get to the envisioned outcomes.

#### **Next Steps**

Following the workshop, most participants agreed to join an e-mail discussion list to continue the conversation and comment on the specifications and software as they are developed. Some participants self-identified for more involved advisory roles, including model development, software testing and review of training materials. Two participants volunteered to pilot-test the software in Uganda and an Asian country to be determined.

The Capacity Project has published all the materials and outputs produced in the workshop on its website (www.capacityproject. org). The workshop proceedings and further discussion by the technical advisory team will result in a full set of software specifications that will be published on the Project website. The first iteration of the software, titled iHRIS Plan, will be released in the summer of 2008.

#### For More Information

Please visit http://www.capacityproject.org/workforce\_planning\_workshop/ or contact us at hris@capacityproject.org.

### The Capacity Project Partnership













