

Appendices

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Putting evidence at the centre of everyday life: Making evidence available to citizens when they are making choices

8 December 2025

[MHF product code: LEP 9b]

Appendix 1: Methodological details

We use a standard protocol for preparing living evidence profiles (LEP) to ensure that our approach to identifying research evidence is as systematic and transparent as possible in the time we are given to prepare the profile.

Engaging subject matter experts and citizen partners

Citizen partners were engaged after drafts of the living evidence profile report were completed to offer feedback and propose changes that help with clarity.

Organizing framework

To structure our searches for evidence to include in this LEP and to structure our analysis and the presentation of our findings, we drew on an organizing framework developed through the efforts of the [Global Commission on Evidence to Address Societal Challenges](#) (the Global Evidence Commission) following consultations with subject-matter experts and citizen partners, guidance from the [Citizen Leadership Group](#), and from the views and experiences elicited through a [series of citizen panels held in October 2022](#). This organizing framework categorized the range of strategies for supporting citizens to use evidence in everyday life into five overarching strategies. This LEP focuses on one of those strategies, namely making evidence-based available to citizens, which consists of two sub-strategies:

- building more trustworthy websites that feature evidence about a wide range of choices
- creating tools (sometimes called decision aids) like websites, videos and brochures that explain what evidence is available about different options alongside the pros and cons of each option (or citizen-friendly products).

We used these sub-strategies to organize the summary tables of the research evidence identified for this LEP.

Identifying research evidence

In April 2024, we searched for evidence syntheses (and protocols for evidence syntheses underway) and for single studies relevant to all five strategies developed by the [Global Evidence Commission](#) in six databases: [Health Systems Evidence](#), [Social Systems Evidence](#), [PubMed/MEDLINE](#), [EBSCOhost](#), [ProQuest](#) and [Web of Science](#). The detailed search strategies for each of the sub-strategies are available upon request.

We retrieved 4,299 total studies across all databases searched. Covidence software was used to coordinate screening with our team of researchers. After duplicates were removed, a single member of the research team assessed 3,304 for relevance to any of the five strategies based on a review of titles and abstracts. A second member of the team then

reviewed the allocations and identified potential discrepancies, which were discussed and reconciled between the two team members in a one-on-one meeting.

For the 1,007 studies that were considered relevant to strategy 2, a single member of the research team assessed the full text of each study, which resulted in a further 760 being removed, and a final set of 142 studies deemed eligible for the analysis. The team used a dedicated virtual channel to discuss and iteratively refine inclusion/exclusion criteria throughout the process, which provided a running list of considerations that all members could consult during the first stages of assessment. Several studies were removed during the final stages of analysis, which have been listed in Appendix 4.

We excluded documents that did not directly address the research question and the organizing framework. We were unable to extract key findings from documents that were written in languages other than Chinese, English, French, Portuguese or Spanish, or were not able to be translated to English via Google applications. We provided any documents that made it to full-text screening and did not have content available in these languages in Appendix 4 containing documents excluded at the final stages of reviewing.

Assessing relevance and quality of evidence

We assessed the relevance of each included evidence document as being of high or low relevance to the research question and sub-strategies of the organizing framework.

Two reviewers independently appraised the methodological quality of the included evidence documents using AGREE II. We used three domains in the tool (interest holder involvement, rigour of development and editorial independence) and classified guidelines as high quality if they were scored as 60% or higher across each of these domains. Disagreements were resolved by consensus with a third reviewer if needed. AMSTAR rates overall methodological quality on a scale of 0 to 11, where 11/11 represents an evidence synthesis of the highest quality. High-quality evidence syntheses are those with scores of eight or higher out of a possible 11, medium-quality evidence syntheses are those with scores between four and seven, and low-quality evidence syntheses are those with scores less than four. It is important to note that the AMSTAR tool was developed to assess evidence syntheses focused on clinical interventions, so not all criteria apply to those pertaining to health-system arrangements or to economic and social responses. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, an evidence synthesis that scores 8/8 is generally of comparable quality to another scoring 11/11; both ratings are considered 'high scores.' A high score signals that readers of the evidence synthesis can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the evidence synthesis should be discarded, merely that less confidence can be placed in its findings and that the evidence synthesis needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1): S8.)

Preparing the profile

Each included document is cited in the reference list at the end of the LEP. For each included evidence synthesis and single study, we prepared a small number of bullet points and an overarching declarative statement of the findings, alongside additional study characteristics (e.g., date of last search, methodological quality, study jurisdiction). Findings from all the evidence documents are then used to summarize key messages in the profile report. Protocols and titles/questions have their titles hyperlinked, given that findings are not yet available.

Appendix 2: Details about each identified evidence synthesis

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
<i>Sub-strategy 1:</i> Building more trustworthy websites that feature evidence about a wide range of choices (n=3) (Search 1, Search 2, Search 3)	Website design, content features and sociodemographic factors affect the perceived credibility and trustworthiness of web-based health information sources, with evidence showing website design, interactive features, clear layout and authority of the owner having a positive effect on trust and credibility (1)	High	No	1/9 (AMSTAR rating by McMaster Health Forum)	July 2016	No	None identified
	Why the public trusts certain websites and distrust others is influenced by antecedents of trust, including sociodemographics (e.g., age groups, education, income levels), information quality, ease-of-use and appearance, and perceived reputation of websites (2)	High	No	2/9 (AMSTAR rating by McMaster Health Forum)	November 2013	No	None identified
	Existing internet decision-making resources for patients considering surgery for ulcerative colitis are inaccessible with high reading levels, did not mention considerations of patient values, and were of low quality; there were suggestions that existing websites do not support decision-making and existing resources are needed (3)	High	No	3/9 (AMSTAR rating by McMaster Health Forum)	Not stated	No	None identified
<i>Sub-strategy 2:</i> Creating tools (sometimes called decision aids) like websites, videos and brochures that explain what evidence is available about different options alongside the pros and cons of each option (n=99) (Search 1, Search 2, Search 3)	Existing decision aids for lung cancer screening show promise in enhancing patient knowledge and reducing decisional conflict, and are generally well-received by both patients and physicians (4)	High	No	7/10 (AMSTAR rating by McMaster Health Forum)	December 2019	No	None identified
	Question prompt lists and decision aids, whether used independently or as part of a program, are both feasible and effective tools in hospital settings for facilitating communication about life-prolonging treatments with patients facing advanced diseases, particularly those with advanced cancer, leading to decreased patient anxiety, increased cues for discussing end-of-life care, and improved patient understanding of treatment options (5)	High	No	6/10 (AMSTAR rating by McMaster Health Forum)	January 2019	No	None identified
	Treatment decision aids for people with prostate cancer can increase patient knowledge and shared decision-making; however, most existing sources do not include families, are written in complex language, and are convoluted; this can be accounted for by co-designing tools with people with lived experiences, their family members and urologists (6)	High	No	3/9 (AMSTAR rating by McMaster Health Forum)	2014	No	None identified
	Decision aids are a feasible and effective approach to supporting healthcare decisions for postmastectomy breast reconstruction by increasing patient awareness and health literacy and shared decision-making (7)	High	No	6/11 (AMSTAR rating by McMaster Health Forum)	2019	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	Evidence on the quality of colorectal cancer (CRC) decision aids (DAs) is too limited and there are substantive differences in the quality of DA communications between prostate, breast and colon cancers (8) - Since CRC patients are known to have low health literacy skills, having visualized, plain language DAs is crucial - There is also a need for personalized health information in CRC DAs to facilitate patient participation in the decision-making process	High	No	5/9 (AMSTAR rating by McMaster Health Forum)	February 2019	No	None identified
	Decisions aids were found to increase patient knowledge and confidence and reduce decisional stress for patients making decisions about prostate cancer testing (9)	High	No	8/11 (AMSTAR rating by McMaster Health Forum)	March 2024	No	None identified
	Patients and caregivers identified efficacy, adverse effects, cost and quality of life as key decision-making factors, and while research on patient decision aids for adult patients with hematologic malignancies and their caregivers is limited, available studies show that patient decision aids are associated with increased knowledge, higher patient satisfaction, reduced decisional conflict, and support for shared decision-making (10)	High	No	8/10 (AMSTAR rating by McMaster Health Forum)	August 2020	No	None identified
	Decision aids are successful to inform decision-making regarding mammogram screening in women with breast cancer, but may not be sufficient to change behaviour; the effectiveness of decision aids may be improved by clearing stating bias and using modern technology to maintain attention (11)	High	No	5/9 (AMSTAR rating by McMaster Health Forum)	2020	No	None identified
	While decision aids for prostate cancer in uro-oncology are high-quality, there is a clear need for improved, targeted instruments for kidney and bladder cancer, highlighting areas for enhancement in personalization and adherence to international standards (12)	High	No	6/11 (AMSTAR rating by McMaster Health Forum)	May 2020	No	None identified
	Decision aids can improve decisional conflict and knowledge for women with BRCA₁ and BRCA₂ genes for breast cancer; however, all studies had high or unclear risk of bias (13)	High	No	4/10 (AMSTAR rating by McMaster Health Forum)	2019	No	None identified
	Self-administered decision aids for colorectal cancer screening may increase participation and knowledge; however, heterogenous comparators and different means of measuring informed choice may prevent a comprehensive understanding (14)	High	No	9/11 (AMSTAR rating by McMaster Health Forum)	2021	No	None identified
	Patient decision aids for cancer treatment improved understanding of treatment options, increase shared decision-making, physician-patient	High	No	4/9 (AMSTAR rating by	2021	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	rapport, comfort in expressing concerns and asking questions, and decision satisfaction (15) - Limitation of patient decision aids included little information and challenges with accessing technology - Nurses may facilitate the implementation of patient decision aids and can help patients better understand information provided			McMaster Health Forum)			
	Decision aids for locally advanced breast cancer scored adequate or better on the International Patient Decision Aids Standards and can improve patient knowledge, shared decision-making, and anxiety (16) Educational level was related to better understanding for decision choices	High	No	4/9 (AMSTAR rating by McMaster Health Forum)	2021	No	Education
	Relatively few randomized controlled trials (RCTs) described their processes for developing cancer-related patient decision aids (PtDAs) and for tailoring these PtDAs to disadvantaged patients; among the PtDAs for which this information was available, consideration of patient education, health literacy, and race/ethnicity was common, while other social determinants of health were not generally addressed (17) - PtDAs may improve communication between patients with low health literacy and their providers, but the uptake and accessibility of PtDAs may be relatively low among patients with low literacy - While PtDAs reflecting racial/ethnic diversity may enhance patient engagement, their impact likely varies between racial/ethnic groups	High	No	4/11 (AMSTAR rating by McMaster Health Forum)	December 2013	Partial (only for SR)	- Place of residence - Race/ethnicity /culture/ language - Gender/sex - Education - Socio-economic status
	There are few German patient decision aids for oncological patients, and existing ones are of low quality according to the Patient Decision Aids Standards (18)	High	No	4/9 (AMSTAR rating by McMaster Health Forum)	2020	No	None identified
	In the context of decision-making related to CRC screening, decision aids can enhance patient knowledge relative to both usual care and provision of CRC information; while DAs may also improve screening intention and uptake relative to usual care, the provision of CRC information may be able to achieve the same outcomes (19)	High	No	7/11 (AMSTAR rating by McMaster Health Forum)	July 2015	No	None identified
	In the context of treatment for localized prostate cancer, many paper-, web-, computer- and video-based decision aids do not fulfil criteria of International Patient DA Standards, and their use of communicative aspects (e.g., visuals) varies greatly; future studies should explore whether the use of such communicative aspects improves the quality of shared decision-making (20)	High	No	5/9 (AMSTAR rating by McMaster Health Forum)	2018	No	Gender/sex
	In the cancer care context, PtDAs can improve knowledge of and reduce decisional conflict around fertility preservation, though PtDA use seems	High	No	4/9	March 2018	No	Gender/sex

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	limited; while patients, their parents and clinicians are generally satisfied with PtDAs, some note negative emotions associated with PtDA use (21)			(AMSTAR rating by McMaster Health Forum)			
	Among DAs for women with early-stage breast cancer, IPDAS scores range from 31–92%, with most DAs performing well on dimensions related to treatment options, value clarification, transparency and decision guidance but varying in their fulfilment of other criteria; moreover, the DAs' communicative aspects scores range from 31% to 68%, with most DAs scoring well in terms of accessibility but varying their use of other communicative aspects (e.g., personalization) (22)	High	No	7/9 (AMSTAR rating by McMaster Health Forum)	March 2018	No	• Gender/sex
	In the cancer care context, web-based decision aids (WDAs) may improve some decision indicators (e.g., patient knowledge, decisional conflict, informed choice); however, heterogeneity and methodological limitations were seen across studies, and further research is required to confirm whether WDA can support high-quality cancer-related decision-making by patients (23)	High	No	6/9 (AMSTAR rating by McMaster Health Forum)	September 2020	No	None identified
	A diverse range of decision aids to support cancer survivors' engagement with survivorship care services after primary treatment until the end of life were found to be acceptable and improved knowledge outcomes, but decisional outcomes were inconclusive; implementation barriers related to care connectivity, self-efficacy and perception of usefulness among clinicians were identified [Synthesis of mainly low-quality evidence] (24) - Assessed decision aids shared similar content structure, starting with the decision context, followed by a list of options presented as storyboards or anecdotes, imaging results, pictorial information on risks, and comparison tables - Decision aids also included personalized cost estimates for different options (in the case of choosing an insurance plan) and exercises for value clarification - Information about different options were presented in an interactive program as dynamic pathways for users to learn about the outcomes of each possible choice	High	No	7/10 (AMSTAR rating by McMaster Health Forum)	September 2021	No	None identified
	Web-based decision aids for breast cancer screening improved the patient-centred outcomes of knowledge, decision conflict and the proportion of those making an informed choice in women aged 50 years and below, but had no effect on screening intention or decision regret [Important heterogeneity among study findings] (25)	High	No	5/11 (AMSTAR rating by McMaster Health Forum)	February 2020	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	- Decision aids were defined as those providing information on at least two screening options' pros and cons that facilitate consideration about trade-offs - All assessed decision aids also included introduction to issues in decision-making, charts and pictographs for concepts of confusion (e.g., overdiagnosis, false positives), and breast cancer risk by age group, while others included risk assessment algorithms that described risk factors to users and values clarification exercises						
	The use of breast cancer screening patient decision aids increased reluctance among younger women (38–50 years of age) to begin mammography screening [Synthesis of mainly low-quality evidence] (26) - The national implementation of breast cancer screening patient decision aids in clinical practice may lead to a 77% increase in the number of younger women who do not wish to begin mammography screening - In women over 68 years of age, breast cancer screening patient decision aids may not affect their continuation of mammography screening - Assessed decision aids included evidence on important breast screening outcomes and assessment of women's knowledge about screening benefits/harms	High	No	9/11 (AMSTAR rating by McMaster Health Forum)	August 2016	Yes	None identified
	Decision aids for cancer related decisions improved decision-making and decreased decisional conflict and indecision, compared to controls receiving usual care or alternative (unspecified) treatment (27)	High	No	6/11 (AMSTAR rating by McMaster Health Forum)	2015	No	None identified
	Decision aids for breast cancer treatment, including surgery, radiotherapy, endocrine and chemotherapy, can decrease decisional conflict and increase treatment knowledge and satisfaction; however, the effect on treatment decision is variable (28) - The variable effect on treatment decision may be because breast cancer decisions are influenced by many more factors other than decision aids - Decision aids were usually focused on one treatment when breast cancer management often involves multiple treatments	High	No	7/10 (AMSTAR rating by McMaster Health Forum)	2015	No	None identified
	Vaccination decision aids may have a slight positive impact on increasing vaccine uptake, moderately enhancing intent to vaccinate, and reducing decisional conflict, with variations in effectiveness across studies and a need for standardized decision aids for better comparisons (29)	High	No	7/11 (AMSTAR rating by McMaster Health Forum)	July 2019	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	Only two of the eight studies in this review identified that vaccination decision aids can statistically reduce decision-making conflict and vaccine hesitancy; additional research is needed to understand their impact (30)	High	No	4/9 (AMSTAR rating by McMaster Health Forum)	2020	No	None identified
	Publicly available decision aids for primary cardiovascular disease (CVD) prevention are insufficient for individuals with low literacy due to 1) high readability and 2) limited explanation of CVD mechanisms, risks and management strategies (31)	High	No	5/9 (AMSTAR rating by McMaster Health Forum)	2019	No	None identified
	Decision aids for people with chronic musculoskeletal pain can improve patients' knowledge of pain treatment options, but overall showed inconclusive results regarding their efficacy at improving patient outcomes, suggesting that additional resources are needed to support shared decision-making for pain treatments (32)	High	No	7/9 (AMSTAR rating by McMaster Health Forum)	2020	No	None identified
	Decision aids are beneficial and recommendable by participants for promoting advance care planning (ACP), with video-based decision aids proving to be beneficial for informed treatment choice and patient-centred outcomes and paper-based decision aids showing benefits for treatment engagement (33) For informed treatment choice, opinions regarding decision aid, and patient-centred outcomes (including patient expectations and quality of life), the evidence mostly supports video-based ACP decision aid formats, while paper-based decision aids are most recommended for ACP patient engagement	High	No	6/9 (AMSTAR rating by McMaster Health Forum)	October 2014	No	None identified
	Decision aids improve patient knowledge and decisional confidence of atrial fibrillation management and have mixed effects on the uptake and adherence to preventative stroke treatments (34)	High	No	8/11 (AMSTAR rating by McMaster Health Forum)	August 2020	No	None identified
	The use of decision aids in left ventricular assist device-eligible patients with advanced heart failure showed no significant change in left ventricular assist device knowledge (95% CI -0.24 to 0.39) or decisional conflict (95% CI -5.28 to 2.32), with evidence certainty ranging from moderate to very low, indicating no difference in patients' left ventricular assist device knowledge following education (35)	High	No	5/11 (AMSTAR rating by McMaster Health Forum)	June 2023	No	None identified
	Decision aids for shared decision-making were beneficial for decision-making quality and treatment outcomes among coronary heart disease patients; additionally, while shared decision-making is applicable to	High	No	9/11 (AMSTAR rating by	June 2022	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	emergency heart disease, none of the included studies evaluated its use in coronary heart disease emergencies (36)			McMaster Health Forum)			
	Patient decision aids are most effective when co-designed with a healthcare professional and can improve diabetes health literacy and shared decision-making regarding medication, blood glucose level, hypertension and cholesterol outcomes (37)	High	No	4/10 (AMSTAR rating by McMaster Health Forum)	2018	No	None identified
	Patient decision aids for aortic stenosis and coronary artery disease can improve awareness in patients; however, they may not address the needs of patients with low health literacy (38) Patients with low health literacy are rarely approached to contribute to the development of decision aids, which can contribute to bridging gaps in healthcare	High	No	6/11 (AMSTAR rating by McMaster Health Forum)	2023	No	None identified
	Most identified DAs seem to support the clarification of care options alongside discussion of potential harms and benefits with patients who have chronic conditions; however, it is unclear whether other elements of shared decision-making (SDM) are supported by DA design, and the association between SDM elements supported by DA design and SDM outcomes cannot be evaluated (39)	High	No	7/9 (AMSTAR rating by McMaster Health Forum)	November 2017	No	None identified
	Decision aids for palliative care decisions can increase knowledge and reduced decisional conflict, but there are few high-quality decision aids, and this may be improved by involving parents in design stages (40)	High	No	6/9 (AMSTAR rating by McMaster Health Forum)	2018	No	None identified
	Only five decision aids for family caregivers of individuals with advanced dementia were identified, highlighting a deficiency in tailoring information to caregivers' preferences and limited use of technology, indicating a need for future research to explore technology-enhanced decision aids tailored to diverse caregivers' needs in end-of-life decision-making (41)	High	No	5/9 (AMSTAR rating by McMaster Health Forum)	February 2018	No	None identified
	Decision aids like videos, booklets and web tools improved knowledge and communication for dementia care but need to address multiple decision-making aspects to better support complex care needs (42)	High	No	7/11 (AMSTAR rating by McMaster Health Forum)	March 2018	No	None identified
	Decision aid interventions for family caregivers of individuals with advanced dementia improve knowledge and reduce decisional conflict regarding feeding options but do not significantly change caregiver preferences or actual tube feeding use; future interventions should incorporate individualized support and cultural adaptation frameworks for greater impact (43)	High	No	4/9 (AMSTAR rating by McMaster Health Forum)	June 2022	No	Age

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	Decision aids for home and community care, addressing various decision points, were often relevant to older adults but frequently did not meet International Patient Decision Aid Standards criteria, and their development and use lacked substantial involvement from interprofessional teams, including nurses, underscoring the need for increased collaboration in designing decision aids to facilitate shared decision-making in home care settings (44)	High	No	6/9 (AMSTAR rating by McMaster Health Forum)	November 2018	No	None identified
	End-of-life decision-making tools, like advance care planning and linguistically tailored aids, improved outcomes for ethnocultural minorities by increasing care plan documentation and reducing preferences for life-prolonging care (45)	High	No	6/9 (AMSTAR rating by McMaster Health Forum)	June 2021	No	None identified
	Evidence on use of decision aids for end-of-life care indicate consistently positive outcomes (e.g., knowledge and communication improvements, decisional conflict, and anxiety and well-being), especially when the International Patient Decision Aid Standards are used in the development of decision aids (46)	High	No	4/10 (AMSTAR rating by McMaster Health Forum)	February 2023	No	None identified
	Patients nearing end-of-life decision-making have more diverse and extensive needs than previously recognized, and existing decision aids fail to address key gaps, including inconsistent acknowledgment, elicitation and documentation of individual preferences for the amount of information provided, the desired level of participation in decision-making, and the involvement of families and healthcare professionals (47)	High	No	5/9 (AMSTAR rating by McMaster Health Forum)	January 2017	No	None identified
	Healthcare decision aids showed promising results (with moderate to high quality) in older adults, including increased knowledge, decreased decisional conflict, and improved patient-provider communication; however, the effects on decision-making satisfaction and shared decision-making are inconsistent (48)	High	No	9/11 (AMSTAR rating by McMaster Health Forum)	2022	No	None identified
	Decision aids are promising interventions for improving the knowledge, risk perception and participation in decision-making of older adults, while reducing decisional conflict; however, it is unclear whether the investigated DAs are effective among certain subgroups (e.g., those aged 80+ years, those with low levels of education) (49) While the included studies had samples with mean ages of 65+, the study designs (e.g., choice of outcome measurement tools) may not have been appropriate for older adults	High	No	5/11 (AMSTAR rating by McMaster Health Forum)	February 2014	Partial (only for SR)	- Education - Personal characteristics associated with discrimination
	Decision aids for older patients at the end of life were generally acceptable, and seemed to improve knowledge of care options among patients and surrogate decision-makers while reducing decisional conflict,	High	No	5/9 (AMSTAR rating by	May 2015	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	their components lacked disease-specific prognostic information [Synthesis of mainly low-quality evidence] (50) - A wide variety of end-of-life decision aid formats were identified, including different combinations of print, computerized format, audio and video - Decision aid involvement included patients, surrogate decision-makers, nurses, or out-of-hospital elderly, with staff administration (including interview or decision-making scenarios) or self-administration - The International Patient Decision Aids Standards (IPDAS) criteria covered by the identified decision aids included presentation of options, engagement of health providers for guidance, and measured effectiveness; identified gaps included lack of patient values integration, numeric probabilities, and step-by-step decision process support			McMaster Health Forum)			
	Moderate-to-high evidence supports the use of patient decision aids in obstetrics and gynecology to reduce decisional conflict and improve knowledge without affecting anxiety or satisfaction, while the limited available evidence on their cost-effectiveness suggests potential financial savings, though their effectiveness, applicability and feasibility in low- and middle-income countries remain untested by randomized controlled trials (51)	High	No	5/11 (AMSTAR rating by McMaster Health Forum)	July 2019	No	None identified
	Most women considering vaginal birth after caesarean expressed dissatisfaction with the information provided by healthcare professionals and decision aids, as it often failed to address their specific needs, particularly in terms of engagement, knowledge acquisition and emotional support (52)	High	No	4/9 (AMSTAR rating by McMaster Health Forum)	June 2023	No	• Gender/sex
	Decision aids may reduce pregnancy-related decisional conflict among women with pre-existing morbidity or previous C-section, and increase women's knowledge of their condition (53)	High	No	9/11 (AMSTAR rating by McMaster Health Forum)	September 2021	No	• Gender/sex
	Decision aids for prenatal testing for Down syndrome did not follow guidelines from the International Patient Decision Aid Standards, provide unbiased information, and were not easily accessible, all of which may limit their use for healthcare professionals (54)	High	No	6/9 (AMSTAR rating by McMaster Health Forum)	Published September 2015	No	None identified
	Patient decision aids were more effective than usual care in reducing total Decisional Conflict Scale scores and improving decision quality; these	High	No	7/9 (AMSTAR rating by	October 2018	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	findings were incorporated into the revised Ottawa Decision Support Framework (55) • Patient decision aids increased accurate risk perceptions and increased congruence between informed values and chosen options			McMaster Health Forum)			
	Despite multiple decisions required for gender-affirming therapies, only one patient decision aid has been developed for transmasculine genital reconstruction (56)	High	No	6/9 (AMSTAR rating by McMaster Health Forum)	February 2020	No	• Gender/sex
	In the context of pregnancy care, decision aids may enhance patient knowledge while reducing decisional conflict and anxiety; however, their use does not seem to improve health outcomes or healthcare costs (57)	High	No	8/11 (AMSTAR rating by McMaster Health Forum)	March 2011	No	• Gender/sex
	Decision aids improved knowledge and decisional conflict for people making health treatment and or screening decisions, and may improve their active role in decision-making, accuracy of risk perceptions, and values-congruent choices; similar improvements in some outcomes were seen when decision aids used before consultations and those used during consultations were analyzed separately (58) • All assessed decision aids contained information on options, outcomes and values clarification, while most decision aids contained information about the clinical problem and outcome probabilities • Assessed decision aids spanned 50 different decisions, commonly covering surgery, cancer screening, genetic testing and medications • Decision aids were found to have no effect on decision-making satisfaction and quality of life health outcomes	High	No	10/11 (AMSTAR rating by McMaster Health Forum)	April 2015	Yes	None identified
	In the "Share to Care (S2C)" Shared Decision Making project, the development of 80 patient decision aids at University Hospital Kiel revealed that despite rigorous evidence reviews, almost 70% of outcome-specific information for decision aids was based on low-quality, non-directly comparative evidence, highlighting the challenges in obtaining high-quality evidence and emphasizing the importance of transparently communicating the best available evidence to patients (59)	High	No	1/9 (AMSTAR rating by McMaster Health Forum)	Not specified	No	None identified
	In chronic care, a significant literature gap exists regarding the timing of PtDA utilization alongside SDM, with the findings highlighting that, while SDM often extends beyond medical visits, PtDAs are commonly assessed for process-related and proximal outcomes (60)	High	No	3/9 (AMSTAR rating by McMaster Health Forum)	March 2021	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	Patient decision aids work best when they combine research evidence (e.g., systematic reviews), patient experiences and expert insights, with clear explanations of how the evidence was gathered to ensure transparency and usefulness (61)	High	No	7/9 (AMSTAR rating by McMaster Health Forum)	November 2015	No	None identified
	Decision aids, particularly in the context of health disparities among racial and ethnic minorities, have demonstrated effectiveness in improving patient-doctor communication and decision quality outcomes, primarily focused on cancer screening, but there is limited research for sexual and gender minorities, and the range of clinical decisions covered is not comprehensive for minority populations (62)	High	No	4/9 (AMSTAR rating by McMaster Health Forum)	2013	No	- Race/ ethnicity/ culture/ language - Gender/sex
	There is inconclusive evidence on the effectiveness of the inclusion of personal stories in healthcare decision aids; however, it may invoke an emotional response or support individuals with lower levels of health literacy (63)	High	No	4/9 (AMSTAR rating by McMaster Health Forum)	2013	No	None identified
	The option of 'no active intervention' for decision aids in healthcare may often be underutilized unless it is discussed by clinicians and patients explicitly, but this option is important for facilitating such discussions (64) In this study, a decision aid was defined as “an evidence-based tool designed to help patients make specific and deliberated choices among healthcare options”	High	No	0/10 (AMSTAR rating by McMaster Health Forum)	October 2018	No	None identified
	Decision aids should be tested in real life settings and should include contributions from people with lived experiences and healthcare professionals to ensure their relevance, different levels of information that patients can select from, consistent formatting, and clearly state risks and biases (65) The International Patient Decision Aid Standards can help ensure quality when designing decision aids	High	No	1/9 (AMSTAR rating by McMaster Health Forum)	Published Dec 2019	No	None identified
	A cost-effectiveness analysis found that, in the care of women with menorrhagia, the use of a PtDA with a nurse interview was dominant relative to both usual care and a PtDA without a nurse interview; however, the broader evidence base on PtDAs suggests that PtDA administration and delivery will pose upfront costs, and their value for money in the long term is unclear (66)	High	No	3/10 (AMSTAR rating by McMaster Health Forum)	January 2013	No	Gender/sex
	Patient decision aids can help patients make decisions by 48%; however, decisions made using decision aids are not always congruent with patient values; further studies are needed to explore how decision aids can incorporate patient values (67)	High	No	5/11 (AMSTAR rating by McMaster Health Forum)	2012	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	In the context of breathlessness care, patient education materials (PEMs), of which patient decision aids are a subtype, may improve patient health outcomes (e.g., the severity of breathlessness); however, only five of the 88 identified PEMs fulfilled the IPDAS criteria, and not all PEMs seem equally effective, particularly for disadvantaged populations with low literacy (68)	High	No	9/11 (AMSTAR rating by McMaster Health Forum)	November 2020	No	- Education - Personal characteristics associated with discrimination
	Patient decision aids are more effective when individuals are actively seeking healthcare strategies, suggesting that motivation and engagement are key features for developing and utilizing decision aids in clinical settings (69)	High	No	3/11 (AMSTAR rating by McMaster Health Forum)	2011	No	None identified
	Decisions aids may support problem solving and shared decision-making in healthcare; however, they typically do not address clinical attitudes or biases (70) Only four studies involving decision aids were used in this review	High	No	3/9 (AMSTAR rating by McMaster Health Forum)	2016	No	None identified
	Decision aids showed potential to improve smoking cessation knowledge, decisional quality and quit attempts, but their effectiveness for sustained smoking cessation was inconclusive (71)	High	No	9/10 (AMSTAR rating by McMaster Health Forum)	July 2017	No	None identified
	Identified decision aids were mostly focused on substance use and smoking, are typically combined with other interventions, and show positive effects on improving health behaviours across different populations (72)	High	No	5/10 (AMSTAR rating by McMaster Health Forum)	2018	No	None identified
	Artificial intelligence decision aids, as perceived by both clinicians and patients across various clinical settings, were valuable tools supporting shared decision-making at different stages of the patient journey, promoting engagement, communication, confidence and compliance (73)	High	No	2/9 (AMSTAR rating by McMaster Health Forum)	October 2020	No	None identified
	Integrating media-rich or interactive features like content control, tailoring, and patient narratives in computer-based decision aids improves the quality of preference-sensitive decision-making (74)	High	No	3/11 (AMSTAR rating by McMaster Health Forum)	2013	No	None identified
	Computerized clinical decision support systems can increase shared decision-making, patient autonomy, and continuity of care and reduce administrative burden, but may be inaccessible due to technical difficulties (75)	High	No	3/9 (AMSTAR rating by	2010	No	Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	- Remote areas with fewer resources might not have the capacity to design and maintain complex systems - Experience with health information technology is required for the successful adaptation of computerized clinical decision support systems - To account for the digital divide, alternative methods should be available			McMaster Health Forum)			
	Computer-based clinical decision support systems have slight positive effects on patient-reported outcomes; they should be co-designed with healthcare professionals, administrative staff and patients (76)	High	No	4/9 (AMSTAR rating by McMaster Health Forum)	2015	No	None identified
	Web-based decision aids performed similarly to printed and video decision aids for prostate cancer patients in terms of increasing patient knowledge and decision confidence, but performed lower than video-based decision aids in increasing screening participation (77) - Web-based decision aids increased patient knowledge and decreased decisional conflict, while also reducing practitioner control in decision-making compared to usual care - There was no identified difference in web-based aids compared to printed decision aids across any outcomes	High	No	11/11 (AMSTAR rating by McMaster Health Forum)	November 2016	No	None identified
	To enhance the use of digital decision aids for cardiovascular diseases, it is crucial to identify the optimal timing for their implementation within the care process and integrate them into electronic medical records and information and communication technology systems; additionally, training clinicians in shared decision-making and the use of decision aids could address their knowledge gaps and reduce variability in decision aid usage (78)	High	No	4/9 (AMSTAR rating by McMaster Health Forum)	November 2021	No	None identified
	Intervention studies provide strong evidence that e-media platforms are effective in promoting colorectal cancer screening, with e-media decision aids significantly increasing participation in screening, as individuals using them were nearly twice as likely to complete the screening compared to those in comparison groups, highlighting their potential in the context of the rapid growth of electronic gadgets (79)	High	No	7/11 (AMSTAR rating by McMaster Health Forum)	December 2020	No	None identified
	Video decision aids may be potentially effective in influencing patient preferences for goals of care, facilitating goals-of-care conversations with healthcare providers, and improving advanced care planning knowledge scores; however, they had no impact on patient transfer, advance directive completion or preferences for intubation (80)	High	No	9/11 (AMSTAR rating by McMaster Health Forum)	June 2021	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	Technology based decision aids for contraceptive use display positive effects for 36% contraceptive use, 27% continuation, general knowledge and self-efficacy (81)	High	No	8/11 (AMSTAR rating by McMaster Health Forum)	2022	No	None identified
	Online decision aids for prenatal screening may encourage personal reflection and shared decision-making, but currently do not meet the International Patient Decision Aids Standards nor include information on common risks (e.g., miscarriage) and decisions experienced by patients (e.g., decision to have amniocentesis) (82) • Decision aids can be improved by including up-to-date information	High	No	5/9 (AMSTAR rating by McMaster Health Forum)	Published April 2022	No	None identified
	DAs, particularly web-based formats, significantly enhance SDM by improving patient knowledge, reducing decisional conflict, increasing patient involvement in healthcare decisions, and patient satisfaction while reducing decision conflict and regret (83)	High	No	6/10 (AMSTAR rating by McMaster Health Forum)	July 2022	No	None identified
	Interactive digital decision aids in prenatal screening improved knowledge, decisional conflict and risk perceptions about miscarriage related to testing procedure among pregnant women (84) • Interactive decision aids, as distinguished from passive decision aids, engages users through two-way communication, provide non-directive evidence (risks and benefits) on different options, and help clarify personal values • Assessed decision aid formats included web-based, computerized (audio-, video- and text-based), game-based and interactive multimedia	High	No	8/11 (AMSTAR rating by McMaster Health Forum)	August 2021	No	None identified
	Online patient decision aids for thickness rectal prolapse surgery are of poor quality and accessibility, consequently obstructing shared decision-making; future decision aids should incorporate patient needs and accurate information from medical professionals (85)	High	No	2/9 (AMSTAR rating by McMaster Health Forum)	Published November 2017	No	None identified
	For those considering the use of genetic testing, decision aids may be an effective addition to genetic counselling by allowing counsellors to feel more informed about their decision and improving their knowledge about genetic risks, though there was little effect on their decisional conflict and psychological outcomes (86) • It could not be concluded whether the sole use of decision aids without genetic counselling could effectively inform decisions about the use of genetic testing	Low	No	8/10 (AMSTAR rating by McMaster Health Forum)	May 2022	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	Assessed decision aid formats included web-based, film presentation, PowerPoint presentation, computer-based and booklet-based						
	11 existing procedures were identified across four phases for the cultural adaptation and validation of patient decision aids (87) - The motivation of the study was to identify methods for the adaption of existing decision aids to mitigate the duplication of efforts in their development 11 procedures for decision aid adaptation and validation were identified across four phases: exploring the decision aid in the new cultural context, adapting the decision aid to the new cultural context, lab testing the adapted decision aid, and field testing the adapted decision aid - Different decision aid formats gave rise to different challenges in cultural adaptation (e.g., adapting written material to the literacy level of the target population; adapting audio-video formats such that the target population can identify with the characters) - Assessed decision aid formats included computer-based, CD-ROM, web-based, interpersonal counselling program, written and visual materials, oral presentations, and video material	Low	No	4/9 (AMSTAR rating by McMaster Health Forum)	October 2017	No	None identified
	Consistent evidence showed that contraceptive decision aids may increase short-term knowledge of and interest in contraception among adolescents and young adults, but the effectiveness was unclear on other outcomes including contraception use, unintended pregnancies and satisfaction with decision-making process due to low strength of evidence (88) Assessed decision aid formats included mobile application, video, interactive multimedia, social media, website and paper handout	Low	No	7/10 (AMSTAR rating by McMaster Health Forum)	March 2021	No	None identified
	Evidence suggested that patient decision aids for people with type 2 diabetes improved decisional conflict, knowledge of the condition, risk perception about cardiovascular complications, and decision-making participation, but no effect on medication adherence and glycemic control were found (89) - Assessed decision aids included paper-based and web-based formats, those that focused on decisions about medications and others on treatment goal setting, those used before and/or during clinical consultation, and those that were standalone and others that were used as an aspect of a more complete shared decision-making intervention - The assessed decision aids were reported to be helpful and easy to use by clinicians and people with type 2 diabetes	Low	No	6/11 (AMSTAR rating by McMaster Health Forum)	January 2018	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	Evidence suggested that decision aids for anticoagulation therapy in patients with atrial fibrillation reduced decisional conflict, improved knowledge about the disease, and increased oral anticoagulants uptake, while the effects were inconclusive on stroke and major bleeding incidence [Synthesis of low- to moderate-quality evidence] (90) - Assessed decision aid formats included computerized, booklet and audiotape, and mobile-based - Decision aids may be more effective if delivered before rather than during consultation - Decision aids that included only situation diagnosis and option clarification may be inadequate in facilitating informed decisions - No difference in shared decision-making outcomes were found between computer-based and paper-based decision aid formats	Low	No	6/11 (AMSTAR rating by McMaster Health Forum)	January 2021	No	None identified
	The effectiveness of patient decision aids for breast, prostate, lung and colorectal cancer treatment may be similar to other decision support interventions (e.g., question prompt lists, consultation audio recording) with no significant differences found in knowledge, satisfaction, anxiety or decisional conflict outcomes (91)	Low	No	6/11 (AMSTAR rating by McMaster Health Forum)	June 2011	No	None identified
	Computerized decision aids for shared decision-making in seriously ill patients may improve patient-centred outcomes including decisional conflict, knowledge and unnecessary treatment [Synthesis of mainly low-quality evidence] (92) A study found patients to have higher satisfaction with the use of decision aid if they had higher education levels and poorer physical functioning	Low	No	6/9 (AMSTAR rating by McMaster Health Forum)	February 2016	No	- Education - Personal characteristics associated with discrimination
	Interactive multimedia decision aids for women considering genetic testing for familial breast cancer were scarce, mostly not truly interactive, and limited in applicability to a wide range of countries and health system contexts (93) Assessed decision aid formats included CD-ROM and website, and there was limited information about their process of development, evidence base and systematic nature	Low	No	1/9 (AMSTAR rating by McMaster Health Forum)	May 2006	No	None identified
	Patient decision aids based on pre-produced videos had positive or no effect; were used for screening, treatment adherence or treatment decisions; and most commonly addressed cancer screening, risk reduction, advance care planning and adherence to provider recommendations (94)	Low	No	3/9 (AMSTAR rating by McMaster Health Forum)	December 2016	No	None identified
	The use of decision aids in cardiac surgery patients, including current status, outcome indicators, and factors influencing clinical practice	Low	No	6/9 (AMSTAR rating by	January 2022	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	implementation, reveals that their application is primarily focused on elective surgery (95)			McMaster Health Forum)			
	Multidisciplinary clinics, where patients and clinicians work through the decision-making process together, were found to be a superior mode of delivering decisional support than other formats, given their nature and capability to enhance the shared decision-making process (96)	Low	No	6/10 (AMSTAR rating by McMaster Health Forum)	December 2016	No	None identified
	Patient decision aids may not include all required information to support patients in making informed decisions; information frequently omitted from patient decision aids included description of procedures, potential harms and patient concerns (97) - It is important to note that decision aids might not be comprehensive in the attempt to reduce cognitive burden on patients - Decision aids are typically developed by healthcare professionals, but patient concerns may not be the same as concerns perceived by healthcare professionals	Low	No	2/9 (AMSTAR rating by McMaster Health Forum)	2006	No	None identified
	Predictors to participate in decision-making using information sheets (e.g., question prompt, decision aids, audio tapes) included higher education, female sex, presence of breast cancer, and presence of prostate cancer (98)	Low	No	3/10 (AMSTAR rating by McMaster Health Forum)	2003	No	- Gender/sex - Education
	Decision aids for prostate cancer screening can improve patient knowledge and decision-making involvement, and reduce decisional conflict; however, patient literacy was not adequately accounted for in studies (99)	Low	No	6/11 (AMSTAR rating by McMaster Health Forum)	2006	No	None identified
	Most knowledge translation strategies for genetic testing are based on the United States and United Kingdom, are focused on breast, lung and ovarian cancer, and are of low quality, but still demonstrate positive effects on patient knowledge and well-being (100)	Low	No	5/9 (AMSTAR rating by McMaster Health Forum)	2014	No	None identified
	Decision aids for prostate cancer treatment can improve knowledge and shared decision-making and decrease anxiety and distress; however, their influence on treatment choice is unclear (101) - Decision aids also include guidance, as information may not be sufficient to support decision-making - Some decision aids do not include all treatments available - Many decision aids do not include information on risks or bias	Low	No	6/10 (AMSTAR rating by McMaster Health Forum)	2009	No	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	Cancer-related decision aids significantly improved knowledge of cancer screening options (p <0.001, 95% CI 0.27 to 0.73) compared to usual practice, but not anxiety or treatment choices; additionally, outcomes measures were inconsistently assessed (102)	Low	No	4/11 (AMSTAR rating by McMaster Health Forum)	2007	No	None identified
Protocol	A systematic review of decision aids that facilitate elements of shared decision-making in chronic illnesses: A review protocol (103)						
Protocol	User-centered design and the development of patient decision aids: Protocol for a systematic review (104)						
Protocol	Developing a complex intervention to support timely engagement with palliative care for patients with advanced cancer in primary and secondary care in the UK: A study protocol (105)						

Appendix 3: Details about each identified single study

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
Sub-strategy 1: Building more trustworthy websites that feature evidence about a wide range of choices (n=2)	Patient-oriented websites containing key information for breast cancer diagnosis provide a reliable method of communicating information and should include 1) integrated and detailed information on different stages and processes and 2) evidence-based suggestions written in lay language (106) A total of 12 breast cancer patients were interviewed to provide their feedback on a patient-oriented website for women diagnosed with breast cancer	High	<i>Publication date:</i> May 2008 <i>Jurisdiction studied:</i> United States <i>Methods used:</i> Qualitative study	None identified
	LetsTalksShots, a personalized vaccine risk communication website, combines evidence and lived experience to develop tailored animations, prompts and relevant information to provide personalized recommendations and help reduce vaccine hesitancy across different age groups (107) Older adults described being more open to new information while adults with children were more hesitant to vaccine information than adults without children	High	<i>Publication date:</i> June 2023 <i>Jurisdiction studied:</i> North America <i>Methods used:</i> Mixed methods survey	Age
Sub-strategy 2: Creating tools (sometimes called decision aids) like websites, videos and brochures that explain what evidence is available about different options alongside the pros and cons of each option (or citizen-friendly products) (n=17)	Key components to successful decision aids include product clarity, relevance to end users, meaningful engagement of product users during development, feasible use, regular evaluation, sustainable development, and public awareness (108) This study explored the development of knowledge mobilization products for healthcare research	High	<i>Publication date:</i> December 2022 <i>Jurisdiction studied:</i> United States <i>Methods used:</i> Longitudinal case study	None identified
	Decision aids, including plain language and simple images, can improve understanding and shared decision-making in women with breast cancer regardless of socio-economic status or level of literacy (109)	High	<i>Publication date:</i> November 2016 <i>Jurisdiction studied:</i> United States <i>Methods used:</i> Mixed methods	Socio-economic status
	An update was made to the process recommended by the International Patient Decision Aid Standards Collaboration for the systematic development of decision aids, producing a new reporting checklist (DEVELOPTOOLS) to further principles of user-centred design in decision aid development (110)	High	<i>Publication date:</i> June 2021 <i>Jurisdiction studied:</i> Canada	- Place of residence - Socio-economic status

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
	- Several strategies are used by decision aid developers to involve marginalized groups, such as through informal needs assessment and community-based organizations - Examples of barriers to involvement include transportation costs and trust, while facilitators include scheduling flexibility with time and location and the provision of incentives - Beyond the use of evidence to inform the development process, limited information was described about the use of evidence in the presentation of options in the decision aid content		<i>Methods used:</i> Mixed methods	
	The co-design of a patient decision aid for prostate cancer therapy revealed crucial information on patient priorities, the importance of lay language and supporting visuals, as well as the concise and efficient delivery of decision aids in clinical settings (111) - Patients believed that information on treatment experience, quality of life and treatment side effects should be included in decision aids - Clinicians and patients disagreed on what features were priorities for decision aids	High	<i>Publication date:</i> July 2019 <i>Jurisdiction studied:</i> United States <i>Methods used:</i> Qualitative	None identified
	A three-phased systematic development of a two-sided treatment decision-making tool for patients with haemophilia highlights feasibility and both physician and patient satisfaction in facilitating treatment decisions (112) A three-phased approach for decision tool development was used, which included topic selection, prototype development and usability testing using interviews with targeted end users through focus groups	High	<i>Publication date:</i> October 2014 <i>Jurisdiction studied:</i> Canada <i>Methods used:</i> Delphi survey, prototype development, usability testing	None identified
	Decision aids are valuable tools for enhancing the quality of decision-making regarding colorectal cancer screening, leading to increased knowledge and reduced decisional conflict; however, preliminary findings indicate that their impact on decisional conflict may be minimal for individuals who were previously invited to participate in a public screening program but were not specifically informed about the procedure (113)	High	<i>Publication date:</i> January 2019 <i>Jurisdiction studied:</i> Spain <i>Methods used:</i> Randomized controlled trial	None identified
	Women who used a decision aid had a significantly lower decision conflict scale score, higher satisfaction and knowledge scores, and lower indecision rate than the women who used only a pamphlet as the source of childbirth information (114)	High	<i>Publication date:</i> November 2020 <i>Jurisdiction studied:</i> Japan <i>Methods used:</i> Non-randomized controlled trial	Gender/sex
	The process of declaring competing interests in patient decision aids vary widely across organizations with all included organizations having no required policy for declarations; clear policies for competing interests are required to maintain transparency (115)	High	<i>Publication date:</i> 9 September 2016 <i>Jurisdiction studied:</i>	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
			United States <i>Methods used:</i> Qualitative study	
	A patient decision aid for Achilles tendon rupture was described as acceptable by both patients and healthcare professionals in a preliminary study; a randomized control trial is warranted to determine its efficacy (116) - Information that could improve the quality of the decision aid included: - state when the aid could be used and its target population - improve accessibility (concise language) - include information on rehabilitation options and long-term recovery - include more information on potential harms - include information on the quality and certainty of data	High	<i>Publication date:</i> 7 February 2023 <i>Jurisdiction studied:</i> United States <i>Methods used:</i> Mixed methods	None identified
	This study identified 10 theory-based, relevant and acceptable behaviour change techniques (BCTs) for promoting the use of patient decision aids (PtDAs) related to Down's syndrome prenatal screening among pregnant women; identified BCTs included the use of credible scores, goal-setting, encouraging patients to address the barriers to and facilitators of using PtDAs, planning action to support PtDA use, and adding objects to the environment in which PtDA use should take place (117) Key methodological limitations include 1) underrepresentation of multiparous women alongside those with lower education and 2) inadequate sample size in one of three focus groups	High	<i>Publication date:</i> 2018 <i>Jurisdiction studied:</i> Québec City, Canada <i>Methods used:</i> Qualitative description design consisting of focus groups	- Gender/sex - Socio-economic status - Personal characteristics associated with discrimination (e.g., age, disability)
	This study garnered the perspectives of head and neck cancer (HNC) survivors on electronic decision aids (eDAs) for HNC patients, alongside their recommendations for a prototype eDA; participants expressed that eDAs would be beneficial tools for patient education and patient-provider communication, recommending that eDAs incorporate visual aids, interactive features and customizability (118) - In terms of eDA design, there were mixed perspectives around 1) the inclusion of medically explicit images, 2) the type of device for which the eDA should be designed, and 3) the ideal degree of complexity of visuals (e.g., graphs) - The findings are not transferable to other types of tumours given the specificity of the sample	High	<i>Publication date:</i> 2023 <i>Jurisdiction studied:</i> Canada <i>Methods used:</i> Qualitative description design consisting of semi-structured interviews	None identified
	An interactive website that informs contraception decision-making, Contraception Choices, did not lead to significant differences in long-acting reversible contraception use, satisfaction with contraceptive method, self-reported pregnancy, and sexually transmitted infection, though user	High	<i>Publication date:</i> June 2020 <i>Jurisdiction studied:</i> London, UK	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
	comments positively reported the website's helpfulness with contraception choice and feeling more prepared for healthcare consultations (119) - Contraception Choices interactive website (www.contraceptionchoices.org) is informed by an evidence base of two systematic reviews, empirical qualitative research involving young women, and behaviour change theory - The website provides tailored information to guide contraceptive decision-making in the forms of: videos of women addressing contraceptive experiences and concerns with health professionals, infographic on effectiveness, "Did you know?" and FAQ sections, and an interactive decision tool that algorithmically produces a side-by-side comparison of three methods based on the user's indicated contraception-related preferences with exportable results		<i>Methods used:</i> Experimental (randomized controlled trial)	
	Anticoagulation Choice, a conversation/decision aid with curated evidence on thromboembolic stroke risks for joint use by atrial fibrillation patients and clinicians to assess the need for and approach to anticoagulation therapy, was developed following a human-centred design approach, facilitating shared decision-making to inform proper patient-centred care (120) - Anticoagulation Choice decision aid: anticoagulationdecisionaid.mayoclinic.org - With regard to the inclusion of evidence, the developers deemed it to be a matter of judgment on what and how to present them, leveraging combined methods on risk communication and option presentation which have been effectively demonstrated in previous trials - The decision aid first presents the risk of stroke without anticoagulation to spark a conversation about whether intervention is needed before the subsequent presentation of risk estimates with anticoagulation - In developing the decision aid, this study took the view that appropriate care for patients comes from information and deliberation between patients and clinicians, not on information or choice alone, nor more or clearer information	High	<i>Publication date:</i> April 2019 <i>Jurisdiction studied:</i> United States <i>Methods used:</i> Qualitative study	None identified
	Patient decision aids for osteoporosis treatment can be cost-effective if they improve adherence to bisphosphonates by increasing treatment initiation or persistence by at least 20% over a three-year period, with potential benefits in reducing fractures and healthcare costs (121) - The analysis utilized a Markov microsimulation model to estimate costs and benefits from a Canadian healthcare perspective, incorporating direct medical costs and quality-adjusted life years (QALYs) - Results indicated that the decision aid was less cost-effective in men, with an incremental cost-effectiveness ratio (ICER) of \$63,814 CAD	High	<i>Publication date:</i> May 2016 <i>Jurisdiction studied:</i> Canada <i>Methods used:</i> Cost-effectiveness analysis	None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
	over QALY, highlighting the need for further research on its effectiveness across different demographics			
	Patient decision aids have greater effects on decision-making in presurgical evaluation in patients with osteoarthritis of the knee in academic sites than community sites, particularly when presurgical assessments are unavailable (122)	High	<i>Publication date:</i> 1 February 2018 <i>Jurisdiction studied:</i> United States <i>Methods used:</i> Randomized control trial	None identified
	A preliminary controlled study indicates that GD Choice (Grave's disease choice), a decision-making tool, can significantly increase engagement in shared decision-making and awareness of treatment complications; however, a larger trial is needed (123)	High	<i>Publication date:</i> 1 November 2015 <i>Jurisdiction studied:</i> United States <i>Methods used:</i> Randomized control trial	None identified
	A decision aid for smoking cessation received positive reviews from physicians and experts regarding increasing patient knowledge and facilitating the decision-making process; additional research is needed to test the effectiveness of the decision aid in patients (124)	High	<i>Publication date:</i> 20 April 2022 <i>Jurisdiction studied:</i> Switzerland <i>Methods used:</i> Cross-sectional study	None identified

Appendix 4: Documents that were excluded in the final stages of review

Document type	Hyperlinked title
Sub-strategy 1	
Review	A systematic review of internet decision-making resources for patients considering surgery for ulcerative colitis
Review	Systematic review of the types of methods and approaches used to assess the effectiveness of healthcare information websites
Article	Utilizing chatbot technology to disseminate health information: The case of human papillomavirus vaccine – user-centered design approach
Sub-strategy 2	
Review	The importance of patient decision aids for decisions about cancer treatment: A qualitative systematic review
Article	Availability and quality of patient decision aids for dermatologic conditions
Article	Decision aids that really promote shared decision making: The pace quickens
Article	Educating patients to evaluate web-based health care information: The GATOR approach to healthy surfing
Article	Impact of decision aids in prostate cancer screening: A Systematic Review And Meta-Analysis
Article	Measuring the benefits of decision aids for economic evaluation
Article	Modifying unwarranted variations in health care: Shared decision-making using patient decision aids
Article	Navigating unknown terrain: Decision aids in dementia care
Article	Using the Veterans Health Administration as a laboratory for integrated decision tools for patients and clinicians

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