

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

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Online Resource 2 – Complete dataset collected from the included studies

<i>Record</i>	<i>Nature of the record</i>	<i>Year of publication</i>	<i>Target jurisdiction</i>	<i>Decision context</i>	<i>Health technology focus</i>	<i>Type of decision situation</i>	<i>Technical component – method(s) used</i>		<i>Aggregation ?</i>	<i>Identification and selection of criteria</i>	<i>Social component – method(s) used</i>	<i>Participants</i>	<i>Intended user(s) of the model</i>
1	Scientific literature	1995	USA	Evaluation (HTA)	MDs	Selection of a single option	CEA	Economic evaluation		Expert consultation	Meetings	Providers, product makers, scientific experts	HTA committees/agencies
2	Scientific literature	2021	Global	Evaluation (HTA)	MDs	Selection of a single option + Recursive selection	AHP	MCDA	Yes	Literature review followed by expert consultation	Meetings	Providers, principal investigators	Principal investigators
3	Scientific literature	2022	Global	Evaluation (HTA)	MDs	Selection of a single option + Ranking	Fuzzy PSI, fuzzy MARCOS	MCDA	Yes	Literature review followed by expert consultation	Meetings	Providers	Principal investigators
4	Scientific literature	2019	Global	Evaluation (HTA)	MDs	Selection of a single option + Ranking	Fuzzy ANP, COPRAS	MCDA	Yes	Literature review	Questionnaires/Surveys	Providers	Principal investigators
5	Scientific literature	2022	Global	Evaluation (HTA)	MDs	Selection of a single option + Ranking	BWM, EDAS	MCDA	Yes	Literature review followed by expert consultation	Meetings	Scientific experts	Not specified
6	Scientific literature	2019	Global	Evaluation (HTA)	MDs	Selection of a single option + Ranking	AHP	MCDA	Yes	Not specified	Not sufficiently described	Providers, scientific experts	Not specified
7	Scientific literature	2019	Global	Evaluation (HTA)	MDs	Selection of a single option	AHP	MCDA	Yes	Literature review	Questionnaires/Surveys	Providers, payers and policy makers, product makers	Providers, payers and policy makers, product makers
8	Scientific literature	2016	Mexico	Evaluation (HTA)	Wearables	Selection of a single option + Ranking	Not sufficiently described	Not sufficiently described		Literature review	Not sufficiently described	Patients and the public, providers, principal investigators	Not specified
9	Scientific literature	2021	Ecuador	Evaluation (HTA)	Smart MDs	Selection of a single option + Ranking	AHP	MCDA	Yes	Literature review	Not sufficiently described	Scientific experts	Not specified
10	Scientific literature	2018	Global	Evaluation (HTA)	Smart MDs	Selection of a single option + Ranking	IVIF, VIKOR	MCDA	Yes	Literature review followed by expert consultation	Not sufficiently described	Not specified	Not specified
11	Scientific literature	2019	Global	Evaluation (HTA)	Smart MDs	Selection of a single option + Ranking	IFCI	MCDA	Yes	Literature review followed by expert consultation	Meetings	Principal investigators, scientific experts	Not specified
12	Scientific literature	2020	USA	Evaluation (HTA)	Wearables	Selection of a single option	MAST	MCDA	No	Literature review followed by expert consultation	Meetings	Providers, principal investigators, scientific experts	Providers, principal investigators
13	Scientific literature	2014	Spain	Selection and prioritization for HTA	MDs	Ranking	Not sufficiently described	Not sufficiently described		Literature review	Questionnaires/Surveys	Providers	HTA committees/agencies
14	Scientific literature	2010	Canada	Selection and prioritization for HTA	HTs	Ranking	AHP	MCDA	Yes	Literature review followed by expert consultation	Questionnaires/Surveys, meetings	HTA committees/agencies	HTA committees/agencies
15	Scientific literature	2018	Global	Evaluation (HTA)	MDs	Ranking	EVIDEM	MCDA	Yes	Literature review	Meetings	Scientific experts	Payers and policy makers
16	Scientific literature	2015	Global	Evaluation (HTA)	MDs	Ranking + Categorization	AHP	MCDA	Yes	Literature review	Questionnaires/Surveys, Delphi	Providers, scientific experts	Providers

17	Scientific literature	2006	Denmark	Selection and prioritization for HTA	HTs	Ranking + Categorization	Not sufficiently described	Not sufficiently described		Literature review followed by expert consultation	Questionnaires/Surveys , meetings	Scientific experts, category not specified	HTA committees/agencies
18	Scientific literature	2021	Iran	Selection and prioritization for HTA	HTs	Ranking + Categorization	TOPSIS, SAW, VIKOR	MCDA	Yes	Literature review followed by expert consultation	Meetings	Scientific experts	Principal investigators
19	Scientific literature	1989	Global	Selection and prioritization for HTA	HTs	Ranking	Not sufficiently described	Not sufficiently described		Literature review	Not sufficiently described	Not specified	HTA committees/agencies
20	Scientific literature	2021	Global	Evaluation (HTA)	MDs	Selection of a single option + Ranking	AHP, ELECTRE	MCDA	Yes	Expert consultation	Interviews, meetings	Providers	Providers
21	Scientific literature	2016	Global	Evaluation (HTA)	MDs	Selection of a single option + Ranking	Fuzzy AHP	MCDA	Yes	Literature review	Not sufficiently described	Scientific experts	Providers
22	Scientific literature	2016	Iran	Selection and prioritization for HTA	HTs	Ranking	AHP, TOPSIS	MCDA	Yes	Literature review followed by expert consultation	Questionnaires/Surveys	HTA committees/agencies	Payers and policy makers
23	Scientific literature	2007	UK	Evaluation (HTA)	Interventions	Ranking	CBA	Economic evaluation		Expert consultation	Workshops	Providers, scientific experts	Providers
24	Scientific literature	1991	Australia	Selection and prioritization for HTA	MDs	Ranking	Not sufficiently described	Not sufficiently described		Literature review	Not sufficiently described	Not specified	Not specified
25	Scientific literature	2020	Global	Evaluation (HTA)	Wearables	Ranking	Not sufficiently described	Not sufficiently described		Literature review followed by expert consultation	Questionnaires/Surveys	Providers, product makers, scientific experts	Providers, principal investigators
26	Scientific literature	2019	Global	Evaluation (HTA)	Smart MDs	Ranking	Neutrosophics, TOPSIS	MCDA	Yes	Literature review followed by expert consultation	Meetings	Not specified	Not specified
27	Scientific literature	2015	R. South Sudan	Evaluation (HTA)	MDs	Categorization	Screening method using decision gates	Others		Literature review followed by expert consultation	Workshops	Not specified	Principal investigators
28	Scientific literature	2000	Israel	Evaluation (HTA)	HTs	Ranking + Categorization	Not sufficiently described	Not sufficiently described		Literature review followed by expert consultation	Delphi	Payers and policy makers, principal investigators	HTA committees/agencies
29	Scientific literature	2016	Kazakhstan	Selection and prioritization for HTA	HTs, interventions	Categorization + Recursive selection	Not sufficiently described	Not sufficiently described		Literature review followed by expert consultation	Workshops	Providers, payers and policy makers, principal investigators	Payers and policy makers
30	Scientific literature	1998	The Netherlands	Selection and prioritization for HTA	HTs, interventions	Categorization	Not sufficiently described	Not sufficiently described		Literature review	Not sufficiently described	Not specified	HTA committees/agencies
31	Scientific literature	2009	Europe	Selection and prioritization for HTA	HTs	Categorization	Not sufficiently described	Not sufficiently described		Literature review followed by expert consultation	Questionnaires/Surveys	HTA committees/agencies, scientific experts	HTA committees/agencies
32	Scientific literature	2012	Israel	Evaluation (HTA)	HTs	Recursive selection + Selection of a portfolio	PAPRIKA, PDA (optimization)	MCDA	Yes	Literature review	Meetings	Payers and policy makers	Payers and policy makers
33	Scientific literature	2009	Global	Evaluation (HTA)	HTs	Selection of a portfolio	Not sufficiently described	Not sufficiently described		Literature review	Meetings	Payers and policy makers	Providers, payers and policy makers, principal investigators
34	Scientific literature	2003	Korea	Evaluation (HTA)	MDs	Selection of a portfolio	AHP	MCDA	Yes	Literature review	Questionnaires/Surveys , meetings	Scientific experts	Payers and policy makers
35	Technical documents	2019	British Columbia	Selection and prioritization for HTA	HTs	Not specified	Not sufficiently described	Not sufficiently described		Not specified	Questionnaires/Surveys , meetings	Patients and the public, payers and policy makers, scientific experts	HTA committees/agencies
36	Technical documents	2015	Canada	Selection and prioritization for HTA	MDs, DTs, interventions	Ranking + Recursive selection	Not sufficiently described	Not sufficiently described		Not specified	Not sufficiently described	Payers and policy makers	HTA committees/agencies
37	Technical documents	Not specified	Sweden	Selection and prioritization for HTA	MDs	Not specified	Screening method using checklist	Others		Not specified	Not sufficiently described	Payers and policy makers	HTA committees/agencies

38	Technical documents	2021	LMIC	Selection and prioritization for HTA	HTs	Ranking + Recursive selection	Not sufficiently described	Not sufficiently described		Literature review followed by expert consultation	Delphi	Patients and the public, payers and policy makers	HTA committees/agencies
39	Scientific literature	2009	Spain	Selection and prioritization for HTA	HTs	Selection of a single option	Not sufficiently described	Not sufficiently described		Literature review followed by expert consultation	Questionnaires/Surveys , meetings	Patients and the public, providers	Providers
40	Scientific literature	2019	Europe	Selection and prioritization for HTA	MDs	Categorization	Taxonomy	Others		Literature review	Interviews	HTA committees/agencies	HTA committees/agencies
41	Scientific literature	2013	Lithuania	Evaluation (HTA)	HTs	Ranking	Not sufficiently described	Not sufficiently described		Literature review	Delphi	Providers, payers and policy makers, scientific experts	Not specified
42	Scientific literature	2016	France	Evaluation (HTA)	MDs	Selection of a single option	PAPRIKA	MCDA	Yes	Literature review followed by expert consultation	Questionnaires/Surveys	Providers	Providers
43	Scientific literature	2010	Global	Selection and prioritization for HTA	DTs	Categorization	Not sufficiently described	Not sufficiently described		Literature review	Delphi	Providers, payers and policy makers, product makers, scientific experts	HTA committees/agencies, principal investigators
44	Scientific literature	1992	USA	Selection and prioritization for HTA	HTs	Ranking	Not sufficiently described	Not sufficiently described		Not specified	Delphi	Patients and the public, providers, scientific experts	HTA committees/agencies
45	Scientific literature	1990	USA	Selection and prioritization for HTA	HTs	Categorization	Not sufficiently described	Not sufficiently described		Expert consultation	Delphi	Providers, payers and policy makers, product makers, scientific experts	Not specified
46	Scientific literature	2024	Australia	Selection and prioritization for HTA	HTs, interventions	Ranking	PAPRIKA	MCDA	Yes	Literature review followed by expert consultation	Questionnaires/Surveys	Payers and policy makers, scientific experts, principal investigators	Payers and policy makers, HTA committees/agencies
47	Scientific literature	2024	Spain	Evaluation (HTA)	HTs, interventions	Ranking	EVIDEM	MCDA	Yes	Literature review followed by expert consultation	Questionnaires/Surveys , focus groups	Patients and the public providers, payers and policy makers	Providers, payers and policy makers
48	Scientific literature	2024	Global	Evaluation (HTA)	Wearables	Selection of a single option	Screening method using decision gates	Others		Literature review	Not specified	Not specified	Providers, principal investigators
49	Scientific literature	2024	Thailand	Evaluation (HTA)	MDs	Selection of a single option + Ranking	AHP, TOPSIS	MCDA	Yes	Literature review followed by expert consultation	Interviews	Providers, scientific experts	Providers
50	Scientific literature	2017	UK	Selection and prioritization for HTA	MDs	Categorization	Screening method using checklist	Others		Expert consultation	Meetings	Patients and the public, providers, payers and policy makers, product makers, scientific experts, principal investigators	HTA committees/agencies
51	Technical documents	2024	UK	Selection and prioritization for HTA	HTs, interventions	Categorization	Not sufficiently described	Not sufficiently described		Not specified	Meetings	Not specified	HTA committees/agencies