

Evidence and scoring matrix for the adapted MCDA framework

OBJECTIVES CRITERIA <i>Sub-criteria</i>	Synthesis of available evidence / Questions to consider	Score (quantitative)	Comments
NORMATIVE UNIVERSAL OBJECTIVES – QUANTITATIVE APPRAISAL			
OBJECTIVE: ADDRESSING AREAS OF HIGH THERAPEUTIC NEED			
DISEASE SEVERITY			
<i>Effect of disease on life-expectancy</i>		<input type="checkbox"/> 5 Very severe <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No effect	
<i>Effect of disease on morbidity (includes disability and function)</i>		<input type="checkbox"/> 5 Very severe <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No effect	
<i>Effect of disease on patients' quality of life</i>		<input type="checkbox"/> 5 Very severe <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No effect	
<i>Effect of disease on caregivers' quality of life</i>		<input type="checkbox"/> 5 Very severe <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No effect	
SIZE OF POPULATION AFFECTED		X=Prevalence or incidence <input type="checkbox"/> 5: X > 500/10,000 <input type="checkbox"/> 4: X < 500/10,000 <input type="checkbox"/> 3: X < 100/10,000 <input type="checkbox"/> 2: X < 10/10,000 <input type="checkbox"/> 1: X < 5/10,000 (rare) <input type="checkbox"/> 0: X < 2 in 100,000 (ultra rare)	

OBJECTIVES CRITERIA <i>Sub-criteria</i>	Synthesis of available evidence / Questions to consider	Score (quantitative)	Comments
UNMET NEEDS		<input type="checkbox"/> 5 Many & serious <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No limitations	
OBJECTIVE 2: PROVIDING LARGE IMPROVEMENTS IN HEALTH OUTCOMES			
COMPARATIVE EFFECTIVENESS			
<i>Improvement of efficacy outcome 1:</i>		<input type="checkbox"/> 5 Much better than comparator <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No difference <input type="checkbox"/> -1 <input type="checkbox"/> -2 <input type="checkbox"/> -3 <input type="checkbox"/> -4 <input type="checkbox"/> -5 Much worse than comparator	
<i>Etc.</i>			
COMPARATIVE SAFETY / TOLERABILITY <i>includes</i> <ul style="list-style-type: none"> • Adverse events • Serious adverse events • Fatal adverse events • Long-term safety • Tolerability 		<input type="checkbox"/> 5 Much better than comparator <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No difference <input type="checkbox"/> -1 <input type="checkbox"/> -2 <input type="checkbox"/> -3 <input type="checkbox"/> -4 <input type="checkbox"/> -5 Much worse than comparator	

OBJECTIVES			
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COMPARATIVE PATIENT PERCEIVED HEALTH/PATIENT- REPORTED OUTCOMES (PRO) includes <ul style="list-style-type: none"> • <i>Improvement in health-related quality of life</i> • <i>Impact on autonomy</i> • <i>Impact on dignity</i> • <i>Convenience/ ease of use/ mode of administration</i> 		<input type="checkbox"/> 5 Much better than comparator <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No difference <input type="checkbox"/> -1 <input type="checkbox"/> -2 <input type="checkbox"/> -3 <input type="checkbox"/> -4 <input type="checkbox"/> -5 Much worse than comparator	
OBJECTIVE: DELIVERING IMPORTANT TYPES OF HEALTH BENEFIT			
TYPE OF PREVENTIVE BENEFIT		<input type="checkbox"/> 5 Elimination of disease <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No reduction in risk of disease	
TYPE OF THERAPEUTIC BENEFIT		<input type="checkbox"/> 5 Cure / life saving <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No impact on existing condition	
OBJECTIVE: PRODUCING FAVORABLE ECONOMIC CONSEQUENCES			
COMPARATIVE COST CONSEQUENCES – COST OF INTERVENTION <i>Including acquisition, implementation, maintenance costs and replacement of existing treatment</i>		<input type="checkbox"/> 5 Substantial savings <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No difference <input type="checkbox"/> -1 <input type="checkbox"/> -2 <input type="checkbox"/> -3 <input type="checkbox"/> -4 <input type="checkbox"/> -5 Substantial additional expenditures	

OBJECTIVES			
CRITERIA	Synthesis of available evidence / Questions to consider	Score (quantitative)	Comments
<i>Sub-criteria</i>			
COMPARATIVE COST CONSEQUENCES— OTHER MEDICAL COSTS			
<i>Other medical costs to the healthcare system</i>		<input type="checkbox"/> 5 Substantial savings <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No difference <input type="checkbox"/> -1 <input type="checkbox"/> -2 <input type="checkbox"/> -3 <input type="checkbox"/> -4 <input type="checkbox"/> -5 Substantial additional expenditures	
<i>Medical costs to patients</i>		<input type="checkbox"/> 5 Substantial savings <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No difference <input type="checkbox"/> -1 <input type="checkbox"/> -2 <input type="checkbox"/> -3 <input type="checkbox"/> -4 <input type="checkbox"/> -5 Substantial additional expenditures	
COMPARATIVE COST CONSEQUENCES— NON- MEDICAL COSTS			
<i>Patients' and caregivers' productivity costs</i>		<input type="checkbox"/> 5 Substantial savings <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No difference <input type="checkbox"/> -1 <input type="checkbox"/> -2 <input type="checkbox"/> -3 <input type="checkbox"/> -4 <input type="checkbox"/> -5 Substantial additional expenditures	

OBJECTIVES			
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<i>Sub-criteria</i>			
<i>Costs to the wider social care system</i>		<input type="checkbox"/> 5 Substantial savings <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No difference <input type="checkbox"/> -1 <input type="checkbox"/> -2 <input type="checkbox"/> -3 <input type="checkbox"/> -4 <input type="checkbox"/> -5 Substantial additional expenditures	
<i>Non-medical costs to patients (e.g., transportation expenses, paid caregivers)</i>		<input type="checkbox"/> 5 Substantial savings <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No difference <input type="checkbox"/> -1 <input type="checkbox"/> -2 <input type="checkbox"/> -3 <input type="checkbox"/> -4 <input type="checkbox"/> -5 Substantial additional expenditures	
OBJECTIVE: REDUCING UNCERTAINTY THROUGH SOLID KNOWLEDGE			
QUALITY OF EVIDENCE			
<i>Clinical evidence</i>		<input type="checkbox"/> 5 Well reported, highly relevant and valid <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 Not relevant and/or invalid	
<i>Epidemiology evidence</i>		<input type="checkbox"/> 5 Well reported, highly relevant and valid <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 Not relevant and/or invalid	

OBJECTIVES			
CRITERIA <i>Sub-criteria</i>	Synthesis of available evidence / Questions to consider	Score (quantitative)	Comments
<i>Economic evidence</i>		<input type="checkbox"/> 5 Well reported, highly relevant and valid <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 Not relevant and/or invalid	
EXPERT CONSENSUS / CLINICAL PRACTICE GUIDELINES		<input type="checkbox"/> 5 Strong first-line recommendation for drug above all other alternatives <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No recommendation or not recommended	
OBJECTIVE: ADDRESSING PRIORITIES TO INCREASE FAIRNESS / JUSTICE include in quantitative model if applicable to society / healthcare system / health plan) <i>Is there any value to be derived from priorities and fairness considerations?</i>			
RARE DISEASES		<input type="checkbox"/> 5 Strong alignment with rare disease priority <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No alignment with rare disease priority	
OTHER PRIORITIES <i>(e.g., cancer, diabetes, remote population)</i>		<input type="checkbox"/> 5 Strong alignment with other established priorities <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 No alignment with other established priorities	

OBJECTIVES CRITERIA Sub-criteria	Synthesis of available evidence / Questions to consider	Impact on value (qualitative)	Comments
NORMATIVE CONTEXTUAL OBJECTIVES – QUALITATIVE APPRAISAL			
OBJECTIVE: ALIGNING WITH THE MANDATE AND SCOPE OF HEALTHCARE SYSTEM			
MANDATE AND SCOPE OF HEALTHCARE	<i>Is the intervention aligned with the mandate/scope of healthcare in your country/region? Does the consideration of this criterion have an impact on the value of the intervention?</i> <ul style="list-style-type: none"> for example, lifestyle treatments may not fall under the scope of healthcare Evidence: Insights from appraiser:	<input type="checkbox"/> Positive impact <input type="checkbox"/> No impact <input type="checkbox"/> Negative impact	
OBJECTIVE: ALIGNING WITH THE COMMON GOAL			
COMMON GOAL AND SPECIFIC INTERESTS <i>To consider:</i> <ul style="list-style-type: none"> Stakeholder pressures Stakeholder barriers Conflict of interest 	<i>Are you aware of pressures/barriers from stakeholders regarding this intervention? Does the consideration of this criterion have an impact on the value of the intervention?</i> Evidence: Insights from appraiser:	<input type="checkbox"/> Positive impact <input type="checkbox"/> No impact <input type="checkbox"/> Negative impact	
OBJECTIVE: ENSURING ENVIRONMENTAL SUSTAINABILITY			
ENVIRONMENTAL IMPACT <i>To consider:</i> <ul style="list-style-type: none"> Environmental impact of production Environmental impact of use Environmental impact of implementation 	<i>Does the intervention have a potential environmental impact? Does the consideration of this criterion have an impact on the value of the intervention?</i> Evidence: Insights from appraiser:	<input type="checkbox"/> Positive impact <input type="checkbox"/> No impact <input type="checkbox"/> Negative impact	
FEASIBILITY CONTEXTUAL OBJECTIVES – QUALITATIVE APPRAISAL			
OBJECTIVE: BEING AFFORDABLE WITH LOW OPPORTUNITY COSTS			
OPPORTUNITY COSTS & AFFORDABILITY <i>To consider:</i> <ul style="list-style-type: none"> Opportunity costs for patient (forgone resources) Opportunity costs for population 	<i>Does the intervention result in significant displacement of resources of the healthcare system in your country/region? Does the consideration of this criterion have an impact on the value of the intervention?</i> Evidence:	<input type="checkbox"/> Positive impact <input type="checkbox"/> No impact <input type="checkbox"/> Negative impact	

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NORMATIVE CONTEXTUAL OBJECTIVES – QUALITATIVE APPRAISAL			
<i>(forgone resources)</i> <ul style="list-style-type: none"> Affordability 	Insights from appraiser:		
OBJECTIVE: ENSURING AND PRESERVING SYSTEM CAPACITY AND APPROPRIATE USE			
SYSTEM CAPACITY & APPROPRIATE USE OF INTERVENTION <i>To consider:</i> <ul style="list-style-type: none"> Organizational requirements (e.g., process, premises, equipment) Skill requirements Legislative requirements Surveillance requirements Risk of inappropriate use Institutional/personal barriers to uptake Ability to reach the whole target region/population 	<i>Does the healthcare system in your country/region have sufficient capacity (e.g., skills, knowledge of intervention, surveillance system) to ensure appropriate use of the intervention?</i> <i>Does the consideration of this criterion have an impact on the value of the intervention?</i> Evidence: Insights from appraiser:	<input type="checkbox"/> Positive impact <input type="checkbox"/> No impact <input type="checkbox"/> Negative impact	
OBJECTIVE: HAVING FAVORABLE POLITICAL , HISTORICAL AND CULTURAL CONTEXT			
POLITICAL/ HISTORICAL CONTEXT <i>To consider:</i> <ul style="list-style-type: none"> Political priorities and context Cultural acceptability Precedence (congruence with previous and future decisions) Impact on innovation & research Impact on partnership & collaboration among healthcare stakeholders 	<i>Are you aware of any political/historical aspect regarding this intervention (such as precedence, impact on innovation, impact on collaboration within the healthcare system)?</i> <i>Does the consideration of this criterion have an impact on the value of the intervention?</i> Evidence: Insights from appraiser:	<input type="checkbox"/> Positive impact <input type="checkbox"/> No impact <input type="checkbox"/> Negative impact	