Title: Selection and prioritization of medical devices for HTA evaluation: A systematic review of existing approaches

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Online Resource 3 – Other terms found in the literature for each of the value attributes

Attribute	Other terms found in the records
Clinical efficacy and/or effectiveness	"Effect of the technology on disease burden" (13); "Clinical impact" (14, 36); "Therapeutic benefit" (15, 35); "Potential marginal benefit for the individual patient" (17); "Health benefits" (18, 41); "Expected effect of the technology on health outcomes" (19); "Potential benefits of assessment" (30); "Potential for a significant health benefit" (31); "Incremental benefits" (32); "Incremental level of efficacy/effectiveness" (33); "Public benefit" (34); "Clinical benefit for the patient" (37, 42, 46); "Potential clinical benefit" (38); "Impact on morbidity and/or mortality" (43); "Potential of the results of an assessment to change health outcomes" (44); "Potential to improve individual patient outcome" (45), "Comparative effectiveness" (47); "Type of benefit" (47); "Impact of innovative technology (...) better patient outcomes" (49); "Insufficient or uncertain benefit to the patient" (50); "Population impact (...) potential of guidance to improve patient or service user outcomes" (51).
Impact of the disease	"Health problem" (12); "Disease burden" (14, 39); "Burden of disease" (17, 23, 29, 30, 38); "Severity of disease" (19, 28, 38); "Mortality/morbidity" (28); "Disease severity" (35, 47); "Severity of the condition" (37); "Disease frequency" (39); "Prevalence or incidence of the disease" (43); "Prevalence" (44), "Burden of condition" (46).
Ethical, social, and legal aspects	"Patient and ethical considerations" (9); Health equity, sociocultural, ethical, and legal aspects" (7); "Ethical, legal, or psychosocial implications (14); "Expected impact of the new technology on access to care" (17); "Equity and fairness" (23); "Context to the legal framework" (33); "Coherence to the generally accepted ethics" (33); "Equity" (36, 46); "Legal, ethical, or political challenges" (37); "Political, historical or cultural aspects" (38); "Potential impact on equity in general" (38); "Potential of the results of an assessment to inform ethical, legal, or social issues" (44); "Potential to address social and ethical implications" (45); "Potential to affect policy decisions" (45); "Health inequalities" (51).
Target population	"Vulnerable population size" (18, 22); "Proportion of the population using the device" (24); "Number of patients" (28, 42); "Population impact" (36); "Potential to affect a large patient population" (45); "Affected population" (47); "Design appropriate only to a small population" (50); "Population impact (...) size of the target population" (51).
Budget impact on the health system	"Economic impact" (13, 14); "Expected effect of the technology on cost" (19); "Opportunity cost and budget impact" (47); "Uncertain or no cost benefit" (50).
Risk analysis	"Risk of technical failures" (2); "Infection risk" (5); "Radiation risk" (5); "Safety" (10, 12, 15, 22, 26, 29, 38, 42, 43); "Compliance with safety" (21); "Probability of failure of the device" (24); "Risks" (39); "Risk/safety" (i.e., risk class of the device) (40); "Comparative safety" (47).
Cost of the device (including complementary equipment)	"Intervention costs" (2); "Maintenance and repair cost" (3, 5, 39); "Investment cost" (5); "Total life cycle costs" (6); "Economic aspects" (12); "Marginal direct healthcare costs of the new technology" (17); "Potential for a significant cost impact" (31); "Incremental total cost" (32); "Consequences in terms of costs" (37); "Cost of the intervention" (38); "Cost per patient" (42); "Elements of cost in the model of care and cost of technology/therapeutics" (46); "Cost consequences/offsets" (46); "Direct healthcare costs" (47); "Cost evaluation" (48); "Funding support" (49).
Quality of the available scientific evidence	"Availabilty of data for an assessment" (19); "Certainty (quality of evidence)" (23); "Uncertainty of the evidence" (38); "Sufficient evidence to support an assessment" (38), "Evidence base" (46); "Lack of evidence" (50); "Evidence does not translate to UK setting" (50), "Evidence quality and system intelligence" (51).
Market competitiveness	"Availability" (9); "Availability of alternatives" (14); "Availability of alternative technologies" (18, 29); "Existence of alternative treatments" (28); "Current market size" (34); "Lack of available alternatives" (38); "Alternatives" (41); "Accuracy of the current diagnostic approach" (43); "Unmet needs" (47).

Efficiency	"Affordability of the device" (15, 28); "Affordability of maintenance and replacement" (15); "Cost minimization" (27); "Economic efficiency" (29); "Economic value creation" (33); "Enhances diagnostic efficiency or be more cost-effective than the current diagnostic approach" (43); "Potential of the results of an assessment to change costs" (44); "Potential to reduce unit or aggregate cost" (45); "Impact of innovative technology (...) efficiency enhancements" (49).
Stakeholders agreement on the adoption of the device	"Controversial nature of proposed technology" (14); "Controversy" (19); "Fit with national standards and targets" (23); "Acceptability" (23); "Coherence to strategic goals" (33); "Technology acceptance among physicians" (33); "Strategic alignment" (35); "Relevance of the disease to current regional/national health policies and/or priorities" (43); "Leadership support" (49).
Organizational aspects	"Adaptation to the organization" (21); "Need for significant service reorganization" (31); "Need to reorganize health care" (37); "Feasibility to change current practice to incorporate this technology" (43); "Organizational feasibility" (46); "Availability of resources in the system" (47); "Organizational impact" (47); "Motivation for technology adoption" (49); "Innovation culture" (49).
Public health interest	"Expected level of interest" (14); "Level of interest from media and patient organisations" (38); "Expected level of interest from policy-makers" (41).
Variation in medical practice	"Variation in treatment or patient outcomes" (43); "Variation in rates of use" (44); "Potential to reduce unexplained variations in medical practice" (45).
Degree of innovation	"Technology level used" (3); "Innovative therapy with no satisfactory standard treatment" (31); "Not novel" (50).
Timeliness of HTA	"Timeliness of review" (14); "Timeliness of the assessment" (19).
Uncertainty about the use of the technology	"Uncertainty" (30); "Uncertainty in clinical practice" (33); "Expert consensus" (47); "Not clear how the technology would be used in NHS" (50).
Medical/technological knowledge	"Importance to healthcare innovativeness" (38); "Potential to advance medical knowldege" (45).
Specific features of the device	"Length of stay" (2); "Downtime due to maintenance" (3); "Maintenance interval" (3); "Warranty period" (3, 4, 20, 21); "Durability/maintenance" (4); "Technology setup/preparation" (5); "Service life" (10, 11, 20, 26); "Maintenance requirements" (11, 26); "Repair and calibration" (21); "Support service" (21); "After-sales service" (21); "Reputation"/"Opinion" (i.e., opinion of other HTA agencies or scientific societies concerning the device) (9, 21, 42); "Technology life-cycle" (33); "Roles/functionalities of the device" (i.e., assistive device, artificial body part, etc.) (40); "Nature of the device" (i.e., diagnostic vs therapeutic) (40).
Need for training of the healthcare professional	"Special skills from the staff" (1); "Staff education" (5); "Ease of training" (15); "Additional training required" (21); "Training intensity" (33); "Need for training of users" (42); "Staff technological proficiency levels" (49).
Cost-effectiveness	-
Regulatory status of the device	"FDA approval of the device" (1); "Alignment with international standards" (9); "Authorization" (9); "CE mark or expected to obtain one within 12 months" (38); "Regulatory approval" (38).
Cost of procedure without the cost of the device	"Number of technical staff" (3); "Health care resources consequences" (15); "Resource impact" (35); "Other healthcare costs" (47); "Non-medical costs" (47).
Patient-reported outcomes	"Patient perspectives" (12, 15); "Benefits perceived by patients" (38); "Comparative patient-reported outcomes" (47).
Medical or technical complications for the patient	"Post operative complications" (2); "Change (deterioration) in patients' health status caused by the failure of the device" (24).
Multidisease applicability	"Multiple indications expected" (38).

Technical specifications	"Technological aspects" (12), "Continuous monitoring capability" (48).
User-friendliness	"Usability" (2, 9, 27); "Ease of use" (7, 10, 11, 15, 20, 25, 26); "Ease of handling" (21); "Patient experience" (46); "Feasibility of use" (48); "Impact of innovative technology (...) enhanced user experiences" (49); "Usability or technology design issue" (50).
Quality/Reliability	"Trust in the device" (25).
Price of the device	-
Comfort for the patient	"Patient satisfaction" (2); "Incremental level of patient satisfaction" (33).
Quality of life for the patient	"Longevity and quality of life" (28).
Capacity of the health system	"Organizational infrastructure for technology implementation" (49); "System impact" (51).
Exposure of the healthcare professional to physical or chemical agents	"Occupational health and safety" (5).
Technical performance of the device	"Technical performance (accuracy and precision)" (48).
Environmental impact of the production and use of the device	"Environmental sustainability" (51)
Adverse events for the patient	"Adverse effects" (39).
Financing	"Coverage (i.e., DRG-tariff/additional payments for the device)" (42).