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BRIEF REPORT

Health Care System Information Sharing: A Step Toward Better Health Globally

In the face of the ever rising health care costs and declining resources, efficient and equitable health care technology reimbursement systems, based on robust health technology assessment (HTA) including economic evaluations, are vital for a sustainable health care. However, globally, HTA is not adequately utilized in health care reimbursement decisions. In most regions, it is still in its nascent phase. The use of HTA is hindered by the presence of fragmented reimbursement systems at both the national and regional levels as well as the lack of necessary resources and knowledge. Transparency and sharing of country-specific reimbursement system information is an important "first step" to improve the efficiency and fairness of health care globally [1,2].

Although efforts such as the EUnetHTA Joint Action [3] are underway to improve information sharing and harmonize HTA across countries, attempts to standardize the HTA requirements and processes are still in their early phase. In contrast, during the last two decades, there has been much progress in the standardization and harmonization of the regulatory process around the world through the efforts of the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use [4], the Global Harmonization Task Force [5], the European Commission [6], the European Medicines Agency [7], and the World Health Organization [1,2,8,9].

Finding information on the reimbursement systems of different countries is challenging. Barriers such as different languages, lack of transparency, fragmentation of the available information, and limited resources impede the information flow. To answer this unmet need, the International Society of Pharmacoeconomics and Outcomes Research (ISPOR), through its members and ISPOR regional chapters, has developed publicly accessible information on country-specific decision-making processes for regulatory approval, reimbursement, and economic evaluation of health care technologies. The information is accessible through the Web-based ISPOR Global Health Care Systems Road Map (ISPOR Road Map) (http://www.ispor.org/HTARoadMaps/Default.asp) and the ISPOR Pharmacoeconomic Guidelines Around The World (ISPOR PE) (http://www.ispor.org/PEguidelines/index.asp).

The ISPOR Global Health Care Systems Road Map

The ISPOR Road Map [10] provides the following information by country: 1) a concise background on the country health care system, 2) an outline of the health care decision makers and influencers, 3) health care bodies interrelations, 4) description of the decision-making processes for reimbursement and coverage, 5) data requirements for HTA, and 6) useful resources for further research. In an easy-to-read format, key information on health care reimbursement systems is provided in this comprehensive overview, filling in the gap between research, clinical practice, and decision making and drawing closer the use of evidence in health care decisions and policies.

The ISPOR Road Map framework was developed by the ISPOR Health Technology Assessment Special Interest Group. The information contained in the ISPOR Road Map is provided by ISPOR members with knowledge of a country's reimbursement system. To ensure quality and accuracy, the information is reviewed by other professionals in the field as well as by a member of an official health care body within the country. Members from ISPOR and ISPOR regional chapters from more than 50 countries are participating in this initiative. Because, in most cases, pharmaceuticals and devices are reimbursed by different decision-making bodies, and by different pathways, the ISPOR Road Map information on pharmaceuticals reimbursement is separate from medical devices. Presently more than 25 road maps from more than 20 countries are available on the ISPOR Road Map.

ISPOR Pharmacoeconomic Guidelines Around The World

The ISPOR PE [11] provides a list of 33 key features of a country-specific guidance document for the economic assessment of a new pharmaceutical product. The key features, derived from Hjelmgren et al. [12], are as follows: 1) type, 2) title and year of the document, 3) affiliation of authors, 4) main policy objective, 5) standard reporting format included, 6) disclosure of funding/author's interests, 7) target audience, 8) perspective, 9) indication, 10) target population, 11) subgroup analysis, 12) choice of comparator, 13) time horizon, 14) assumptions required, 15) preferred analytical technique, 16) costs to be included, 17) source of costs, 18) modeling, 19) systematic review of evidences, 20) preference for effectiveness over efficacy, 21) preferred outcome measure, 22) preferred method to derive utility, 23) equity issue stated, 24) discounting costs, 25) discounting outcomes, 26) sensitivity analysis—parameters and range, 27) sensitivity analysis— methods, 28) presenting results, 29) incremental analysis, 30) total cost/effectiveness, 31) portability of results (generalizability), 32) financial impact analysis, and 33) mandatory or recommended or voluntary [12,13]. The ISPOR PE provides the option to interactively create a comparative table of two or more countries by selecting from the key features listed above.

The ISPOR PE also provides a hyperlink to the economic evaluation document or full text of the guidance document (if in the public domain). Guidance documents in the ISPOR PE are dated on the basis of the publication date and are categorized as follows:

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- Published PE Recommendations—country-specific economic evaluation guidelines or recommendations published by experts in the field but are not "officially" recognized or required by the health care decision-making bodies/entities in this country/region for reimbursement.
- PE Guidelines—country-specific "official" guidelines or policies concerning economic evaluation that are recognized or required by the health care decision-making bodies/entities in this country/region for reimbursement.
- Submission Guidelines—country-specific "official" guidelines or policies concerning drug submission requirements with an economic evaluation part/section and are required by the health care decision-making bodies/entities in this country/region for reimbursement.

Members from ISPOR and ISPOR regional chapters from more than 50 countries are participating in this initiative. Presently, the ISPOR PE contains information on 33 country-specific pharmaceutical economic evaluation guidelines and are reviewed annually by professionals in the field within the country, to ensure the quality and accuracy.

Health Care Systems: Asia-Pacific Region

The Asia-Pacific region, one of the fastest growing emerging health care markets in the world, has the widest variations in the health care systems across countries. An array of health care delivery systems exists, ranging from fully developed universal health coverage, with an established full HTA process and economic evaluation, to fragmented health care systems with minimal health care coverage, unclear national guidelines and regulations. Limited resources and the rising cost of health care, though a common global trend, are more deeply felt in Asia-Pacific countries. Main contributing issues are large populations, high economic growth, and increasing demand for better health services. As a result, major reforms are underway in several countries, whether with an emerging health care system or with a fully developed one [10,14].

Information in the ISPOR Road Map and the ISPOR PE describes the health care systems and outlines the undergoing health care reform that is taking place in Asia [10,11].

Japan, one of the countries in Asia with a well-established health care system and several decades of universal health coverage, is undergoing major changes. To address the rising health care costs, implementation of a full HTA process, which includes economic evaluation, is underway to be completed by 2014 for pharmaceuticals [15,16].

Australia, considered a point of reference with its established health care system and well-developed process for reimbursement and coverage, including economic evaluation and value-based pricing, has also undergone recent changes in its health care system. As of 2011, to provide the population with affordable, reliable access to medicinal products in a timely manner, new pharmaceuticals are processed concurrently rather than consecutively by the Therapeutics Goods Administration and the Pharmaceutical Benefits Advisory Committee. The aim of the concurrent review process by the Therapeutics Goods Administration (for safety, efficacy, and labeling) and by the Pharmaceutical Benefits advisory Committee (for comparative effectiveness and cost-effectiveness) is to reduce time toward listing medicinal products in the Pharmaceutical Benefits Schedule [17,18].

Several other countries in the Asia-Pacific region, with a developing health care system, are following suit and undergoing major changes in the health care sector. In Taiwan, HTA was implemented as part of its reimbursement process and established as a separate entity in 2007. In addition, universal patient coverage has reached 99% of the population [19,20].

China is currently revamping its health care system, to be completed by 2020. China's goal is to provide universal health care coverage for all citizens through health insurance, as well as a fully comprehensive national essential drug system by that date. In 2009, first steps in establishing the essential drug system were taken and a new essential drug list was issued [17,21].

In addition, in their continuing effort to reform their health care systems, Asia-Pacific countries have recently developed new guidelines on pharmacoeconomic evaluation and/or HTA. These guidelines were not available a few years ago in countries such as China, South Korea, Taiwan, and Thailand. Thailand had even taken a step further by mandating an economic evaluation of a new health technology as part of its reimbursement process and is currently considering economic evaluation as one of the requirements for regulatory approval [11,14,22].

In conclusion, countries throughout the region struggle for an accessible, affordable, and sustainable health care system. To achieve these goals, changes in policies are underway to redefine the existing system and are having a major impact on all health care stakeholders. ISPOR, as a forum for health care information sharing, is continually updating its ISPOR Road Map and ISPOR PE to assist decision makers, researchers, as well as other health care stakeholders to improve health globally.

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