

# DEVELOPMENT OF HOSPITAL-BASED HTA UNIT PROCESSES IN THE CZECH HOSPITAL ENVIRONMENT

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#### **OBJECTIVES**

The current trend in HTA is its application to local medical facilities (called hospital-based HTA or HB-HTA), where HTA methods can foster strategic decisions of the hospital management, especially in employing and/or procurement of new technology. The essence of HB-HTA utilization is to implement processes that allow assessment of the technology considering specific conditions of the hospital. Although there are multiple concepts of HTA implementation that can be tailored to the particular hospital's needs, establishing a HTA unit seems the most practical in the case of big university hospitals.

### **RESULTS**

Based on a management needs survey, assessment requirements are divided into four categories according to their urgency:

- 1. Urgent, immediate risk of service (device operation) interruption.
- 2. Technology requires to be substituted due to impracticability of its recovery.
- 3. Technology requires to be expanded due to existing demand.
- 4. Incorporation of new innovative technology or planned replacement of obsolete technology.

For each category, a flow chart was designed specifying the assessment process and assessment team composition. The processes have been tested in introducing advanced point of care testing methods into the clinical practice in the Motol University Hospital.

Level of priority	Criteria	Technology	Team
1	Urgent, immediate risk of service (device operation) interruption.	Medical equipment and devices for diagnostics and support of life	HTA coordinator Biomedical Engineer Physician
2	Technology requires to be substituted due to impracticability of its recovery.	Medical equipment and devices (Imaging) and monitoring	HTA coordinator Biomedical Engineer Physician Health economist
3	Technology requires to be expanded due to existing demand.	Medical Equipment for diagnostics and therapy, medications and diagnostic kits	HTA coordinator Biomedical Engineer Physician Health economist (Nurse, Lawer, Ethicist, Statistician)
4	Incorporation of new innovative technology or planned replacement of obsolete technology.	Medical equipment and devices fo diagnostics and therapy, high density or expensive technologies	HTA coordinator Biomedical Engineer Physician Health economist (Nurse, Lawer, Ethicist, Statistician)

## REFERENCES

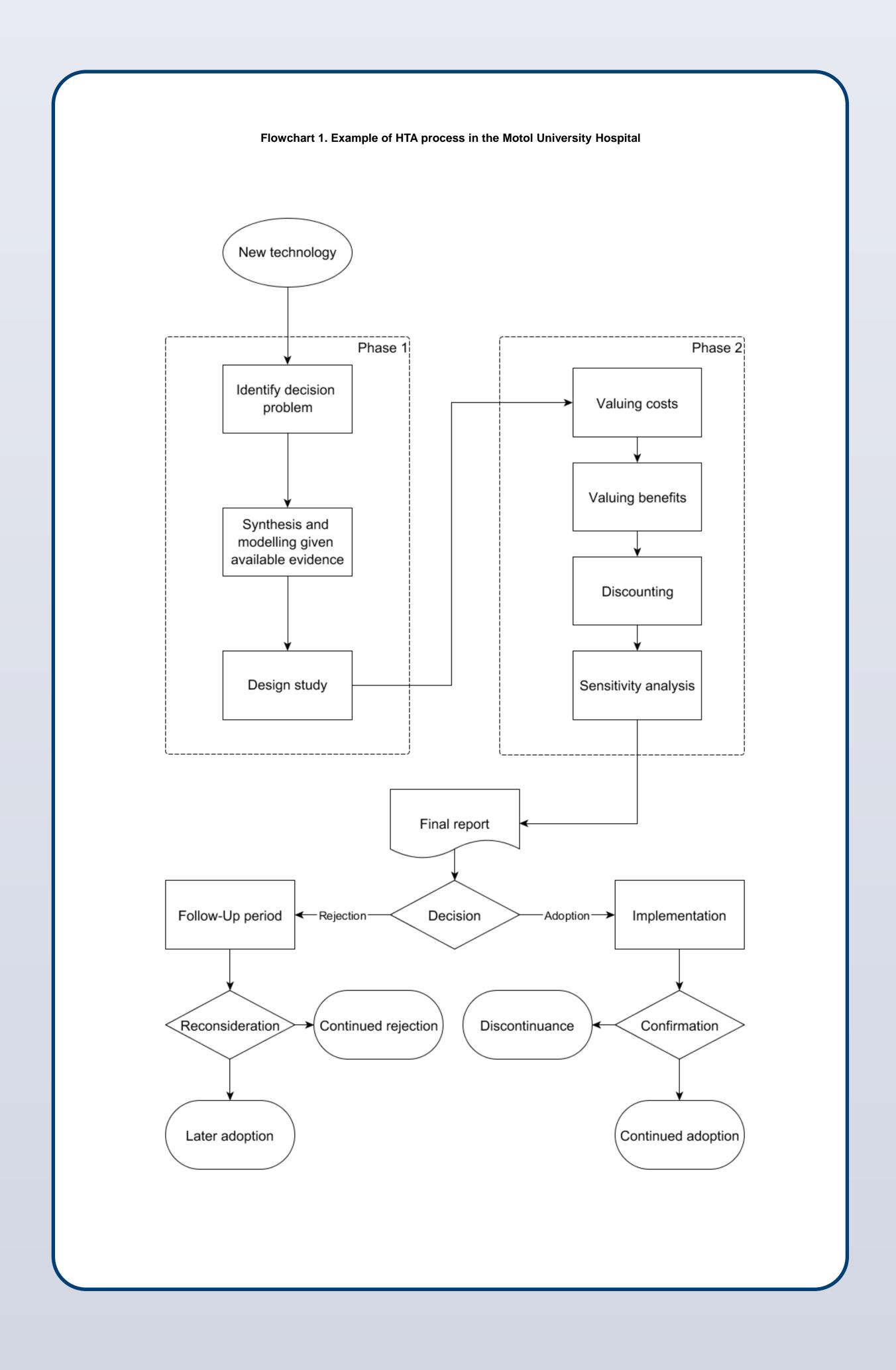
- 1) NUNES, A.A. et al., Evaluation and incorporation of health technologies: process and methodology adopted by a high-complexity care university hospital. Cad. Saúde Pública, Rio de Janeiro, 29 Sup:S179-S186, 2013
- 2) YANG, B.M., The future of health technology assessment in healthcare decision making in Asia. Pharmacoeconomics 2009; 27:891-901.
- 3) McGREGOR, M., BROBHY, J.M., End-user involvement in health technology assessment (HTA) development: a way to increase impact. Int J Technol Assess Health Care 2005; 21:263-7.
- 4) SCHÖFFSKI, O., Graf v.d. SCHULENGURG, J.-M., eds: Gesundheitsökonomische Evaluationen, 4th ed., Springer, 2012, ISBN 978-3-642-21699-2.
- 5) ROSEN, R., GABBEY, J., Linking health technology assessment to practice. BMJ 1999; 319:1-3.

## **METHODS**

The models must be tailored for the Czech healthcare system and specific conditions of the particular hospital. The processes accommodated for evaluating, making decisions about and incorporating technologies are described to support the Motol University Hospital's Board of Directors. The hospital comprises all medical specialties and shows rich technological equipment including necessary expertize, providing sufficient internal resources for HTA analyses focused on clinical practice.

#### **CONCLUSION**

The model will be used for establishing working procedures of the intended HTA Unit in the Motol University Hospital, and further tested and enhanced in line with practical experience. The process is supported by the hospital management, who have collaborated on model adjusting.



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