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HEALTH POLICY ANALYSIS

Capacity Building for HTA Implementation in Middle-Income Countries: The Case of Hungary

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ABSTRACT

Objectives: Middle-income countries often have no clear roadmap for implementation of health technology assessment (HTA) in policy decisions. Examples from high-income countries may not be relevant, as lower income countries cannot allocate so much financial and human resources for substantiating policy decisions with evidence. Therefore, HTA implementation roadmaps from other smaller-size, lower-income countries can be more relevant examples for countries with similar cultural environment and economic status. **Methods:** We reviewed the capacity building process for HTA implementation in Hungary with special focus on the role of ISPOR Hungary Chapter. **Results:** HTA implementation in Hungary started with capacity building at universities with the support of the World Bank in the mid 90's, followed by the publication of methodological guidelines for conducting health economic evaluations in 2002. The Hungarian Health Economics Association (META) - established in 2003 - has been recognized as a driving force of HTA implementation. META became the official regional ISPOR Chapter of Hungary in 2007. In 2004 the

National Health Insurance Fund Administration made the cost-effectiveness and budget impact criteria compulsory prior to granting reimbursement to new pharmaceuticals. An Office of Health Technology Assessment was established for the critical appraisal of economic evaluations submitted by pharmaceutical manufacturers. In 2010 multicriteria decision analysis was introduced for new hospital technologies. **Conclusion:** The economic crisis may create an opportunity to further strengthen the evidence base of health care decision-making in Hungary. In the forthcoming period ISPOR Hungary Chapter may play an even more crucial role in improving the standards of HTA implementation and facilitating international collaboration with other CEE countries.

Keywords: capacity building, HTA implementation, ISPOR Hungary Chapter, middle-income countries.

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Introduction

The health status of the population in middle-income countries is usually worse than in high-income countries. Because health care resources are scarcer in these countries, the societal cost of inappropriate pricing and reimbursement decisions of new health care technologies is even higher. Implementation of health technology assessment (HTA) in the decision-making process may alleviate this problem. Key success factors for HTA implementation, however, are building human resource and financial capacities, establishing a transparent decision-making process, and implementing robust HTA methodology.

Middle-income countries often have no clear roadmap for HTA implementation. Examples from high-income and resource-rich

countries such as the United Kingdom (i.e., the “National Institute for Health and Clinical Excellence experience”) may not be relevant because lower income countries cannot allocate so many financial and human resources for substantiating health policy decisions with evidence. In addition, the size of the country matters; the smaller a country is the more limited facilities for preparing full HTA reports it has. Therefore, HTA implementation roadmaps from other smaller size, middle-income countries can be more relevant, especially if the country is from the same geographical and cultural environment with similar economic status.

One of the most important questions of the HTA implementation roadmap is whether capacity building should come first or whether mandatory HTA requirement in the reimbursement process can induce the necessary background knowledge.

Conflict of interest: Authors have no conflicts of interest.

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<http://dx.doi.org/10.1016/j.vhri.2013.06.002>

Both options are feasible and have their advantages and disadvantages.

Previous publications have already addressed major steps of HTA implementation in Hungary [1–3]. Because HTA implementation in Hungary started with capacity building, our objective was to summarize the role of International Society of Pharmacoeconomics and Outcomes Research (ISPOR) Hungary Chapter in human resource development. The Hungarian example for HTA capacity building can be especially relevant for other Central Eastern European countries.

Hungary has 9.94 million inhabitants, and its gross domestic product per capita was €10,016 in 2011 [4]; therefore, the country has passed the World Bank's threshold of high-income countries. A major part of the HTA implementation, however, happened in the years when Hungary was classified as a middle-income country.

Step 1: HTA Capacity Building

In the mid-1990s, two new academic centers, the School of Public Health at the University of Debrecen and the Health Care Management Training Center at Semmelweis University, were established. Tutors received World Bank scholarships to study health economics, health care management, epidemiology, biostatistics, public health, and other related sciences in distinguished international academic centers. Many graduates of the World Bank program left the country, but many of them stayed or even returned after some years of international experience.

Smaller scale educational projects also contributed to HTA capacity building. The TUDOR program at the University of Szeged was established to facilitate the application of evidence-based medicine in Hungary. The program was sponsored by the British Department for International Development, Know How Fund [5].

By 2000, the number of trained professionals with a thorough understanding of HTA reached 50.

Several Hungarian universities (Corvinus University of Budapest, University of Debrecen, University of Pécs, and University of West Hungary) introduced training programs in economic evaluation of medical technologies for undergraduate students. The first postgraduate course with a major focus on economic evaluation and economic modeling was introduced by the Faculty of Social Sciences at the Eötvös Loránd University in 2007.

By 2010, the number of trained professionals with personal experience in HTA research or appraisal exceeded 200.

Step 2: Methodological Guidelines

Standardization of economic evaluations is a necessity prior to mandating the use of economic evaluation in policy decisions. The Hungarian methodological guidelines for conducting economic evaluation of health care interventions were published in 2002 [6]. These guidelines covered all health care interventions; therefore, they were not specific for pharmaceuticals and not limited to reimbursement questions. The intention was to update the guidelines every 2 years; however, the Ministry of Health did not implement any revision before 2013.

Step 3: Scientific Organization

The Hungarian Health Economics Association (Magyar Egészség-gazdaságtani Társaság [META]) was established in 2003. The founders aimed at establishing an independent organization to discuss major health economic and health policy issues at monthly meetings. Since 2003 META has been organizing 8 to 10 meetings a year. Each 2-hour monthly meeting is dedicated to a particular research, policy, or methodological topic, with an advocate (or researcher), an opponent, and a moderator. Pricing and reimbursement policy of new health technologies and

methodological standards of HTA research have been discussed at several meetings over the years.

In 2006, META was one of the main organizers of the highly successful 6th European Congress of Health Economics in Budapest [2]. In 2007, META became the official Hungarian Chapter of the ISPOR. ISPOR Hungary Chapter has a strong commitment to facilitate international collaboration with other Central Eastern European countries.

In 2007, ISPOR Hungary Chapter organized its first 1-day annual national congress in health economics. Since 2010, the 2-day congress with more than 200 participants has an international plenary session with invited speakers from other ISPOR regional chapters.

The achievements of the ISPOR Hungary Chapter have been recognized by policymakers. Several former ministers and state secretaries gave lectures at the annual health economics congress. Moreover, in 2010, the State Secretary of Health invited META to establish the Management and Health Economics Section of the Professional Health Care College (the Advisory Board of the Health Care Secretariat of the Ministry of Human Resources). META also gained official recognition on behalf of other professional medical societies by joining the Association of Hungarian Medical Society (Magyar Orvostársaságok és Egyesületek Szövetsége [MOTESZ]).

In 2012, ISPOR Hungary Chapter and Eötvös Loránd University launched a 1-week summer university course with the title of "Implementation of HTA in CEE countries," attended by participants from 10 countries.

In 2013, ISPOR Hungary Chapter has 114 members, with 350 professionals visiting local meetings in 2012.

Step 4: Compulsory HTA in Policy Decisions

In 2004, the Hungarian National Health Insurance Fund Administration made the cost-effectiveness and budget impact criteria compulsory prior to granting reimbursement to new pharmaceuticals. The Ministry of Health established a Department of Health Technology Assessment (HTA Department) at one of its background institutes for the critical appraisal of economic evaluations submitted by pharmaceutical manufacturers. The summary appraisal prepared by the HTA Department is taken into account by the National Health Insurance Fund Administration in reimbursement decisions. The single HTA process for patented outpatient pharmaceutical products is described in Fig. 1.

Experience of the first 6 years of the Hungarian fourth hurdle indicated that the quality of economic evaluations submitted in reimbursement dossiers was rather heterogeneous. In 2009, a working group was set up to develop a policy-relevant, detailed Hungarian critical appraisal checklist to improve the quality of pharmacoeconomic evaluations submitted for single HTA in pharmaceutical reimbursement applications. The critical appraisal checklist has been published recently [7].

In 2010, new multicriteria decision analysis was introduced for new hospital technologies, mainly for medical devices.

Recent Activities and Further Steps

ISPOR Hungary Chapter has been growing continuously. The society has a balanced membership structure from the academia, public, and private sectors. It has a Young Professional Unit with an age limit of 35 years. Young professionals are especially active in driving changes by establishing working groups in several policy and research areas. The chapter established a student unit for graduate, postgraduate, and PhD students in 2012.

ISPOR Hungary Chapter has coordinated the revision of methodological guidelines for conducting economic evaluation of health care interventions. The revised guidelines were published in March 2013. The new guidelines indicate explicit cost-effectiveness thresholds for Hungary (two to three times of gross

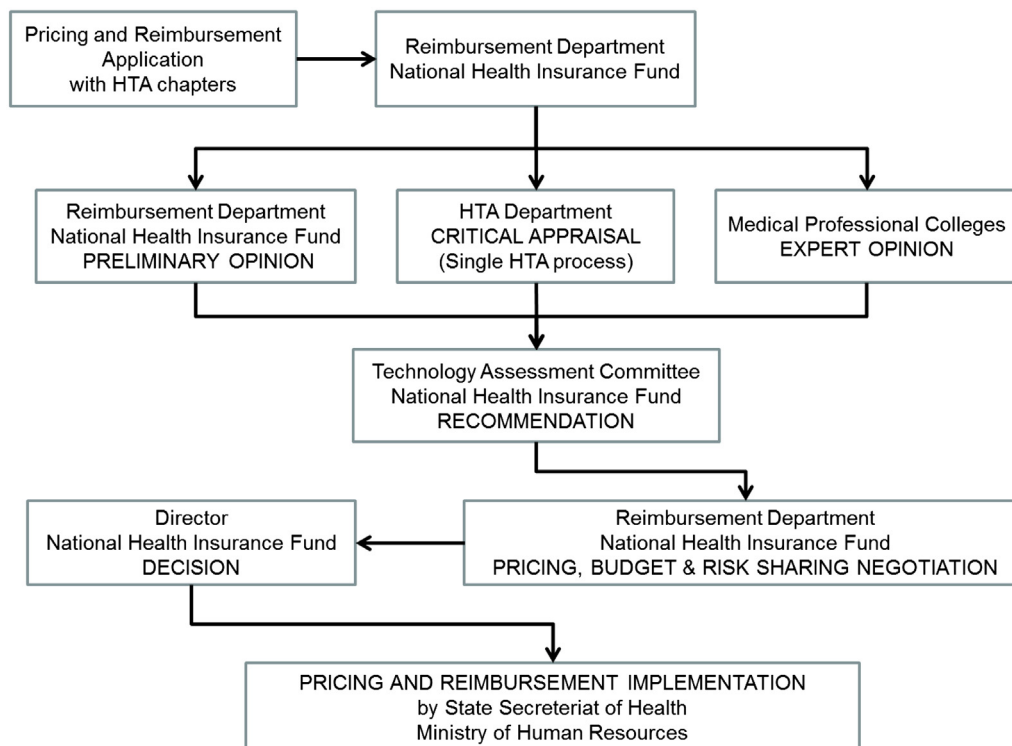


Fig. 1 – Pricing and reimbursement process with single HTA for patented outpatient pharmaceutical products. HTA, health technology assessment.

domestic product per capita). According to the guidelines, these thresholds are considered as a tool (reference point), and so they are not used as mandatory criterion for reimbursement. In the new guidelines, the discount rate for both costs and health gains has been reduced from 5% to 3.7%.

Yet, health policy and major reimbursement decisions are still not fully transparent in Hungary. The National Health Insurance Fund Administration has implemented serious cost-containment measures for pharmaceuticals in recent years; therefore, budget impact has become the most important element for reimbursement decisions with mandatory financial risk-sharing agreements.

The Young Professional Unit of ISPOR Chapter Hungary has established a working group to develop proposals for improving the transparency and evidence base of pharmaceutical pricing and reimbursement decisions.

Conclusions

The global economic crisis significantly influenced the Hungarian economy. Public health care resources are highly limited, and they are not sufficient to maintain the current health care infrastructure and the publicly funded benefit package; therefore, health care financing and provision have to be restructured. There is growing pressure on policymakers to justify their major policy decisions. The economic crisis may create an opportunity to strengthen the evidence base of health care decision making in Hungary [8].

ISPOR Hungary Chapter has played a crucial role in HTA implementation. In the forthcoming period, the chapter will be most

likely to play an even more crucial role in improving the standards of HTA implementation and facilitating international collaboration with other countries in the Central Eastern European region.

Source of funding: The authors have no other financial relationships to disclose.

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