Special Article

Making Health Technology Assessment Information Available for Decision Making: The Development of a Thai Database

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In Thailand, there is an attempt to develop the Thai HTA database in order to improve the accessibility and usefulness of HTA information. At present, the database is available online at www.db.hitap.net. The database includes 1) economic evaluation studies i.e. cost-minimization analysis, cost-effectiveness analysis, cost-benefit analysis, and cost-utility analysis, 2) outcome assessment studies i.e. randomized controlled trials, and 3) quantitative measured quality of life studies. All HTA studies related to the Thai context, and published in either Thai or English from 1990 onward, are eligible for inclusion in the database. In addition, there is a quality evaluation for each economic evaluation study which will help readers, who have limited knowledge about the method, to understand and make appropriate use of the information in their own settings. This may also raise awareness among researchers, who will conduct economic evaluation studies in the future, to adhere to the standard methodological guidelines because the quality evaluation was developed based on the national guidelines published in this supplement journal.

Keywords: *Health technology assessment, Database, Economic evaluation*

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Health technologies, including pharmaceuticals, medical devices, procedures, and health prevention and promotion, at both individual and community levels are an important part of health care systems, and form a significant proportion of health expenditure worldwide. Health technology assessment (HTA) is, therefore, considered as an important tool for assisting decision makers in appraising whether a particular health technology is effective, appropriate and efficient[1].

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There are two distinct operational cultures within a health care system that could limit the use of HTA information in decision making. On one hand, decision-makers, including policy-makers at national and hospital levels, are often working in a very tight timeframe. They rarely wait for evidence before making their decisions. On the other hand, academics seeking a research result prefer to work within longer timeframes. They like to ensure that they conduct a perfect study. HTA will have a limited impact on policy if it is not available at the right time for making decisions. For example, by the time HTA data are available or published, it is often too late to include the information in the coverage decision because the new technology has already become established. This is also an

important barrier to subsequent changes based on HTA data, because once a technology or intervention has become standard practice, restricting its use becomes much more difficult.

Two ways to improve the availability of information for decision-making are suggested here. First, it is recommended that HTA should be planned and used in a systematic manner rather than on an a*d hoc* basis. It is possible for HTA studies to be conducted and used routinely as a source of information, for example, for the pharmaceuticals listed on the Pharmaceutical Benefit Schedule in Australia[2], or they can be used with a clear and planned timeline for evaluations as is the practice by NICE in England and Wales[3]. Second, if HTA information is to be introduced for decision-making at every level, having access to reliable HTA data for competing health technology is very important. The latter recommendation is also in line with the development of HTA databases in many settings[4].

During the past decades, although there has been an increasing number of HTA studies related to the Thai setting[5], a limitation of the Thai HTA database limits the accessibility of the information and, subsequently, the use of HTA in decision-making. As a result, searching for HTA information becomes a time-consuming procedure. Many HTA studies have been published in grey literature such as theses, dissertations, conference proceedings and research reports and that makes it more difficult for the reviewers. In Thailand, there is an attempt to develop the Thai HTA database in order to improve the accessibility and usefulness of HTA information. This is a collaborative project between the Ganesh SAP Research Unit, the Silpakorn University and the Health Intervention Technology Assessment Program (HITAP) with support from the Health Systems Research Institute, the Thai Health Promotion Foundation, and the Bureau of Policy and Strategy, Ministry of Public Health.

At present, the database is available online at www.db.hitap.net. The database includes 1) economic evaluation studies *i.e.* cost-minimization analysis, cost-effectiveness analysis, cost-benefit analysis, and cost-utility analysis, 2) outcome assessment studies *i.e.* randomized controlled trials, and 3) quantitative measured quality of life studies. All HTA studies related to the Thai context, and published in either Thai or English from 1990 onward, are eligible for inclusion in the database. The database will be updated regularly. In addition, one of the most important initiatives of the database is that there is a quality evaluation for each economic evaluation study which will help readers, who have limited knowledge about the method, to understand and make appropriate use of the information in their own settings. This may also raise awareness among researchers, who will conduct economic evaluation studies in the future, to adhere to the standard methodological guidelines because the quality evaluation was developed based on the national guidelines published in this supplement journal.

Lastly, given a better HTA infrastructure *i.e.* the methodological guidelines and the HTA database, we hope that proper policy and strategies can be developed to improve the allocation and use of health technology instead of the imprecise, inconsistent and unaccountable practices of prioritization which still exist in the Thai health care system today.

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การส่งเสริมให้มีข้อมูลการประเมินเทคโนโลยีด้านสุขภาพสำหรับผู้กำหนดนโยบาย: การพัฒนาฐาน ข้อมูลสำหรับประเทศไทย

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เพื่อเพิ่มการเข้าถึงและใช้ประโยชน์จากงานวิจัยที่เกี่ยวกับการประเมินเทคโนโลยีด้านสุขภาพ คณะผู้นิพนธ์ได้พัฒนาฐานข้อมูลสำหรับประเทศไทย ซึ่งปัจจุบันสามารถสืบค้นได้จาก www.db.hitap.net โดยฐานข้อมูลดังกล่าวประกอบด้วย 1) งานวิจัยด้านการประเมินความคุ้มค่าทางการแพทย์ ทุกวิธีการวิเคราะห์ ได้แก่ ต้นทุนต่ำสุด ต้นทุนประสิทธิผล ต้นทุนผลได้ และต้นทุนอรรถประโยชน์ 2) งานวิจัยด้านการประเมินผลลัพธ์ เช่น การทดลองแบบสุ่มที่มีกลุ่มเปรียบเทียบ 3) งานวิจัยด้านการวัดคุณภาพชีวิต ทั้งนี้ฐานข้อมูลดังกล่าว รวบรวมงานวิจัยการประเมินเทคโนโลยีด้านสุขภาพ ในบริบทของประเทศไทย ที่ตีพิมพ์ทั้งภาษาไทยและภาษาอังกฤษ ตั้งแต่ปี พ.ศ. 2533 เป็นต้นมา นอกจากนี้ยังมีการประเมินคุณภาพงานวิจัย ซึ่งช่วยให้ผู้อ่านที่มีความรู้จำกัด เกี่ยวกับระเบียบวิธีวิจัย สามารถเข้าใจและนำข้อมูลจากงานวิจัยไปประยุกต์ใช้อย่างเหมาะสมต่อไป และอาจกระตุ้นให้นักวิจัยที่จะทำงานวิจัยด้านการประเมินความคุ้มค่าทางการแพทย์ยึดถือเป็นมาตรฐาน ตามคำแนะนำในคู่มือการประเมินเทคโนโลยีด้านสุขภาพสำหรับประเทศไทย