

Search Results

Table of Contents

Search History	page 2
1. Study protocol: DEcisions in health Care to Introduce or Diffuse innovations using Evidence (DECIDE).	page 3
2. Dissolution Similarity Requirements: How Similar or Dissimilar Are the Global Regulatory Expectations?	page 3
3. Improving the effectiveness and efficiency of evidence production for health technology assessment	page 3
4. Early health economic assessment in innovation partnerships: Lessons from the European innovation partnership on active and healthy ageing	page 4
5. Balancing costs and benefits at different stages of medical innovation: a systematic review of Multi-criteria decision analysis (MCDA).	page 4
6. Effects of a demand-led evidence briefing service on the uptake and use of research evidence by commissioners of health services: protocol for a controlled before and after study.	page 5
7. Incorporating evidence review into quality improvement: Meeting the needs of innovators	page 6
8. Continuous innovation: developing and using a clinical database with new technology for patient-centred care--the case of the Swedish quality register for arthritis.	page 6
9. Tool to assess the cost and quality benefits of nursing innovation.	page 7
10. Evidence requirements for innovative imaging devices: from concept to adoption.	page 7
11. Methods for assessment of innovative medical technologies during early stages of development.	page 8

Search History

1. PsycInfo; (evidence adj2 need*).ti,ab; 2557 results.
2. PsycInfo; innovation.ti,ab; 15697 results.
3. PsycInfo; 1 AND 2; 19 results.
4. PsycInfo; innovation*.ti,ab; 22255 results.
5. PsycInfo; 1 AND 4; 29 results.
6. PsycInfo; ("feasibility assessment*" OR "plausibility assessment*").ti,ab; 34 results.
7. PsycInfo; 4 AND 6; 1 results.
8. PsycInfo; (assess* adj4 need*).ti,ab; 15182 results.
9. PsycInfo; 4 AND 8; 107 results.
10. HEALTH BUSINESS ELITE; innovation*.ti,ab; 27980 results.
11. HEALTH BUSINESS ELITE; ("feasibility assessment*" OR "plausibility assessment*").ti,ab; 13 results.
12. HEALTH BUSINESS ELITE; (assess* adj4 need*).ti,ab; 2313 results.
13. HEALTH BUSINESS ELITE; (evidence adj2 need*).ti,ab; 316 results.
14. HEALTH BUSINESS ELITE; 11 OR 12; 2325 results.
15. HEALTH BUSINESS ELITE; (impact adj3 (idea OR ideas)).ti,ab; 80 results.
16. HEALTH BUSINESS ELITE; 11 OR 12 OR 13 OR 15; 2710 results.
17. HEALTH BUSINESS ELITE; 10 AND 16; 41 results.
18. Medline; innovation*.ti,ab; 31163 results.
19. Medline; ("feasibility assessment*" OR "plausibility assessment*").ti,ab; 191 results.
20. Medline; (assess* adj4 need*).ti,ab; 36005 results.
21. Medline; (evidence adj2 need*).ti,ab; 6124 results.
22. Medline; (impact adj3 (idea OR ideas)).ti,ab; 116 results.
23. Medline; 19 OR 20 OR 21 OR 22; 42208 results.
24. Medline; 18 AND 23; 248 results.
25. Medline; 24 [Limit to: Publication Year 2007-2016]; 187 results.
26. EMBASE; innovation*.ti,ab; 41523 results.
27. EMBASE; ("feasibility assessment*" OR "plausibility assessment*").ti,ab; 311 results.
28. EMBASE; (assess* adj4 need*).ti,ab; 44022 results.
29. EMBASE; (evidence adj2 need*).ti,ab; 4344 results.
30. EMBASE; (impact adj3 (idea OR ideas)).ti,ab; 85 results.
31. EMBASE; 27 OR 28 OR 29 OR 30; 48605 results.
32. EMBASE; 26 AND 31; 321 results.
33. EMBASE; (innovat* OR assessment OR evidence OR development OR need OR technolog*).ti; 981361 results.
34. EMBASE; 32 AND 33; 133 results.
35. EMBASE; 34 [Limit to: (Year Published Last 10 Years)]; 112 results.

1. Study protocol: DEcisions in health Care to Introduce or Diffuse innovations using Evidence (DECIDE).

- Citation:** Implementation science : IS, Jan 2016, vol. 11, p. 48., 1748-5908 (2016)
- Author(s):** Turner, Simon; Morris, Stephen; Sheringham, Jessica; Hudson, Emma; Fulop, Naomi J
- Abstract:** A range of evidence informs healthcare decision-making, from formal research findings to 'soft intelligence' or local data, as well as practical experience or tacit knowledge. However, cultural and organisational factors often prevent the translation of such evidence into practice. Using a multi-level framework, this project will analyse how interactions between the evidence available and processes at the micro (individual/group) and meso (organisational/system) levels influence decisions to introduce or diffuse innovations in acute and primary care within the National Health Service in the UK. This study will use a mixed methods design, combining qualitative and quantitative methods, and involves four interdependent work streams: (1) rapid evidence synthesis of relevant literature with stakeholder feedback; (2) in-depth case studies of 'real-world' decision-making in acute and primary care; (3) a national survey and discrete choice experiment; and (4) development of guidance for decision-makers and evaluators to support the use of evidence in decision-making. This study will enhance the understanding of decision-makers' use of diverse forms of evidence. The findings will provide insights into how and why some evidence does inform decisions to introduce healthcare innovations, and why barriers persist in other cases. It will also quantify decision-makers' preferences, including the 'tipping point' of evidence needed to shift stakeholders' views. Practical guidance will be shared with healthcare decision-makers and evaluators on uses of evidence to enable the introduction and diffusion of innovation.
- Source:** Medline
- Full Text:** Available from *Directory of Open Access Journals* in [Implementation Science](#)
Available from *BioMed Central* in [Implementation Science](#)

2. Dissolution Similarity Requirements: How Similar or Dissimilar Are the Global Regulatory Expectations?

- Citation:** The AAPS journal, Jan 2016, vol. 18, no. 1, p. 15-22, 1550-7416 (January 2016)
- Author(s):** Diaz, Dorys Argelia; Colgan, Stephen T; Langer, Connie S; Bandi, Nagesh T; Likar, Michael D; Van Alstine, Leslie
- Abstract:** The objective of this article is to compare and contrast the international expectations associated with the model-independent similarity factor approach to comparing dissolution profiles. This comparison highlights globally divergent regulatory requirements to meet local dissolution similarity requirements. In effect, experiments customized to meet the current international regulatory expectations for dissolution and drug release unnecessarily increase manufacturing costs, hinder science and risk-based approaches, increase collective regulatory burden, reduce continuous improvement and innovation, and potentially delay patient access to urgently needed medication. Comparative assessment of regulatory differences in applying dissolution to demonstrate product similarity is crucial to reduce non-scientifically justified experiments and foster collaborative harmonization among global regulatory health authorities and the pharmaceutical industry.
- Source:** Medline
- Full Text:** Available from *National Library of Medicine* in [AAPS Journal, The](#)

3. Improving the effectiveness and efficiency of evidence production for health technology assessment

- Citation:** International Journal of Technology Assessment in Health Care, December 2015, vol./is. 31/4(201-206), 0266-4623;1471-6348 (08 Dec 2015)
- Author(s):** Facey K.; Henshall C.; Sampietro-Colom L.; Thomas S.
- Language:** English
- Abstract:** Objectives: Health Technology Assessment (HTA) needs to address the challenges posed by high cost, effective technologies, expedited regulatory approaches, and the

opportunities provided by collaborative real-world evaluation of technologies. The Health Technology Assessment International (HTAi) Policy Forum met to consider these issues and the implications for evidence production to inform HTA. This paper shares their discussion to stimulate further debate. Methods: A background paper, presentations, group discussions, and stakeholder role play at the 2015 HTAi Policy Forum meeting informed this paper. Results: HTA has an important role to play in helping improve evidence production and ensuring that the health service is ready to adopt effective technologies. It needs to move from simply informing health system decisions to also working actively to align stakeholder expectations about realistic evidence requirements. Processes to support dialogue over the health technology life cycle need to be developed that are mindful of limited resources, operate across jurisdictions and learn from past processes. Collaborations between health technology developers and health systems in different countries should be encouraged to develop evidence that will inform decision making. New analytical techniques emerging for real-world data should be harnessed to support modeling for HTA. Conclusions: A paradigm shift (to Health Innovation System 2.0) is suggested where HTA adopts a more central, proactive role to support alignment within and amongst stakeholders over the whole life cycle of the technology. This could help ensure that evidence production is better aligned with patient and health system needs and so is more effective and efficient.

Publication Type: Journal: Article

Source: EMBASE

4. Early health economic assessment in innovation partnerships: Lessons from the European innovation partnership on active and healthy ageing

Citation: Value in Health, November 2015, vol./is. 18/7(A726), 1098-3015 (November 2015)

Author(s): De Graaf G.; Steuten L.; Pecchia L.; Boehler C.

Language: English

Abstract: On European and national levels substantial investments are done in partnerships that aim to stimulate the development and implementation of healthcare innovations. One such partnership is the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA). Monitoring and assessing the societal, healthcare and patient impact of such large innovation partnerships is challenging for many reasons, including 1) the wide range of interventions developed; 2) the variety in target populations; 3) the need for fast, iterative assessments of technologies from development to implementation stages; 4) the need for ready available repositories of (country-specific) epidemiology and cost data; and 5) the need to extrapolate results over time and settings. To address these challenges, the Joint Research Center (JRC) of the European Commission has commissioned the construction of an online tool that allows stakeholders of the EIP on AHA to estimate the health economic impact of their interventions in real-time. At the core of this tool is a generic, highly adaptable Markov model with three mutually exclusive health states ('baseline health', 'deteriorated health' and 'death'), combined with an extensive database of epidemiological, economic and effectiveness data. The tool assesses the impact of an innovation on resource use (both from a healthcare and societal perspective) and the Health Related Quality of Life of patients. We demonstrate the application and discuss the value of the tool using a case study from the EIP on AHA, on the development of a falls prediction device. An early assessment (prior to clinical testing) was performed to estimate the possible impact of this intervention, considering various implementation scenarios. Finally, we will discuss the conceptual and practical novelty as well as the (scientific) challenges of this approach for informing healthcare decisions regarding research funding, innovation development and implementation.

Publication Type: Journal: Conference Abstract

Source: EMBASE

5. Balancing costs and benefits at different stages of medical innovation: a systematic review of Multi-criteria decision analysis (MCDA).

Citation: BMC health services research, Jan 2015, vol. 15, p. 262., 1472-6963 (2015)

- Author(s):** Wahlster, Philip; Goetghebeur, Mireille; Kriza, Christine; Niederländer, Charlotte; Kolominsky-Rabas, Peter; National Leading-Edge Cluster Medical Technologies ‘Medical Valley EMN’
- Abstract:** The diffusion of health technologies from translational research to reimbursement depends on several factors included the results of health economic analysis. Recent research identified several flaws in health economic concepts. Additionally, the heterogeneous viewpoints of participating stakeholders are rarely systematically addressed in current decision-making. Multi-criteria Decision Analysis (MCDA) provides an opportunity to tackle these issues. The objective of this study was to review applications of MCDA methods in decisions addressing the trade-off between costs and benefits. Using basic steps of the PRISMA guidelines, a systematic review of the healthcare literature was performed to identify original research articles from January 1990 to April 2014. Medline, PubMed, Springer Link and specific journals were searched. Using predefined categories, bibliographic records were systematically extracted regarding the type of policy applications, MCDA methodology, criteria used and their definitions. 22 studies were included in the analysis. 15 studies (68 %) used direct MCDA approaches and seven studies (32 %) used preference elicitation approaches. Four studies (19 %) focused on technologies in the early innovation process. The majority (18 studies - 81 %) examined reimbursement decisions. Decision criteria used in studies were obtained from the literature research and context-specific studies, expert opinions, and group discussions. The number of criteria ranged between three up to 15. The most frequently used criteria were health outcomes (73 %), disease impact (59 %), and implementation of the intervention (40 %). Economic criteria included cost-effectiveness criteria (14 studies, 64 %), and total costs/budget impact of an intervention (eight studies, 36 %). The process of including economic aspects is very different among studies. Some studies directly compare costs with other criteria while some include economic consideration in a second step. In early innovation processes, MCDA can provide information about stakeholder preferences as well as evidence needs in further development. However, only a minority of these studies include economic features due to the limited evidence. The most important economic criterion cost-effectiveness should not be included from a technical perspective as it is already a composite of costs and benefit. There is a significant lack of consensus in methodology employed by the various studies which highlights the need for guidance on application of MCDA at specific phases of an innovation.
- Source:** Medline
- Full Text:** Available from *EBSCOhost* in [BMC Health Services Research](#)
Available from *BioMed Central* in [BMC Health Services Research](#)
Available from *National Library of Medicine* in [BMC Health Services Research](#)
Available from *Directory of Open Access Journals* in [BMC Health Services Research](#)

6. Effects of a demand-led evidence briefing service on the uptake and use of research evidence by commissioners of health services: protocol for a controlled before and after study.

- Citation:** Implementation science : IS, Jan 2015, vol. 10, p. 7., 1748-5908 (2015)
- Author(s):** Wilson, Paul M; Farley, Kate; Thompson, Carl; Chambers, Duncan; Bickerdike, Liz; Watt, Ian S; Lambert, Mark; Turner, Rhiannon
- Abstract:** Clinical Commissioning Groups (CCGs) are mandated to use research evidence effectively to ensure optimum use of resources by the National Health Service (NHS), both in accelerating innovation and in stopping the use of less effective practices and models of service delivery. We intend to evaluate whether access to a demand-led evidence service improves uptake and use of research evidence by NHS commissioners compared with less intensive and less targeted alternatives. This is a controlled before and after study involving CCGs in the North of England. Participating CCGs will receive one of three interventions to support the use of research evidence in their decision-making: 1) consulting plus responsive push of tailored evidence; 2) consulting plus an unsolicited push of non-tailored evidence; or 3) standard service unsolicited push of non-tailored evidence. Our primary outcome will be changed at 12 months from baseline of a CCGs ability to acquire, assess, adapt and apply research evidence to support decision-making.

Secondary outcomes will measure individual clinical leads and managers' intentions to use research evidence in decision making. Documentary evidence of the use of the outputs of the service will be sought. A process evaluation will evaluate the nature and success of the interactions both within the sites and between commissioners and researchers delivering the service. The proposed research will generate new knowledge of direct relevance and value to the NHS. The findings will help to clarify which elements of the service are of value in promoting the use of research evidence. Those involved in NHS commissioning will be able to use the results to inform how best to build the infrastructure they need to acquire, assess, adapt and apply research evidence to support decision-making and to fulfil their statutory duties under the Health and Social Care Act.

Source: Medline

Full Text: Available from *Directory of Open Access Journals* in [Implementation Science](#)
Available from *BioMed Central* in [Implementation Science](#)
Available from *National Library of Medicine* in [Implementation Science : IS](#)

7. Incorporating evidence review into quality improvement: Meeting the needs of innovators

Citation: BMJ Quality and Safety, November 2013, vol./is. 22/11(931-939), 2044-5415 (November 2013)

Author(s): Danz M.S.; Hempel S.; Lim Y.-W.; Shanman R.; Motala A.; Stockdale S.; Shekelle P.; Rubenstein L.

Language: English

Abstract: Background: Achieving quality improvement (QI) aims often requires local innovation. Without objective evidence review, innovators may miss previously tested approaches, rely on biased information, or use personal preferences in designing and implementing local QI programmes. Aim: To develop a practical, responsive approach to evidence review for QI innovations aimed at both achieving the goals of the Patient Centered Medical Home (PCMH) and developing an evidence-based QI culture. Design: Descriptive organisational case report. Methods: As part of a QI initiative to develop and spread innovations for achieving the Veterans Affairs (VA) PCMH (termed Patient Aligned Care Team, or PACT), we involved a professional evidence review team (consisting of review experts, an experienced librarian, and administrative support) in responding to the evidence needs of front-line primary care innovators. The review team developed a systematic approach to responsive innovation evidence review (RIER) that focused on innovator needs in terms of time frame, type of evidence and method of communicating results. To assess uptake and usefulness of the RIERs, and to learn how the content and process could be improved, we surveyed innovation leaders. Results: In the first 16 months of the QI initiative, we produced 13 RIERs on a variety of topics. These were presented as 6-15-page summaries and as slides at a QI collaborative. The RIERs focused on innovator needs (eg, topic overviews, how innovations are carried out, or contextual factors relevant to implementation). All 17 innovators who responded to the survey had read at least one RIER; 50% rated the reviews as very useful and 31%, as probably useful. Conclusions: These responsive evidence reviews appear to be a promising approach to integrating evidence review into QI processes.

Publication Type: Journal: Article

Source: EMBASE

Full Text: Available from *EBSCOhost* in [BMJ Quality & Safety](#)

8. Continuous innovation: developing and using a clinical database with new technology for patient-centred care--the case of the Swedish quality register for arthritis.

Citation: International journal for quality in health care : journal of the International Society for Quality in Health Care / ISQua, Apr 2013, vol. 25, no. 2, p. 118-124, 1464-3677 (April 2013)

Author(s): Ovretveit, John; Keller, Christina; Hvitfeldt Forsberg, Helena; Essén, Anna; Lindblad, Staffan; Brommels, Mats

Abstract: We describe and explain the development of a clinical quality database and its use for different clinical, management and patient empowerment purposes. A longitudinal case study covering 1993-2009. Rheumatology departments in Swedish hospitals. Those involved in developing the clinical database and its applications and a limited number of users. Different methods for inputting and storing clinical and patient data and for analysing and presenting the data to providers and patients. Participants' perceptions of the value of different applications and of influences, which helped and hindered the development of the system. Different innovations were introduced at different times continually to increase the utility of the clinical data and the clinic- and patient coverage of the clinical data system. Limited interview data show positive patient and provider perceptions of the latest application to collect and present data as time trend visual display in the clinical consultation. A longitudinal perspective revealed how a clinical quality register was developed and how new technologies not imagined in the early 1990s continue to increase the utility and value of the clinical database. This historical perspective provided limited evidence of impact, but does provide lessons for current strategies for innovation for quality in health care and of the need to consider innovation processes, rather than discrete innovations, given the rapid pace of change in new technologies. More evidence is needed of the impact of such registers, and of enhancements, on providers and patients and on costs.

Source: Medline

Full Text: Available from *EBSCOhost* in [International Journal for Quality in Health Care](#)
Available from *HighWire Press* in [International Journal for Quality in Health Care](#)

9. Tool to assess the cost and quality benefits of nursing innovation.

Citation: Nursing management (Harrow, London, England : 1994), Jul 2011, vol. 18, no. 4, p. 28-31, 1354-5760 (July 2011)

Author(s): Ryrrie, Iain; Anderson, Beth

Abstract: Understanding the economic value of nursing services in a time of unprecedented public sector cuts is a challenge. The economic assessment tool (EAT) (RCN 2011) has been designed by the authors of the article for this purpose and generates return on investment dividends for nursing innovations and services. The EAT, which is built on the discipline of improvement and uses many of its tools and techniques, involves four stages: mapping, costing, calculating and reporting. The nursing profession systematically captures a range of clinical data as part of routine care to which monetary values can be assigned. The EAT exploits these data and provides the profession with the economic evidence it might need to sustain quality nursing services in financially uncertain times.

Source: Medline

Full Text: Available from *EBSCOhost* in [Nursing Management - UK](#)
Available from *EBSCOhost* in [Nursing Management - UK](#)
Available from *ProQuest* in [Nursing Management](#)
Available from *EBSCOhost* in [Nursing Management - UK](#)

10. Evidence requirements for innovative imaging devices: from concept to adoption.

Citation: Journal of the American College of Radiology : JACR, Feb 2011, vol. 8, no. 2, p. 124-131, 1558-349X (February 2011)

Author(s): Frank, Richard A; Rucker, Donald W; Ferguson, Michael A; Sweeney, Terry J

Abstract: Changes in the regulatory and reimbursement environment for advances in imaging in the United States are leading to increasing requirements for formal clinical evidence of efficacy, effectiveness, and safety. The authors describe 5 phases of an imaging product's lifecycle: design, regulatory clearance and approval, early adoption, reimbursement, and full adoption. Each phase has distinct needs for clinical evidence. With increasing costs of clinical evidence generation, the question of ownership of the responsibility to gather clinical evidence at each successive phase becomes important. Mismatch between the pace of advances in imaging technologies and the time required to do formal clinical trials to clear regulatory and reimbursement evidence requirements threatens patient access to

the benefits of innovation such as reduction in exposure to radiation. Public and payer requirements for clinical evidence must also be evaluated for their impact on incremental design improvements, which have historically characterized advances in diagnostic imaging. Copyright © 2011. Published by Elsevier Inc.

Source: Medline

11. Methods for assessment of innovative medical technologies during early stages of development.

Citation: GMS health technology assessment, Jan 2009, vol. 5, p. Doc15., 1861-8863 (2009)

Author(s): Bartelmes, Marc; Neumann, Ulrike; Lühmann, Dagmar; Schönermark, Matthias P; Hagen, Anja

Abstract: Conventional Health Technology Assessment (HTA) is usually conducted at a point in time at which the development of the respective technology may no longer be influenced. By this time developers and/or purchasers may have misinvested resources. Thus the demand for Technology Assessment (TA) which incorporates appropriate methods during early development stages of a technology becomes apparent. Against this health political background, the present report describes methods for a development-accompanying assessment of innovative medical technologies. Furthermore, international research programmes set out to identify or apply such methods will be outlined. A systematic literature search as well as an extensive manual literature search are carried out in order to obtain literature and information. The greatest units of the identified methods consist of assessment concepts, decision support methods, modelling approaches and methods focusing on users and their knowledge. Additionally, several general-purpose concepts have been identified. The identified research programmes INNO-HTA and MATCH (Multidisciplinary-Assessment-of-Technology-Centre-for-Healthcare) are to be seen as pilot projects which so far have not been able to generate final results. MATCH focuses almost entirely on the incorporation of the user-perspective regarding the development of non-pharmaceutical technologies, whereas INNO-HTA is basically concerned with the identification and possible advancement of methods for the early, socially-oriented technology assessment. Most references offer only very vague descriptions of the respective method and the application of greatly differing methods seldom exceeds the character of a pilot implementation. A standardisation much less an institutionalisation of development-accompanying assessment cannot be recognized. It must be noted that there is no singular method with which development-accompanying assessment should be carried out. Instead, a technology and evaluation specific method selection seem to be necessary as medical innovations are diverse and none of the methods are exhaustive. Because of a variety of issues (e. g. ideal time of evaluation, lack of data and uncertainty of data) a development-accompanying assessment should not replace a comprehensive HTA, but rather form a possible preceding step in a multi-staged HTA-process. A final appraisal of the methods for development-accompanying assessment cannot be made based on the available sources. However, the present review may serve as a starting point for further development and application of these methods as well as further examination of the concept of development-accompanying assessment. There is a substantial need for further research concerning the application, validation and comparison of the various methods for development-accompanying assessment.

Source: Medline

Full Text: Available from *EBSCOhost* in [GMS Health Technology Assessment](#)
Available from *National Library of Medicine* in [GMS Health Technology Assessment](#)
Available from *Directory of Open Access Journals* in [GMS Health Technology Assessment](#)