

PRODUCT REVIEW / ANALYSE DE PRODUITS

Product Review: PubMed Health

Product: PubMed Health, provided by the National Center for Biotechnology Information (NCBI) at the U.S. National Library of Medicine (NLM)

URL: <http://www.ncbi.nlm.nih.gov/pubmedhealth/>

E-Source Location: International

Audience: Consumers and health care professionals

Purpose: PubMed Health provides summaries and full texts of selected systematic reviews and health technology assessments in one place. With the inclusion of the Database of Reviews of Effects (DARE) from the Centre for Reviews and Dissemination in England, PubMed Health provides comprehensive and reliable systematic reviews on clinical effectiveness.

Contents: With the NLM's December 2011 release of PubMed Health, over 18,000 systematic reviews and health technology assessments published in the last 10 years have been included. Plain language summaries of systematic reviews and other health information including medical encyclopedia are also available for consumers.

Updates: PubMed Health is updated when the information providers selected by PubMed Health supply new or updated information.

Price: Free

Compatibility: Windows PC or Mac; iPhone, iPad, iPod Touch. No official application for the i-platform released yet [1].

Product description

PubMed Health is a service provided by the National Center for Biotechnology Information (NCBI) at the U.S. National Library of Medicine (NLM).

PubMed Health is a new evidence-based resource containing a mixture of reviews of clinical effectiveness research, systematic reviews of clinical trials, technical reports, and summaries presented in an easy-to-read format for consumers, as well as full technical reports for clinicians. The resource provides summaries and full text of selected systematic reviews in one location. PubMed Health aims to only include systematic reviews of clinical effectiveness done or updated in about the last 10 years. Those reviews are generally published or updated from 2003. With its December release, the database contains

over 18,000 systematic reviews and health technology assessments from 12 partner resources [2].

PubMed Health brings together resources from a range of international partners to answer the question "What Works?" for clinical interventions. The information providers are:

- Agency for Health Care Research and Quality (US) (AHRQ).
- Centre for Reviews and Dissemination (UK) (CRD).
- The Cochrane Collaboration (International) (CC).
- German Institute for Quality and Efficiency in Health Care (IQWiG).
- National Cancer Institute (US) (NCI).
- National Institute for Health and Clinical Excellence guidelines program (UK) (NICE).
- National Institute for Health Research (NIHR) Health Technology Assessment Programme (UK) (NIHR HTA).
- Oregon Health and Science University's Drug Effectiveness Review Project (US) (DERP).
- Department of Veterans Affairs' Evidence-based Synthesis Program from the Veterans Health Administration R&D (US) (VA ESP).

It remains unclear though how these information partners have been selected by the National Library of Medicine.

The National Health Service (NHS Choices) provides PubMed Health with England's "Behind Headlines", one of the four key sections from the home page.

PubMed Health is being introduced in phases, starting with consumer drug information provided by the American Society of Health-Systems Pharmacists, and medical encyclopedia from A.D.A.M Education. Over 12,000 reviews from the Database of Reviews of Effects (DARE) by the CRD were a recent and significant addition to PubMed Health, joining over 4,500 Cochrane reviews and other systematic reviews by health technology assessment agencies [3].

Plain language summaries of Cochrane reviews are freely and easily accessible for consumers. For about half of the DARE reviews, the CRD provides an outline with critical appraisal of the scientific evidence in the review as a "Quality Assessment", which summarizes the reliability of the review.

Browsing and searching

The home page includes four key sections:

1. Contents: a complete alphabetical listing of all titles, sorted by type of content including “For consumers”, “DARE reviews”, “Executive summaries”, “Clinical guides”, “Full text reviews”, and “Medical encyclopedia”.
2. Behind Headlines: the NHS guide to the science behind health stories in the news.
3. New & updated: content added in the last 60 days arranged according to type of content.
4. Featured reviews: high-quality reviews on interesting topics are selected and featured here. “Previously featured reviews” are provided in an RSS feed to which people can subscribe.

“Understanding clinical effectiveness” presents an explanation of clinical effectiveness research in a patient-friendly format, along with a section focusing on resources to help people understand systematic reviews and interpret the results. Two new e-books have recently been added to “Understanding research results” from the “Understand clinical effectiveness” tab (2):

Irwig L, et al. *Smart Health Choices: Making Sense of Health Advice*. London: Hammersmith Press; 2008.

Evans I, et al. *Testing Treatments: Better Research for Better Healthcare*. 2nd edition. London: Pinter & Martin; 2011.

A primary search using the top search bar returns clinical effectiveness results ranked by relevance, with the option of viewing all (default) or only specified content types.

Users will also find the ability to see the results in a single search highly valuable not only for reviews in PubMed but also for accessing the comprehensive collection of resources including cancer information for consumers and clinicians from the National Cancer Institute. Results of the “Clinical Queries” filter search for systematic reviews are delivered simultaneously, along with relevant medical encyclopedia contents at the right. Therefore, if there is a more recent systematic review that is not yet included in PubMed Health, users could see it there.

However, for lay people who are not familiar with PubMed, or less experienced with any other major medical databases, browsing the website can be difficult. There is no subject or topic list in each category to help users navigate all of the information. The alphabetic listings of systematic reviews, clinical guides and medical encyclopedia would seem overwhelming for people who browse information instead of searching. Adding some online tutorials to help users with the website navigation would certainly improve users’ experience with this content-rich resource.

PubMed Health versus PubMed versus MedlinePlus

When PubMed Health was first launched, many users were confused by the names of the NLM resources including PubMed, PubMed Health, and MedlinePlus. Is PubMed Health a combination of both PubMed and MedlinePlus? Is PubMed Health a consumer version of PubMed? The fact that PubMed Health provides unique coverage on consumer summaries of Cochrane reviews as well as their intention of having Health Technology Assessments (HTAs) in one place for clinicians instead of having the need to search several HTA agency websites, has made PubMed Health a worthwhile stop for both clinicians and consumers when they search for high levels of evidence.

MedlinePlus, widely known as a reputable consumer health information product, is not directly present in PubMed Health, which may create some uncertainty [4]. However, the “Diseases and Conditions” pages from the medical encyclopedia, with the enhanced display of anatomical images, provide links to MedlinePlus content.

Additional features

PubMed Health now features ‘Add this’ sharing for email and social media. Social media integration includes joining Google+, following @PubMedHealth on Twitter for new providers and featured content. RSS feeds of reviews and “Behind Headlines” are available to help users stay informed with the research behind news stories.

Another content addition to this product’s December release includes evidence-based information on cancer for consumers and health professionals from the National Cancer Institute (NCI[®]) Physician Data Query (PDQ[®]) database. Despite that the source of cancer information is not easily identified as if it were in a separate section from NCI, all reliable information is presented seamlessly wherever it comes from for users to access all in one place. Since the PDQ database is frequently updated, there is a distinct body of updated information appearing in the section “New and Updated” in PubMed Health.

Conclusion

Clinical effectiveness studies are essential for informed clinical and consumer decision making. Keeping informed with new research and interpreting the complex and often conflicting results from multiple studies is a challenge for both clinicians and consumers. PubMed Health is uniquely positioned to gather these critical clinical resources produced by many reliable information providers in one place, making it much less painful to locate information and make sense of research results. The easy-to-use interface, combined with comprehensive coverage in systematic reviews and consumer summaries, creates an uncomplicated user experience for searching complex clinical effectiveness information and answers “what treatments work and what

is unknown”[5]. It is an excellent resource for both clinicians and consumers in finding health information of high levels of evidence and in understanding clinical interventions (what works in medicine).

References

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