

CLINICAL TOOLS: Advantages and Limitations: An Overview

By

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Abstract

Evidence-Based Practice requires that clinicians search the literature to find answers to their clinical questions. Every day information is produced and packaged in different formats, and sources where thousands of articles produced all over the world. Which is the right information is a billion dollar question. Medical field is growing in a faster pace than the other applied science field, the research involved is immediately brought to the Lab and same trial-error applied in the on-going practice. Medline contribution of National Library of Medicine is front runner in providing primary literature to the Medical professionals. CD-ROM, On-line and now integrated information system with discovery services created to use in the Web-Environment effectively. Secondary literature provided by ACP Journal Club, Essential Evidence, Clinical Evidence provide assessment of original study. The Cochrane Library provides access to systematic reviews which help summarize the results from a number of studies. Today there are plenty of clinical tools both subscribed and open access available it is old adage of Dr. S.R. Ranganathan that you have to find the haystack in the mount and get the right information at the right time to the right user.

Key words: Clinical Tools, Physician, Medicine, Pharmacy, Evidence-Based, Mobile-App, Multimedia

INTRODUCTION:

The release of the beta version of Google Scholar (<http://scholar.google.com>) in November 2004 generated much media coverage and academic commentary. Earlier yahoo was popular search engine to retrieve information and medical professionals were depending on CD-ROM evidence based information for their activities. The Google with its more flexibility of reaching users provided more refined searching tools for the users and medical professionals are used to it. Today also the common notion among the users is that they first search the Google.

Although today we have advanced search, Mapping search, Visual search and Scholarly search in Google. The immediate link provided by google make at the earlier stage happily but as the thousands of records are provided it becomes cumbersome for the user to find the final answer and gradually he gets frustrated. Google provides links but it does not give you the information whether it is qualitative paper or its relevancy. Google scholar provide you the citations but not beyond that. In the secondary level the busy clinicians need pin-pointed information, recently published, with more review and citations and full article also. This is possible only when you subscribed to clinical tools related information sources which provide authoritative, relevant and ethical information.

In recent years there has been a concerted move towards the adoption of digital health record systems in hospitals. In the US, for example, the number of non-federal acute care hospitals with basic digital systems increased from 9.4 to 75.5% over the 7 year period between 2008 and 2014

Clinical Tools:

Tools are accessory needed for proper function any physical entity. We use day to day many tools for proper functioning of system and to enhance its performance. In the clinical sense a clinical tools is a broader terms like ICT which uses Medicine, Science and Technology for improving patient care.

Access Medicine:

Access Medicine, an Individual and Institutional Subscription based McGraw Hill Medical Resources. The online edition of Harrison's is available at www.accessmedicine.com. It is a institutional or individual subscription oriented. Both print and online was available. It covers more supplementary chapters than the print version also atlas and video formats available makes it more flexible source with more option.

Clinical Key:

Clinical Key is a medical search engine and database tool owned by medical and scientific publishing company Elsevier. It is customized for Health experts, Clinicians, Medical Librarians, Nursing professionals.

One of the important characteristics of this search engine is it acts as a thinking personal and try to provide beginning with basic answers and prioritized and clue oriented short critical answers are provided. It has Metadata search options where you can limit according to the sources, affiliation, date , you can broaden your search or narrow it and you can bookmark your search history and also you have the save options. This clinical key covers more than 600 journals, reference books, monographs, hand-out, video guidelines, surgical videos, instructions etc.

The DynaMed Background:

Brian S. Alper, MD, MSPH, FAAFP created DynaMed in 1995 with a mission of providing the most useful information to healthcare professionals at the point-of-care.

In 2005, **EBSCO** Health acquired DynaMed. EBSCO Health's experience in providing clinical decision support solutions, healthcare business intelligence, medical journals, medical e-books and medical reference information to hospitals and healthcare organizations worldwide proved a great match. This partnership allowed for investment in technology and content development as well as a long-term vision for the future.

DynaMed Plus Evidence based Step by Step resource used by physicians around the world to answer clinical questions quickly and easily. It was started once again rebuilt from the basic level to provide in using new technology like mobile based oriented in new platform, every day content updated and at a faster rate. This is now a broad based product in the medical field.

Essential Evidence Plus (Cochrane Library) Essential Evidence Plus is a powerful, comprehensive clinical decision support system that integrates information on more than 10,000 topics, guidelines, abstracts, summaries and main feature is called POEM means point based medicine , interactive evidence based tools like diagnosis test calculators, history and physical exam calculators are added features of this products.

Health care clinicians rely on many sources of medical information to make decisions--journal articles and reviews, textbooks, colleagues, continuing medical education conferences, practice guidelines, videotapes and audiotapes, and pharmaceutical representatives--yet most have had little formal training in assessing the clinical usefulness of the information obtained from each

source. The current plethora of Evidence-Based Medicine texts, courses, and journal articles focus just on developing skills for critical reading of the research literature, focusing solely on how to read the clinical research literature and de-emphasizing other sources of information available to clinicians.

Although most clinicians list journals as their preferred source of new information, research has shown that their practice habits do not reflect results of studies published in journals. In other words, the research results that should affect the care of patients are not being seen by the clinicians who need to evolve their medical practice. This discrepancy is most likely the result of the "information overload" that clinicians face. They simply have too much information available to them. In addition to learning how to evaluate new information, they also must learn when to seek new information and where to find it.

In 1994, Slawson and Shaughnessy first published their paper introducing the concepts of Information Mastery™. The ultimate in useful information must have three attributes: it must be relevant to everyday practice, it must be correct, and it should require little work to obtain.

LWW Health Library:

It is a Wolters-Kluwer product covers Lippincott texts, cases, and self-assessment options, This product covers more than 40 texts, 600 videos, 450 cases and more than 3000 questions.

This authoritative collection includes basic science collection, integrated basic science collection, pharmacology, premium basic science, anatomical collection, osteopathic medicine collection
Easy-to-use course integration tools, User-friendly and mobile-responsive interface

Rehabilitation Reference Center:

Rehabilitation Reference Center (RRC) is an evidence-based clinical reference tool for use by rehabilitation clinicians at the point-of-care. RRC provides therapists and students with available evidence for their information needs in the areas of: Physical Therapy, Occupational Therapy, Speech Therapy, and more.

Collection of searchable e-reference books includes Scientific American Medicine, AAFP conditions, Merck manual, and Stedman's Dictionary.

This evidence-based, point-of-care resource is for physical therapists, occupational therapists, speech therapists and rehabilitation professionals. With Rehabilitation Reference Center, therapists can access the most current information in their specialty so they can provide the best

care to their patients. Content Includes Nearly 800 clinical reviews Nearly 100 research instruments Information from AHFS on over 11,700 drugs and their manufacturers More than 9,800 exercise images Key reference handbooks More than 3,000 relevant patient education topics in both English and Spanish.

Up To Date:

Up To Date is an online, peer-reviewed clinical decision support tool with topic reviews covering symptoms, tests and diagnosis, and treatment options for over 8,500 conditions.

ACCESS Pharmacy

Access Pharmacy contains core textbooks and reference works in pharmacy and pharmacology. This is an online curricular resource designed for pharmacy education that contains 24 core textbooks and reference works in pharmacy and pharmacology. **AccessPharmacy** allows students to select a core curriculum topic, browse by organ system, review textbooks, or search across leading pharmacy online references.

AHFS Drug Foundation:

This is a product of American Health-System Pharmacists. AHFS Drug foundation has a 60 years long history in the medical field, it is updated every year and now it is available in digital format, this is both concise, point-of-care and also details information. User can switch from one form to another. This is a premium drug information provider and can be integrated with the existing database also. This provides fast-and evidence-based drug information, fully indexed, full-database searchable, links and citing references are also provided. This is available in website, app, and now they are developing in new-cloud based platform.

Clinical Pharmacology with Clinical Key:

Clinical Pharmacology provided by Clinical key is also product of Elsevier Health provides peer-reviewed information on pharmaceuticals/drugs to the pharmacists and has all the features that is provided by Clinical Key. This helps for high-caliber patient care and also trusted information search engine for reliability in across the organizations.

The Medical Letter on Drugs and Therapeutics and more... (New Rochelle, NY) provides critical evaluations of drugs for physicians and other members of the health professions. Also online are

Adverse Drug Interactions, a browser-based program for selecting up to 12 drugs and generating a report about potential adverse interactions; and the Handbook of Antimicrobial Therapy, regularly updated and now in e-book (PDF) format.

Advantages of Clinical Tools:

The main outcome of any tools we use should be to benefit all. In the Health scenario is that student should not suffer and at least improve the health. This tools helps in providing guidelines for the medical professionals to use the effective tools and avoid ineffective one.

The guidelines for almost try to bring the consistency if not uniformity in dealing with the cases and using it effectively varies over geographical region, among medical professionals in general. But these guidelines help to get patient needed utmost care whatever the local conditions may be and bring standardization in procedure and psychological point of view the patient also feels comfort.

Guidelines are updated on the basis of the conditions and there is continuous monitoring, this updated is provided by the clinical tools.

Limitations of Clinical Tools:

Knowledge is the key for effective utilization of guidelines.

Scientific evidence is available but in occasions it is misinterpreted and misleading.

If majority opinion is the same then it is repeated within the group, some- times it may not hold good for the patients and even it may be harmful.

Due to ineffective or inferior scientific procedure it may harm the patients. Some- times it will cost for the reputation of medical professionals.

The scientific procedure is good but there are some external pressures also which may not allow adopting it and may result in inferior treatment which may be ineffective and fatal also.

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