**Supplementary Table 1. Search Strategies of the Scoping Reviews for HTA Frameworks and for Scientific Disciplines**

|  |  |  |
| --- | --- | --- |
| **Information sources** | **Codes** | **Filters** |
| ***Scientific Articles regarding HTA Frameworks*** |
| PubMed |  ("framework"[Title]) AND (("HTA"[Abstract] OR "health technology assessment"[Abstract]) OR ("HTA"[Title] OR "health technology assessment"[Title])) | * Article types: Journal Article
* Languages: English
 |
| Embase | 'framework':ti AND ('hta':ab,ti OR 'health technology assessment':ab,ti) | * Publication types: Article; Review
 |
| Google Scholar | allintitle: (“framework”) AND (“HTA” OR “health technology assessment”)  | * Patents: not included
* Citations: included
 |
| ***Grey Literature regarding HTA Frameworks*** |
| European Network for Health Technology Assessment (EUnetHTA) https://eunethta.eu | “HTA frameworks” | * Language: English
* Region: any region
* Terms appearing: anywhere in the page
* Safesearch: show most relevant results
* File type: any format
* Usage rights: not filtered by license
 |
| The Professional Society for Health Economics and Outcomes Research (ISPOR) https://www.ispor.org |
| Health Technology Assessment International (HTAi) https://htai.org |
| The International Network of Agencies for Health Technology Assessment (INAHTA) http://www.inahta.org |
| Institute for Clinical and Economic Review (ICER) https://icer-review.org |
| World Health Organization (WHO) https://www.who.int |
| National Institute for Health and Care Excellence (NICE) https://www.nice.org.uk |
| Google Advance Search |
| ***Scientific Articles regarding Scientific Disciplines*** |
| PubMed | (“framework”[Title] OR “model”[Title] OR “theory”[Title] OR “guidance”) AND (“innovation”[Title] OR “identification”[Title] OR “research” [Title] OR “development”[Title] OR “implementation” [Title] OR “validation” [Title] OR “transferability” [Title] OR “generalization” [Title]) | * Text availability: Full Text
* Language: English
* Sort by Best Match
 |
| Embase | (“framework” OR “model” OR “theory” OR “guidance”) AND (“innovation” OR “identification” OR “research” OR “development” OR “implementation” OR “validation” OR “transferability” OR “generalization”) | * Search fields: Title
* Publication types: Article; Review
* Sort by Relevance
 |
| Google Scholar | allintitle: (“framework” OR “model” OR “theory” OR “guidance”) AND (“innovation” OR “identification” OR “research” OR “development” OR “implementation” OR “validation” OR “transferability” OR “generalization”) | * Citations: included
* Patents: not included
* Sort by Relevance
 |

**Supplementary Figure 1. Flow Diagram of Scanning and Identifying Eligible HTA Frameworks and Studies on **

**Supplementary Table 2. Study Characteristics of HTA Frameworks and Studies on Scientific Disciplines**

|  |
| --- |
| **HTA frameworks** |
| ***Author*** | ***Year*** | ***Country*** ***(corresponding author)*** | ***Source*** | ***Journal name*** | ***Name of the HTA framework?*** |
| Chan K et al. | 2020 | Canada | Scientific literature | BMJ Open | / |
| Ni M et al. | 2020 | The UK | Scientific literature | Expert Review of Medical Devices | The Lean and Agile Multi-dimensional Process (LAMP) |
| Almeida N et al. | 2019 | Canada | Scientific literature | International Journal of Technology Assessment in Health Care | / |
| Baran-kooiker A et al.  | 2019 | Poland | Scientific literature | Acta Poloniae Pharmaceutica - Drug Research | The Evidence and Value: Impact on Decision Making Framework (EVIDEM) |
| Haverinen J et al. | 2019 | Finland | Scientific literature | Finnish Journal of eHealth and eWelfare | / |
| Brixner D et al.  | 2018 | the USA | Scientific literature | Value in Health | / |
| Krahn M et al. | 2018 | Canada | Scientific literature | International Journal of Technology Assessment in Health Care | The Ontario Decision Framework |
| Palozzi G et al. | 2018 | Italy | Scientific literature | Sustainability | The Health Technology Balanced Assessment Framework (HTBA) |
| Angelis A et al. | 2017 | The UK | Scientific literature | Social Science & Medicine | The Advance Value Framework (AVF) |
| Assasi N et al.  | 2016 | Canada | Scientific literature | BMC Medical Ethics | / |
| Abelson J et al. | 2016 | Canada | Scientific literature | International Journal of Technology Assessment in Health Care | / |
| Gagnon M et al. | 2015 | Canada | Scientific literature | International Journal of Technology Assessment in Health Care | / |
| Widrig D et al. | 2014 | Switzerland | Scientific literature | International Journal of Technology Assessment in Health Care | / |
| Assasi N et al. | 2013 | Canada | Grey literature (Google advanced search) | / | / |
| Poulin P et al. | 2013 | Canada | Scientific literature | Medical Devices: Evidence and Research | / |
| Goetghebeur M et al.  | 2012 | Canada | Scientific literature | Medical Decision Making | The Evidence and Value: Impact on Decision Making Framework (EVIDEM) |
| Miot J et al. | 2012 | South Africa | Scientific literature | Cost Effectiveness and Resource Allocation | The Evidence and Value: Impact on Decision Making Framework (EVIDEM) |
| Tony M et al. | 2011 | Canada | Scientific literature | BMC Health Services Research | The Evidence and Value: Impact on Decision Making Framework (EVIDEM) |
| Goetghebeur M et al.  | 2010 | Canada | Scientific literature | Cost Effectiveness and Resource Allocation | The Evidence and Value: Impact on Decision Making Framework (EVIDEM) |
| Veenstra D et al. | 2010 | The USA | Scientific literature | Genetics in Medicine | / |
| **Scientific disciplines** |
| ***Author*** | ***Year*** | ***Country*** ***(Corresponding author)*** | ***Source*** | ***Journal name*** | ***Scientific discipline categorization*** |
| Hendricks S et al. | 2018 | South Africa | Scientific literature | Healthcare | Design thinking |
| Rapport F et al. | 2017 | Australia | Scientific literature | Journal of Evaluation in Clinical Practice | Implementation research |
| Neta G et al. | 2015 | The USA | Scientific literature | American Journal of Public Health | Implementation research |
| Roberts J et al. | 2015 | The USA | Scientific literature | Healthcare | Design thinking |
| Vechakul J et al. | 2015 | The USA | Scientific literature | Maternal Child Health Journal | Design thinking |
| Meyers D et al. | 2012 | The USA | Scientific literature | Am J Community Psychol | Implementation research |
| Brown T et al. | 2010 | The USA | Scientific literature | Stanford Social Innovation Review | Design thinking |
| Damschroder L et al. | 2009 | The USA | Scientific literature | Implementation Science | Implementation research |
| Liyanage C et al. | 2009 | The UK | Scientific literature | Journal of Knowledge Management | Implementation research |
| Majdzadeh R et al. | 2008 | Iran | Scientific literature | Journal of Continuing Education in the Health Professions | Implementation research |
| Kilbourne A et al. | 2007 | The USA | Scientific literature | Implementation Science | Implementation research |
| Graham I et al. | 2006 | Canada | Scientific literature | Journal of Continuing Education in the Health Professions | Implementation research |
| Newell W et al. | 2001 | The USA | Scientific literature | Issues in Integrative Studies | Interdisciplinary research |
| Okumus F et al. | 2001 | Turkey | Scientific literature | International Journal of Contemporary Hospitality Management | Implementation research |

**Supplementary Table 3. Stakeholder characteristics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Codename** | **Stakeholder group** | **Face-to-face brainstorming (n=7)** | **Online brainstorming (n=6)** | **Questionnaire (n=7)** |
| Aca1 | Academic |  | Yes | Yes |
| Aca2 | Academic | Yes |  |  |
| Aca3 | Academic | Yes |  |  |
| Aca4 | Academic | Yes |  |  |
| Aca5 | Academic | Yes |  |  |
| Aca6 | Academic | Yes |  |  |
| Aca7 | Academic |  |  | Yes |
| Aca8 | Academic |  | Yes | Yes |
| Hta1 | HTA bodies |  | Yes | Yes |
| Hta2 | HTA bodies |  | Yes | Yes |
| Ind1 | Industry | Yes |  |  |
| Ind2 | Industry |  | Yes | Yes |
| Pat1 | patient |  | Yes | Yes |
| Pat2 | Patient | Yes |  |  |

Aca = Academic; Hta = Representative from HTA bodies; Ind = Representative from industry; Pat = Patient.