UNCOVERING ATRIAL FIBRILLATION (AF) IN PATIENTS WITH STROKE OF UNDETERMINED AETIOLOGY: COST-EFFECTIVENESS OF ADDING IMPLANTABLE CARDIAC MONITORS (ICMs) TO THE DIAGNOSTIC PATHWAY
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OBJECTIVES: Managing stroke of undetermined aetiology (or “cryptogenic stroke”) poses complex therapeutic decisions for physicians. In the absence of a clear diagnosis, effective measures of preventing stroke recurrence may be missed. AF is estimated to be present in a significant portion of these patients. Adding an ICM to standard diagnostics allows physicians to maximize AF detection yield, administer targeted and appropriate care, and efficiently prevent stroke recurrence. We sought to examine the cost-effectiveness of this strategy, under the UK NHS setting.

METHODS: Literature Review of OAC Usage and HRQoL Effects; Stroke HRQoL Effects; and, AF Monitoring and Costs. TreeAge Pro Version 8 was used to develop a Markov Decision Model, analysed using Monte Carlo simulations. The payer perspective was used. Cost calculations based on UK NHS Reference Costs. RESULTS: Depending on the year of the analysis, the ICM-based strategy ranged from highly cost-effective to dominant. The total costs associated with the ICM-based strategy were £24,278 vs. £28,062 for standard practice. The total effect of the ICM-based strategy was 14,623 QALYs vs. 14,107 QALYs. CONCLUSIONS: Using ICMs to diagnose AF in patients with stroke of unknown aetiology dominates current practice even if all such patients receive a device. Therefore, there can be little doubt that using these devices to uncover AF within the studied population can potentially be highly cost-effective. Moving forward, further research is required to identify the specific patient sub-groups in which implanting the ICM combines maximized economic value with practicality and affordability.

MD3
COST-EFFECTIVENESS OF LUMBAR DISC ARTHROPLASTY VERSUS LUMBAR FUSION FROM A HEALTH CARE SYSTEM’S PERSPECTIVE IN AUSTRIA
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OBJECTIVES: Chronic low back pain caused by disc degeneration (“degenerative disc disease”) is one of the most common causes for doctor visits in western industrial countries and presents an immense economic burden both to the individual and to society. In many cases, surgery can be a treatment option. For some indications, “lumbar disc arthroplasty” may be an innovative alternative to the current gold-standard, “lumbar fusion” and recent clinical studies have shown at least its non-inferiority for short- and midterm follow-up The aim of this investigation was to analyse cost-effectiveness of “lumbar disc arthroplasty” versus “lumbar fusion” form a health care system’s perspective. METHODS: A decision model including treatment paths and associated direct costs (surgery, inpatient stays, outpatient visits, GP and orthopaedic consultations, x-ray, medication, rehabilitation and physiotherapy) over a 12-months time horizon was developed. Main outcomes were clinical success (measured by Oswestry-Disability-Index (ODI) and SF-36 at 1 year follow-up) and costs in Euros (€). Clinical input data was derived from a recently performed matched-cohort-study and a meta-analysis of further four trials comparing the two treatment options. Costs were derived from standard Austrian price lists and from hospital’s cost unit accounting. RESULTS: Disc arthroplasty showed statistically significant better outcome-scores at 1 year-follow up, while at the same time caused lower costs than lumbar fusion: Costs per improved ODI-point were 918€ in the fusion group and €519 in patients treated with lumbar disc arthroplasty. Costs for one gained SF36-point were €1,500 after fusion and €866€ after disc arthroplasty. CONCLUSIONS: For a period of 1 year after surgery, this study suggests that lumbar disc arthroplasty is a cost-effective treatment compared with lumbar fusion from a health care system’s perspective in Austria. Further studies, including longer follow-up and indirect-costs, are necessary for the assessment of cost-effectiveness from the societal perspective.

MD4
A SYSTEMATIC FRAMEWORK FOR COMPARING METHODS, PROCEDURES, AND IMPACT ACROSS HTA AGENCIES
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OBJECTIVES: 1) To develop a systematic framework for describing and comparing different features of HTA agencies in a formal and explicit manner; 2) to summarize and categorize these features for selected HTA agencies; 3) to describe and discuss similarities and differences between the agencies by comparison; and 4) to draw conclusions both for producers and users of HTA in research, policy and practice. METHODS: We performed a systematic literature search, added information from HTA agencies and developed a conceptual framework comprising eight main domains: 1) organization; 2) scope; 3) processes; 4) methods; 5) dissemination; 6) decision; 7) implementation; and 8) impact. We grouped relevant subunits of these domains in an evidence table. We chose five HTA agencies to test our framework: IQWiG, DAHTA@DIMDI, NICE, HAS and SBU. The results were interpreted within and compared across agencies by demonstrating similarities and differences. RESULTS: We developed a framework representing a comprehensive structure surrounding HTA and the stages through which a HTA is passing from science to policy and then impacts the population. We

HT1
MONITORS (ICMS) TO THE DIAGNOSTIC PATHWAY
COST-EFFECTIVENESS OF ADDING IMPLANTABLE CARDIAC
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