Health technology assessment in universal health coverage

In December, 2012, close to 100 countries adopted a United Nations' General Assembly resolution requesting the Secretary-General to collect experiences in "sharing, establishing and strengthening institutional capacity to generate country-level evidence-based policy decision-making on the design of universal health coverage [UHC] systems".[1]

In August, 2013, an international workshop convened in Bellagio by NICE International, and supported by the Rockefeller Foundation and the UK's Department for International Development (DFID), concluded that health technology assessment (HTA) is a critical component of evidence-based policy decision making. There was unanimity that HTA should always be part of the priority-setting process, and is an essential foundation to secure UHC through the efficient and equitable allocation of health care and other resources.

HTA provides a structured approach to help analysts prepare materials for decision makers, and decision makers themselves to address the key issues. HTA identifies critical inputs for decision-makers' judgment, such as balancing uncertainty about difficult trade-offs, or how best to proceed when the evidence is poor or absent. A critically important issue for decision makers is equity of access to care and, ultimately, of health-care status and outcomes. Equity is at the heart of UHC, along with financial protection[2] and better health outcomes.

Equity and efficiency are not necessarily at odds.[3] However, HTA grew out of, and is dependent upon, clinical trials and epidemiological evidence of effectiveness. Its principal role has been to provide information on what works, and for whom, relative to the practical alternatives, and with the smallest demands on limited resources. There is no reason in principle why HTA should not take a broader view both of the scope of interventions (for example, to embrace health delivery systems or prevention strategies) and of the objectives of health (for example, by considering interventions for changes in the distribution of health or the distribution of the burden of the costs of health). However, such questions have not usually been asked of HTA by ministries of health.

Extended cost-effectiveness analysis by Disease Control Priorities[4] and UK-led work on distributional cost-effectiveness analysis[5] are promising initiatives. Yet methodological challenges remain in measuring the distributional effects of technology adoption and in quantifying the value society places on these effects. This necessitates an extensive research agenda that includes efforts to collect data. Another possibility within HTA is to weight costs and benefits differentially according to the distributional value one wishes to embody. This means dropping the assumption that all disability-adjusted life-years (DALY) are equal (DALY=DALY=DALY), which commonly underlies the conclusions of HTA analyses. There is nothing sacred about this assumption. The challenge lies in reaching any kind of consensus about what should replace it.

In the meantime, one way forward is through combining equity and efficiency in a deliberative process rather than a mathematical algorithm,[6-8] which draws attention to the institutional foundation and procedural principles of HTA, such as transparency, independence from vested interests, and stakeholder consultation. This will almost certainly require deliberative methods (the meaning of equity is often context-dependent) and localised decision making.[9] Given the growing global momentum for UHC there is a need to address a number of key public policy issues if HTA is to be meaningfully integrated into UHC.

First, intergovernmental organisations, such as WHO, the Pan American Health Organization,[10] and the Association of Southeast Asian Nations, can highlight and build awareness of the contribution of HTA to UHC through global health diplomacy. Second, bilateral institutions, such as DFID, can support the translation of research evidence into policy and practice through strengthening Southern institutions and empowering UK institutions to enter technical cooperation relationships and capacity enhancement, building on the UK's experience of UHC through the National Health Service. Pushing researchers to become advocates for their own research products is not a credible alternative to helping build local capacity for countries' own research needs.[11] Third, national governments have to acknowledge and recognise the need for HTA and help generate and sustain the demand for HTA as they move towards UHC. Finally, national institutions working on HTA, such as the National Institute for Health and Care Excellence (NICE) in the UK and the Health Intervention and Technology Assessment Program (HITAP) in Thailand, should document and share their experiences and evidence to accelerate the transfer

of knowledge, and assist others by building networks of expertise in the initiation and evolution of similar institutional capacity.

Connecting existing national processes and sharing HTA knowledge through global health diplomacy will not only broaden adoption of HTA as an evidence-based instrument, but also strengthen countries' commitment and ability to progress towards UHC.

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1 United Nations General Assembly (GA/11326). Adopting consensus text, General Assembly encourages member states to plan, pursue transition of national health care systems towards universal coverage. New York: United Nations, 2012.

2 Smith PC. Incorporating financial protection into decision rules for publicly financed healthcare treatments. *Health Econ* 2013; **22:** 180–93.

3 Culyer AJ. The bogus conflict between efficiency and vertical equity. *Health Econ* 2006; **15:** 1155–58.

4 Disease Control Priorities 3. 2013. http://www.dcp-3.org/about-project (accessed Nov 28, 2013).

5 University of York. PHRC Project on distributional cost-effectiveness analysis (2011–13). 2013. http://www.york.ac.uk/che/research/equity/d-c-e-a/phrc/ (accessed Nov 28, 2013).

6 Culyer AJ, Bombard Y. An equity framework for health technology assessments. *Med Decis Making* 2012; **32:** 428–41.

7 Sassi F, Archard L, Le Grand J. Equity and the economic evaluation of healthcare. *Health Technol Assess* 2001; **5:** 1–138.

8 WHO Collaborating Center for Knowledge Translation and Health Technology Assessment in Health Equity. Equity-oriented toolkit. http://www.cgh.uottawa.ca/WHOCC/projects/eo_toolkit/ (accessed Nov 28, 2013).

9 Glassman A, Chalkidou K . Priority setting institutions for global health Washington, DC: Centre for Global Development, 2012.

10 PAHO. Resolution on HTA and decision-making (Resolution CSP28.R9), approved by Member States in September 2012. Washington, DC: Pan American Health Organization, 2012.

11 Parkhurst J. Support local governance to get research into policy. *SciDevNet* Sept 22, 2011. http://www.scidev.net/global/communication/opinion/support-local-governance-to-get-research-into-policy-1.html (accessed Nov 28, 2013).