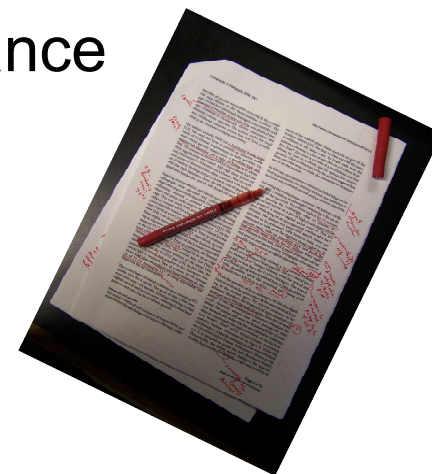


Access & Appraise: Using Advanced Search Features to Evaluate Results for Quality, Authority and Relevance

- What is the “best evidence?”
- What do I spend my time reading and appraising?
- Evaluating quality, authority and relevance



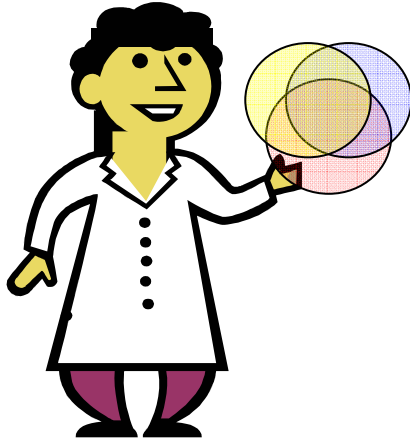
Barbara M. Sullivan, Ph.D.
NUHS Department of Research,
Evidence Based Practice



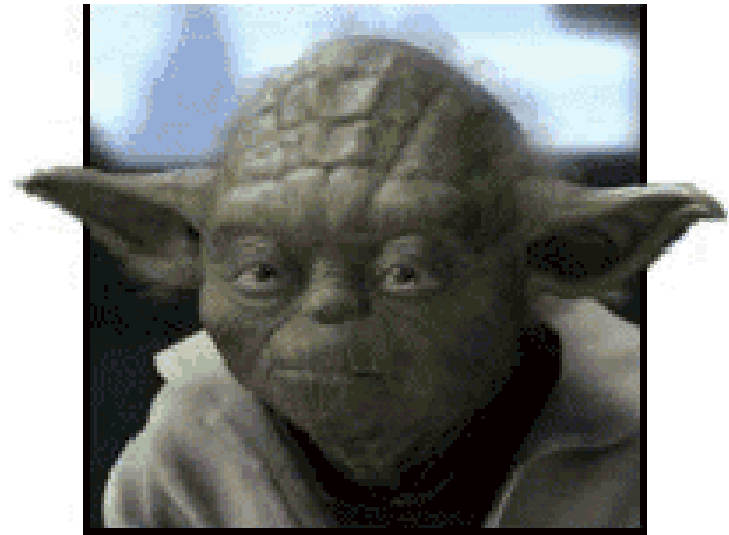
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Barbara M. Sullivan, Ph.D. Dept. of Research NUHS 2008

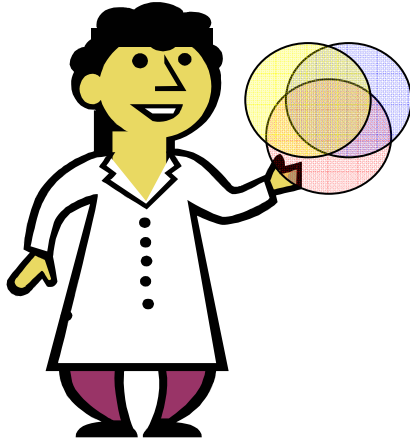
5 *A*s of Evidence Based Practice



- **Asking**
- **Accessing**
- **Appraising**
- **Applying**
- **Assessing**



Evidence Based Practice in **Action** at NUHS

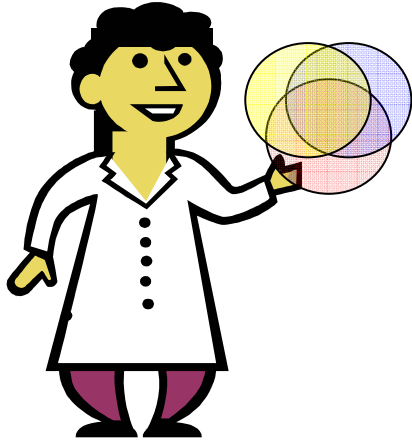


Asking

- Form a patient oriented clinical question using a searchable format
- Information?
- Evidence?



Evidence Based Practice in **Action** at NUHS

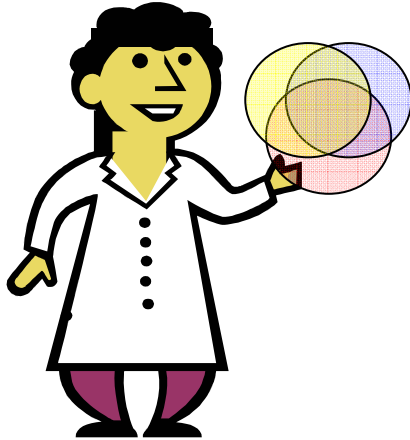


Accessing

- Search
- Identify
- Obtain

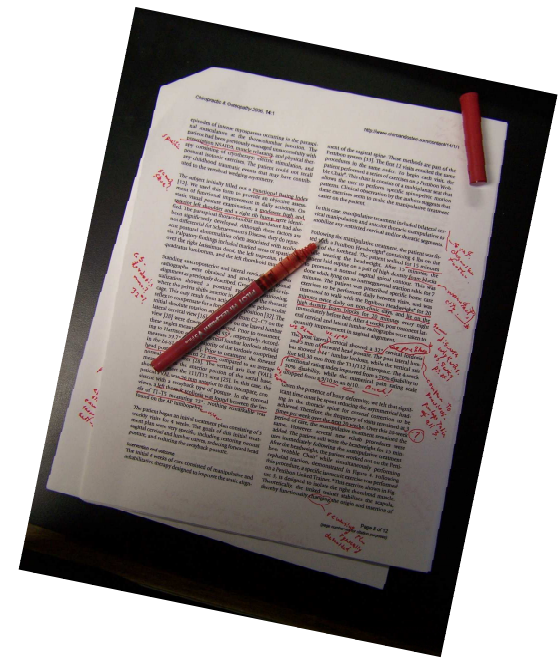


Evidence Based Practice in **Action** at NUHS



Appraise

- Evaluate – do I want to read this
- High Quality
- Authoritative
- Relevant
- Valid, Robust
- Applicable



Accessing the Best Evidence: the Treasure Hunt



- Browsing “Compiled Evidence Websites” for information
- Structured searching of biomedical literature databases



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What are we looking for?

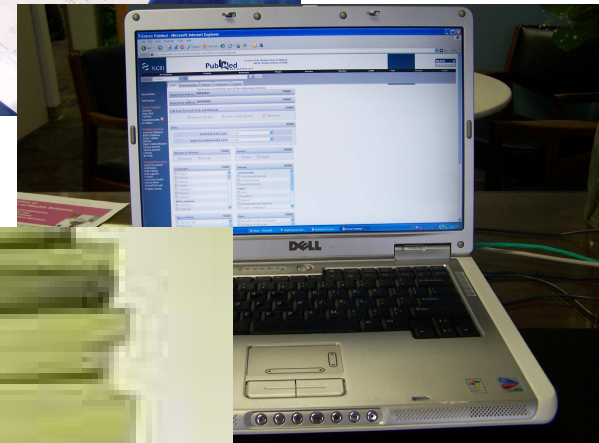
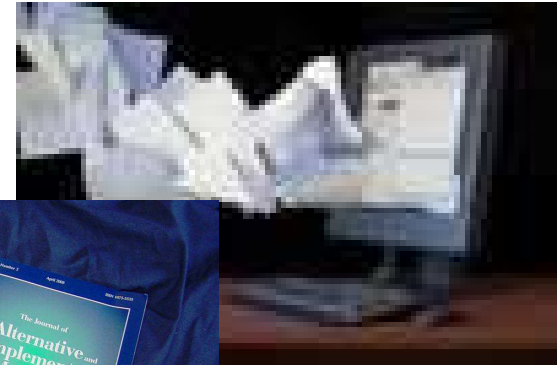
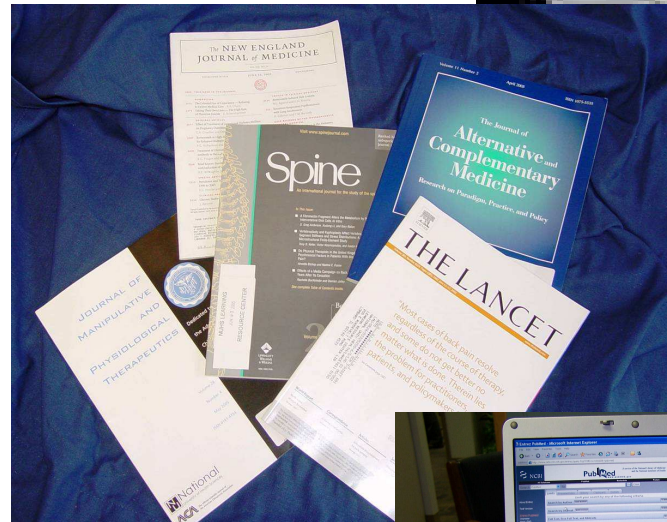


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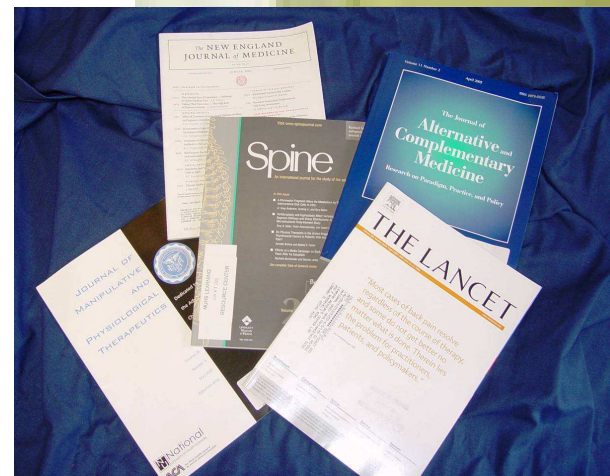
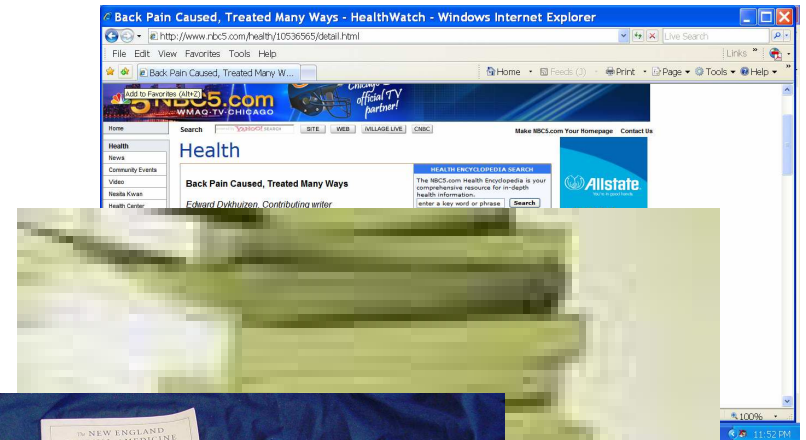
What are we looking for?

- High quality
- Peer-reviewed
- Authoritative
- Relevant
- Applicable
- Valid
- Accessible
- **Evidence**



What is the “best evidence?”

- Journal articles (papers) describing research studies
 - Secondary biomedical literature
 - Primary research studies



Secondary source literature

- descriptions of studies
- “best evidence:” filtered, reviewed, appraised, summarized
- prepared by someone other than the original researcher
- may be objectively or subjectively described



NATURAL MEDICINES
COMPREHENSIVE DATABASE

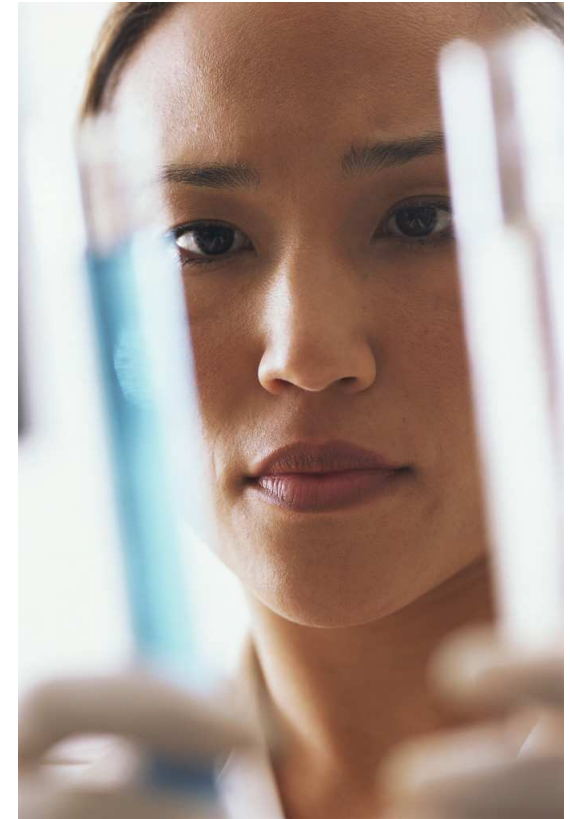


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Primary research studies

- contain **subjects or patients** who are analyzed (not other studies)
 - not reviews, analyses, guidelines, economic analyses based on primary studies etc.
- written by the researchers who conducted the study



Evidence Based Practice begins with a patient and a patient oriented, clinical question

Patient scenario

James, 32 year old male, technical sales manager who drives long distances (or at least for long periods of time) and is a frequent flier for his job, has been visiting you for neck and back issues for over two years on a fairly regular basis. In addition to working from the car and plane, he has a home office and uses a laptop. You and he have discussed work place ergonomics as well as exercise and stretching to alleviate chronic neck and back pain.



Evidence Based Practice begins with a patient and a patient oriented, clinical question

On a recent visit, he tells you he heard on the TV news that chronic back and neck pain causes depression -- or was it vice versa? -- and that chiropractic and alternative care that relieves the pain can relieve depression. He asks, "Do you think that this neck thing could be causing me to feel blue lately? Or do you think mid-winter blues are causing this pain in my lower back and neck? My colleague just had lumbar disk surgery and feels great. I'm not so excited about surgery. Should we be doing something different?"

He says after hearing that news report, he's been looking on the internet to see what might help with the chronic pain and lift his mood.



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... starting to search for evidence

In addition to following up on the comment about “the blues” in order to determine if your patient is suffering from depression to a greater degree than he notes,

- ✓ you decide to find some of the information on depression and “the blues” your patient is reading...
- ✓ you also decide to find the report your patient described
- ✓ since you took the EBP courses at NUHS, you are confident you can search the current research literature for solid evidence for alternative therapies



... starting to search for evidence with PICO

Center for Evidence Based Practice http://www.cebm.net/focus_quest.asp

	Patient, population, problem	Intervention	Comparison	Outcome
Consider	32 yo WM / chronic neck pain / chronic back pain / lumbar disk / spine	CAM therapy chiropractic acupuncture “physical therapy” nonsurgical nonoperative botanical herbal, light	Prescription drugs surgery Massage... alternative therapy treatment	to treat / relieve (chronic, neck, back) pain and (mild) depression
Question components	<ul style="list-style-type: none"> For [P= adult patients with chronic (neck / back / spine / lumbar) pain], is [I= chiropractic / acupuncture / botanical / conservative / nonoperative treatment] as effective as [C= surgery] to [O= alleviate pain / treat mild depression symptoms]? 			



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MedlinePlus – “In the News” Health Care Topics

MedlinePlus Health Information from the National Library of Medicine - Windows Internet Explorer

http://www.nlm.nih.gov/medlineplus/

MedlinePlus Health Information from the National Library of Medicine

MedlinePlus
Trusted Health Information for You

A service of the U.S. NATIONAL LIBRARY OF MEDICINE and the NATIONAL INSTITUTES OF HEALTH

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Health Topics
Start here with 750 topics on common diseases and wellness

Drugs & Supplements
About your prescription and over-the-counter drugs, herbs and supplements

Medical Encyclopedia
Includes pictures and diagrams

Dictionary
Spellings and definitions of medical words

News
Current health news and press announcements

Directories
Find doctors, dentists and hospitals

Go Local
A service for finding local resources for health-related issues

Other Resources
Local health services, libraries, organizations, international sites and more

Current Health News
Finds Both Coated Stents Perform the Same

- ▶ [Hip Bones Seen in Boys with Autism and Autism Spectrum Disorder](#)
- ▶ [Diuretics Most Effective Blood Pressure Medication for People with Metabolic Syndrome](#)
- ▶ [More news](#)

Featured Site

Watch a live webcast of surgery for [overactive bladder](#) on January 30 at 6 p.m. EST

National Wear red Day
Friday February 1, 2008
Show your support for women's heart disease awareness

Get Involved ▶

Interactive Tutorials
Over 165 slideshows with sound and pictures

ClinicalTrials.gov
Studies for new drugs and treatments

NIH SeniorHealth
Health information for older adults

Surgery Videos
Videos of surgical procedures

NEW What's New

Director's Comments

NIH MedlinePlus Mail

Starting an effective search

Go to the source your patient recalls ...

- www.google.com
 - NBC 5 health
 - Chiropractic, pain, depression
 - <http://www.nbc5.com/health/10536565/detail.html>

The screenshot shows a Windows Internet Explorer browser window with the address bar displaying <http://www.nbc5.com/health/10536565/detail.html>. The page title is "Back Pain Caused, Treated Many Ways - HealthWatch". The browser's address bar includes a "Live Search" button. The page content features a navigation menu on the left with categories like Health, News, and Video. The main article is titled "Back Pain Caused, Treated Many Ways" by Edward Dykhuizen, dated December 19, 2006. The article text describes a 28-year-old graduate student, Erin, who suffers from chronic upper back pain and has found relief through chiropractic care and acupuncture. A "My Health" section at the bottom of the article includes links for "Aches/Pains", "All About Backs", and "Have Pain?". On the right side of the page, there is a "HEALTH ENCYCLOPEDIA SEARCH" box and an "Allstate" advertisement with a list of benefits: ACCIDENT FORGIVENESS, NEW CAR REPLACEMENT, DEDUCTIBLE REWARDS, and SAFE DRIVING BONUS. A small "NU" logo is visible in the bottom left corner of the slide.

Read, follow ...

Village Live
About NBC 5
About Us
NBC5 News Today
Marketplace
Classified Ads
Marketplace
2006 Healthy Lifestyle Expo
Junior Year Abroad
Education
Family
Food
Automotive
Employment
House And Home
Financial
Real Estate
Travel
Lottery Results

According to [an overview of back pain from the National Institute of Health](#), the back is uniquely complicated. It is made up of dozens of bones, muscles and nerves, all of which must work in harmony. A slight strain in one muscle or a slight misalignment between two bones can constrict a nerve, causing back pain.

Chiropractors such as Lederer take X-rays to ensure that patients' spines are in need of realignment.

"What I see most often in the X-rays I take are spinal degeneration, osteoarthritis, degenerative disc disease or other conditions," he said.

Treating The Pain

Surgery may be necessary for more serious cases of back pain, but Lederer emphasized that it is only an option after more conservative options have been exhausted. He cited a [recent article in the Journal of the American Medical Association](#) that showed back surgery and certain exercise programs yield about the same results.

Manipulation from a chiropractor is a much less drastic method for helping resolve the imbalance that causes the pain. Chiropractors go through years of training to learn how to adjust joints enough to restore a normal range of motion.

Spinal manipulation -- often accompanied by the "pop" of air being moved from a joint -- is not a full solution by itself. According to Lederer, "chiropractic care now and exercise later" is the best approach. He gives patients exercises to perform that will strengthen back muscles, and he also emphasizes the need for periodic adjustments.

Long-Term Solutions

Of course, if your job is contributing to your back problems, it may be necessary to change the conditions in which

Follow a link to overview of back pain website:

http://www.ninds.nih.gov/disorders/backpain/detail_backpain.htm

The screenshot shows a web browser window displaying the 'Low Back Pain Fact Sheet' from the National Institute of Neurological Disorders and Stroke (NINDS). The browser's address bar shows the URL: http://www.ninds.nih.gov/disorders/backpain/detail_backpain.htm. The website header includes the NINDS logo and the text 'NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE' and 'National Institutes of Health'. A navigation menu contains links for Home, About NINDS, Disorders, Funding & Research, News & Events, Find People, and Training. The main content area is titled 'Low Back Pain Fact Sheet' and includes a sidebar with links like 'More about Back Pain', 'Disclaimer', 'Contact Us', and 'My Privacy'. The main content lists several topics under 'Table of Contents (click to jump to sections)', such as 'What structures make up the back?' and 'What causes lower back pain?'. On the right side, there are links for 'Print-friendly version' and 'Email this page'. Red arrows point from various text labels to specific parts of the website: 'Who?' points to the NINDS logo; 'Site features & info' points to the navigation menu; 'Affiliation?' points to the 'National Institutes of Health' text; 'Purpose?' points to the 'Get Web page suited for printing' link; 'Research?' points to the 'What structures make up the back?' link; and another 'Affiliation?' points to the 'NINDS is part of the National Institutes of Health' text.

Who?

Site features & info

Affiliation?

Purpose?

Affiliation?

Research?

Current information?



National

Evaluating a website – see Resources

- **What is the purpose of the site?**
- **Who runs this site?**
 - Are there links to a home page or about us page that provide clear information about the publisher, authors, editors, professional organizations, institutions and sponsors?
- **Who pays for the site?**
 - The source of a Web site's funding should be clearly stated or readily apparent.
 - Advertising, educational institution, government, grant, organizational dues?
- **What is the basis of the information?**
 - Does the site make health claims that seem too good to be true?
 - Does the information use deliberately obscure, "scientific" sounding language? (recent research studies show...)
 - Does it promise quick, dramatic, miraculous results? Is this the only site making these claims?
- **Where does the information come from?**
 - Are references and original sources provided?
 - Does the site rely on testimonials?
 - Are the authors identified? What are the author(s) credentials?
- **How is the information selected?**
 - Does the site have an editorial board? Is the information reviewed before it is posted or published?
- **How current is the information?** Is it linked to current research publications, articles, databases?
- **How does the site choose links to other sites?**
- **What information about users does the site collect. Why?**
 - Is there a privacy policy
 - Is there a membership requirement? Is it a paid subscription?
- **Can you contact the site management with questions, feedback and information?**
- **Are discussion boards monitored and reviewed?**



Evaluating a website

- **What is the purpose of the site?**
- **Who runs this site?**
 - Are there links to a home page or about us page that provide clear information about the publisher, authors, editors, professional organizations, institutions and sponsors?
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Evaluating a website

➤ What is the basis of the information?

- Does the site make health claims that seem too good to be true?
- Does the information use deliberately obscure, "scientific" sounding language? (recent research studies show...)
- Does it promise quick, dramatic, miraculous results? Is this the only site making these claims?
- Are the links and references to “research studies,” “clinical studies” or “proven scientific results” provided?



Evaluating a website

- **Where does the information come from?**
 - Are references and original sources provided?
 - Does the site rely on testimonials?
 - Are the authors identified? What are the author(s) credentials?
- **How is the information selected?**
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- **How current is the information? Is it linked to current research publications, articles, databases?**
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Evaluating a website

- **What information about users does the site collect. Why?**
 - Is there a privacy policy?
 - Is there a membership requirement? Is it a paid subscription?
- **Can you contact the site management with questions, feedback and information?**
- **Are discussion boards monitored and reviewed?**

Read, follow ...

Village Live	<p>According to an overview of back pain from the National Institute of Health, the back is uniquely complicated. It is made up of dozens of bones, muscles and nerves, all of which must be in harmony. A slight strain in one muscle or a slight misalignment between two bones can constrict a nerve, causing back pain.</p> <p>Chiropractors such as Lederer take X-rays to ensure that patients' spines are in need of realignment.</p> <p>"What I see most often in the X-rays I take are spinal degeneration, osteoarthritis, degenerative disc disease or other conditions," he said.</p> <h3>Treating The Pain</h3> <p>Surgery may be necessary for more serious cases of back pain, but Lederer emphasized that it is only an option after more conservative options have been exhausted. He cited a recent article in the Journal of the American Medical Association that showed back surgery and certain exercise programs yield about the same results.</p> <p>Manipulation from a chiropractor is a much less drastic method for helping resolve the imbalance that causes the pain. Chiropractors go through years of training to learn how to adjust joints enough to restore a normal range of motion.</p> <p>Spinal manipulation -- often accompanied by the "pop" of air being moved from a joint -- is not a full solution by itself. According to Lederer, "chiropractic care now and exercise later" is the best approach. He gives patients exercises to perform that will strengthen back muscles, and he also emphasizes the need for periodic adjustments.</p> <h3>Long-Term Solutions</h3> <p>Of course, if your job is contributing to your back problems, it may be necessary to change the conditions in which</p>
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Classified Ads	
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Family	
Food	
Automotive	
Employment	
House And Home	
Financial	
Real Estate	
Travel	
Lottery Results	

Follow a link to a research article:

<http://jama.ama-assn.org/cgi/content/abstract/296/20/2451>

The screenshot shows a web browser window with the JAMA website. The browser's address bar contains the URL <http://jama.ama-assn.org/cgi/content/abstract/296/20/2451>. The page title is "JAMA -- Abstract: Surgical vs Nonoperative Treatment for Lumbar Disk Herniation: The Spine Pati - Win...". The website header includes the JAMA logo and the text "Journal: quality, authority". The main content area displays the article title "Surgical vs Nonoperative Treatment for Lumbar Disk Herniation" and the subtitle "The Spine Patient Outcomes Research Trial (SPORT) Observational Cohort". The authors listed are James N. Weinstein, DO, MSc; Jon D. Lurie, MD, MS; Tor D. Tosteson, ScD; Jonathan S. Skinner, PhD; Brett Hanscom, MS; Anna N. A. Tosteson, ScD; Harry Herkowitz, MD; Jeffrey Fischgrund, MD; Frank P. Cammisa, MD; Todd Albert, MD; Richard A. Deyo, MD, MPH. The article is from JAMA, 2006;296:2451-2459. The abstract text is partially visible, mentioning "Context For patients with lumbar disk herniation, the Spine Patient Outcomes Research Trial (SPORT) randomized trial intent-to-treat analysis showed small but not statistically significant numbers of patients who crossed over between assigned groups precluded are." and "Objective To compare the". The browser's taskbar at the bottom shows the start button, several open applications (2 Microsoft..., iTunes, 6 Internet..., untitled - Paint), and the system clock showing 12:34 AM.

Title: relevance

Authors: authority

Study Site: relevance

Summary (abstract): relevance

How do I know which journal articles are worthwhile?

Journal

Title

Author

Site

Summary (Abstract)



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JTASS

- 5 second evaluation
- Go or No-go
- Essential to start the full Critical Appraisal
- Demonstrate efficiency: you'll need the skill for the clinic and professional practice

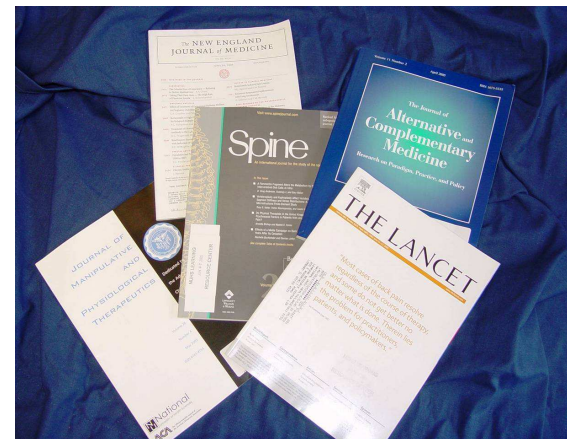
JTASS

Journal

Understand and appraise the quality of the journal.

Answer and understand:

- Is it peer-reviewed?
- Is it indexed? If indexed, where is it indexed?
- Why is it important that journal articles be peer-reviewed and indexed?
- Are you familiar with this journal?



Peer review of journal articles

- Prior to publication in a journal, articles go through rigorous review
- “Peers” review and provide constructive criticism
- Before accepted for publication, peers have to be satisfied with the article
- Only 5% of articles are accepted for publication on the first submission



Peer review of journal articles in PubMed

- Click on [journal link](#) to see if journal is indexed in MEDLINE
- MEDLINE journals are peer-reviewed
- Not all peer-reviewed journals are indexed in MEDLINE
- Click on journal link to go to journal website; check “about us” or similar website link



The screenshot displays the PubMed website interface. At the top left is the NCBI logo. The main header features the PubMed logo and the text "A service of the National Library of Medicine and the National Institutes of Health" with the URL "www.pubmed.gov". Below the header is a navigation bar with links for "All Databases", "PubMed", "Nucleotide", "Protein", "Genome", "Structure", "OMIM", and "PMC". The search bar contains "PubMed" and "for" with "Go" and "Clear" buttons. Below the search bar are buttons for "Limits", "Preview/Index", "History", "Clipboard", and "Details". The "Display" section shows "AbstractPlus" and "Show 20" with "Sort by" and "Send to" dropdown menus. A red arrow points to the "Review: 0" button. The search results section shows a single result: "1: [J Manipulative Physiol Ther.](#) 1999 Jun;22(5):292-8." Below the result is a box containing the title "A feasibility study of chiropractic spinal manipulation versus sham spinal manipulation for chronic otitis media with effusion in children." and the authors "Sawyer CE, Evans RL, Boline PD, Branson R, Spicer A." To the right of the result is a "Related Links" section with two links: "Chronic pediatric asthma and chiropractic s prospective clinical series and randomi: [JM]" and "Nonoperative treatments for sciatica: a pilo clinical trial. [JM]".

Peer review of journal articles in EBSCOhost

- Most databases list journal titles link on “Select Database” page
- CINAHL contains a list of peer-reviewed journals

The screenshot shows the EBSCOhost website interface. At the top, there's a navigation bar with 'Research Databases' and search options like 'Basic Search', 'Advanced Search', and 'Visual Search'. Below this is a 'Choose Databases' section with a 'Continue' button. The main content area lists several databases, each with a checkbox and a brief description. A red arrow points to the 'CINAHL with Full Text' entry, which is described as 'the world's most comprehensive source of full text for nursing & allied health journals'. Other databases listed include 'Academic Search Premier', 'Alt HealthWatch', 'Pre-CINAHL', and 'AMED (Alternative Medicine)'.

Choose Databases

To search within a single database, click the database name listed below. To select more than one database to search, check the boxes next to the databases and click *Continue*.

- [Academic Search Premier](#)
The world's largest academic multi-disciplinary database, *Academic Search Premier* provides full text for nearly 4,650 serials, including full text for more than 3,600 peer-reviewed titles. PDF backfiles to 1975 or further are available for well over one hundred journals, and searchable cited references are provided for more than 1,000 titles. This database is updated on a daily basis via EBSCOhost.
[Title List](#) [More Information](#)
- [Alt HealthWatch](#)
This alternative health database provides full text for 180 publications in the collection, including full text for many peer-reviewed journals. *Alt HealthWatch* provides in-depth coverage across the full spectrum of subject areas covered by complementary and alternative medicine dating back to 1990.
[Title List](#) [More Information](#)
- [Pre-CINAHL](#)
A companion database to *CINAHL*, *Pre-CINAHL* is intended to provide current awareness of new journal articles, and includes a rotating file of limited bibliographic information (no subject searching), which are available to searchers only for the time when these articles are being assigned additional indexing.
[More Information](#)
- [CINAHL with Full Text](#)
CINAHL with Full Text is the world's most comprehensive source of full text for nursing & allied health journals, providing full text for more than 550 journals indexed in *CINAHL*. Of those, nearly 400 have cover-to-cover indexing in *CINAHL*. With more than 600,000 full-text articles dating from 1982, *CINAHL with Full Text* is the definitive research tool for all areas of nursing and allied health literature.
[Title List](#) [More Information](#)
- [AMED \(Alternative Medicine\)](#)
This database, produced by the British Library Health Care Information Service, is a database for physicians, therapists, medical researchers and clinicians looking for information regarding alternative treatments to conventional medicine. With coverage dating from 1985 to the present, this database offers citations and abstracts from over 400 important sources.
[More Information](#)

Peer review of journal articles in EBSCOhost

- Click search result titles >> click specific journal link >> look for info

The screenshot shows the EBSCOhost interface. At the top left is the EBSCOHOST logo with 'Research Databases' next to it. To the right are links for 'Sign In' and 'Folder'. Below the logo are five search options: 'Basic Search', 'Advanced Search', 'Visual Search', 'Choose Databases', and 'Select another EBSCO service'. A green navigation bar contains 'New Search' and several filters: 'Keyword', 'Publications', 'Subject Terms', 'Cited References', 'Indexes', and 'Images'. Below this bar, there are navigation links: '7 of 13', 'Result List', 'Refine Search', 'Print', 'E-mail', 'Save', 'Export', and 'Add to folder'. The 'View' section is set to 'Citation'. The main content area displays the following information:

Title:	Relief of depressive symptoms in an elderly patient with low back pain.
Authors:	Rowell, Robert M. ¹ rowell_r@palmer.edu Lawrence, Dana J. ¹ Hawk, Cheryl ²
Source:	Clinical Chiropractic ; Mar2006, Vol. 9 Issue 1, p34-38, 5p
Document Type:	Article
Subject Terms:	* DEPRESSION, Mental * BACKACHE * CHIROPRACTIC * DEPRESSED persons Treatment
Abstract:	Summary: Objective: To describe the case of a patient with depressive symptoms which improv and to discuss the clinical features of depression , including screening. Clinical features: A 71-y care. Her initial score on the Beck Depression Inventory (BDI) was 8. Intervention and outcome chiropractic technique, moist hot packs, and interferential current to the lumbar spine a total of baseline and again three times during care. Her scores went from 8 (indicated moderate depre

3 JTASS

JTASS

Title

- How much information is available in the title alone?
- Is it potentially interesting or possibly useful in your practice?
- Are key PICO words present? Logically used?
- Why or why not?

Are chronic low back pain ~~outcomes~~ improved with co-management of concurrent depression?

- **Evaluate** the title of the article relative to patient & PICO
- Don't just copy the title down.



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JTASS: Author(s)

Make a determination regarding the quality of the authors.

- Publication history
- Track record: careful, thoughtful work
- What areas of **expertise** do the authors bring to this study?
- Indications of methodological and/or statistical expertise?
- How can you find out more about the authors?
 - Display the abstract or citation
 - In abstract view Click on “author” link in PubMed or EBSCOhost to display other publications
 - [www.scirus](http://www.scirus.com) or Google



JTASS Site

Site

Compare the **site where the study was conducted** to your practice.

- not the website or database where you found the article
- Not the authors' institution



JTASS Site

Compare the site where the study was done to your practice.

- **Where** is the site?
- Is the site considered primary, secondary, or tertiary care?
- Is the site **sufficiently similar** to your own that results, if valid, would apply to patients in your practice? (Patient values, customs)
 1. Is **your access** to the required facilities, expertise and technology sufficient to allow you to implement the interventions described in the article?
 2. Are the **patients** seen in the facility where the article was written likely to be **similar** to your patients in disease severity, treatment, age, sex, race or other key features that have an important bearing on clinical outcomes?
- In areas where the site is not similar, what are the potential consequences as to how you will interpret the results?



JTASS: Summary (Abstract)

- Brief description of the study placed at the beginning of the article
 - ~100-300 words
 - organized
- Includes research question, objective(s), methods (briefly), results (briefly), study implications



JTASS: Summary (Abstract)

Determine which aspects noted in the abstract

- ... are clinically important to you. Why?
- ... are relevant to your PICO
- Look for clinical applicability
- Assess patient / population description
- Assess intervention. Relevant?
- Note outcomes and measurement (if any).

JTASS: Summary (Abstract)

Summary (Abstract)

Determine which, if any, of the results in the abstract are clinically important to you and why.

- Summarize the relevant aspects (patient, methods, measurements, outcomes, results, etc.)
- in your own words



In all reality, what do you look at first?

1. Title of the article to see if you are interested / relevance
2. Conclusion of the abstract to determine the bottom line of this study
3. Remainder of the abstract to determine
 - Relevance to PICO
 - Study design
 - Potential flaws
4. Journal and authors for reputation and recognition
5. ... and only then do most people start to read the full text

Where to find information for JTASS Evaluation

1. Journal link (points to the JAMA link in the search results)

2. Author links (points to the author names in the abstract)

3. Site of authors vs. site of study (see abstract). (points to the author affiliation and the abstract text)

4. Author contact (e-mail) (points to the author's email address)

5. "Summary" Abstract (points to the abstract text)

6. Access the full text (points to the 'FREE text at JAMA' link)

Clicking on the title at the results Summary view leads to the Abstract Plus view



National

JTASS

Journal Understand and appraise the quality of the journal.

- Is it peer-reviewed? Is it indexed? If indexed, where is it indexed?
- Why is it important that journal articles be peer-reviewed and indexed?
- Are you familiar with this journal?

Title Be able to evaluate the title.

- How much information is available in the title alone?
- Is it potentially interesting or possibly useful in your practice?
- Why or why not?

Author(s) Make a determination regarding the quality of the authors.

- Is the track record of the authors (if you know it) one of careful, thoughtful work that has stood the test of time?
- What areas of expertise do the authors bring to this study? Is there any indication that methodological and/or statistical expertise was utilized for this study?

Site Compare the site in this study to your practice.

- Where is the site? Is the site considered primary, secondary, or tertiary care?
- Is the site sufficiently similar to your own that its results, if valid, would apply to patients in your practice?
 1. Is your access to the required facilities, expertise and technology sufficient to allow you to implement the maneuver(s) described in the article?
 2. Are the patients seen in the facility where the article was written likely to be similar to your patients in disease severity, treatment, age, sex, race or other key features that have an important bearing on clinical outcomes?
- In areas where the site is not similar, what are the potential consequences as to how you will read the results?

Summary (Abstract) Determine which, if any, of the results in the abstract are clinically important to you and why.

- Assess patient / population description, intervention,
- Note outcomes.



National

University of Health Sciences EBP@NUHS Essential Evidence Based Practice Study Guide Accessing Advanced Search Features Eval Quality, Authority, Relevance JTASS
Barbara M. Sullivan, Ph.D. Dept. of Research NUHS 2008

Starting an effective search armed with your PICO

[Entrez PubMed](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?DB=pubmed) <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?DB=pubmed>

- Key words, simple text search:
 - Chiropractic depression // chiropractic neck pain // neck pain depression
 - chiropractic depression neck pain

The screenshot shows the PubMed website interface. At the top, the NCBI logo is on the left, and the PubMed logo with the text 'A service of the National Library of Medicine and the National Institutes of Health' is in the center. The URL 'www.pubmed.gov' is also visible. On the right, there are links for 'My NCBI', 'Sign In', and 'Register'. Below the header, there is a navigation bar with tabs for 'All Databases', 'PubMed', 'Nucleotide', 'Protein', 'Genome', 'Structure', 'OMIM', 'PMC', 'Journals', and 'Books'. The search bar contains the text 'chiropractic depression' and has buttons for 'Go', 'Clear', and 'Save Search'. Below the search bar, there are tabs for 'Limits', 'Preview/Index', 'History', 'Clipboard', and 'Details'. The 'Display' dropdown is set to 'Summary', and 'Show' is set to '20'. There are also buttons for 'All: 18' and 'Review: 3'. The search results are listed below, with three items shown. Each item has a checkbox, a title, authors, journal information, and PMID. To the right of the results, there are links for 'Related Articles, Links' and 'One page.'.

✓ Abstract Plus view
✓ JTASS
✓ Date: too old?

1: [Ritvanen T, Zaproudina N, Nissen M, Leinonen V, Hann](#)
Dynamic surface electromyographic responses in chronic low back pain treated by tractional bone setting and conventional physical therapy.
J Manipulative Physiol Ther. 2007 Jan;30(1):31-7.
PMID: 17224353 [PubMed - indexed for MEDLINE]

2: [Middleton P, Pollard H](#)
Are chronic low back pain outcomes improved with co-management of concurrent depression?
Chiropr Osteopat. 2005 Jun 22;13(1):8.
PMID: 15972104 [PubMed]

3: [Rupert RL, McKinzie CL, Morter MT Jr, Daniel DM](#)
Treatment of chronic nonresponsive patients with a nonforce technique.
J Manipulative Physiol Ther. 2005 May;28(4):259-64.

PubMed Single Citation Matcher

PubMed Single Citation Matcher: Related Articles

PubMed Single Citation Matcher - Windows Internet Explorer

http://www.ncbi.nlm.nih.gov/entrez/query/static/citmatch.html

PubMed Single Citation Matcher

NCBI PubMed Single Citation Matcher

Entrez PubMed Nucleotide Protein Ge

- Use this tool to find PubMed citations. You may omit any field.
- Journal may be the full title or the title abbreviation.
- For first and last author searching, use smith jc format.

Journal: JAMA : the journal of the American Medical Association

Date: yyyy/mm/dd (month and day are optional)

Volume: Issue: First page:

Author name (see [help](#)): Weinstein

Only as first author Only as last author

Title words:

Go Clear

PubMed Single Citation Search Results: Check related articles

Search PubMed for "JAMA : the journal of the American Medical Association" Go Clear Save Search

Limits Preview/Index History Clipboard Details

Display Summary Show 20 Sort By Send to

All: 82 Review: 4

Items 1 - 20 of 82 Page 1 of

- 1: [Vinck P, Pham PN, Stover E, Weinstein HM.](#) Related Article
Exposure to war crimes and implications for peace building in northern Uganda.
JAMA. 2007 Aug 1;298(5):543-54.
PMID: 17666675 [PubMed - indexed for MEDLINE]
- 2: [Weinstein JN, Lurie JD, Tosteson TD, Skinner JS, Hanscom B, Tosteson AN, Herkowitz H, Fischgrund J, Cammisa FP, Albert T, Deyo RA.](#) Related Article
Surgical vs nonoperative treatment for lumbar disk herniation: the Spine Patient Outcomes Research Trial (SPORT) observational cohort.
JAMA. 2006 Nov 22;296(20):2451-9.
PMID: 17119141 [PubMed - indexed for MEDLINE]
- 3: [Weinstein JN, Tosteson TD, Lurie JD, Tosteson AN, Hanscom B, Skinner JS, Abdu WA, Hilibrand AS, Boden SD, Deyo RA.](#) Related Articles, Lists
Surgical vs nonoperative treatment for lumbar disk herniation: the Spine Patient Outcomes Research Trial (SPORT): a randomized trial.
JAMA. 2006 Nov 22;296(20):2441-50.
PMID: 17119140 [PubMed - indexed for MEDLINE]
- 4: [Kaye BA, Weinstein J.](#) Related Article
Neonatal signs after in utero exposure to selective serotonin reuptake inhibitors.
JAMA. 2005 Nov 9;294(18):2299-300; author reply 2300-1. No abstract available.
PMID: 16278354 [PubMed - indexed for MEDLINE]
- 5: [Weinstein AR, Sesso HD, Lee IM, Cook NR, Manson JE, Buring JE, Gaziano JM.](#) Related Article

PubMed >> Search Results >> Details Tab

The screenshot shows the PubMed website interface. At the top, the NCBI logo is on the left, and the PubMed logo with the URL www.pubmed.gov is in the center. Below the logo, a navigation bar contains links for All Databases, PubMed, Nucleotide, Protein, Genome, Structure, OMIM, PMC, and Journals. The search bar contains the text "PubMed" in a dropdown menu, followed by "for" and the search query "JAMA : the journal of the American Medical Association". There are "Go", "Clear", and "Save Search" buttons. Below the search bar, there are tabs for Limits, Preview/Index, History, Clipboard, and Details. The Details tab is selected and highlighted with a red arrow. The main content area shows the "Query Translation:" section with the translated query: "JAMA : the journal of the American Medical Association"[Jour] AND Weinstein[author]. Below this is a "Result:" section showing the number "82" and a "Database:" section showing "PubMed". The "User query:" section shows the original search query: "JAMA : the journal of the American Medical Association"[Jour] AND Weinstein[author]. There are three red arrows pointing to the "Details" tab, the "Result:" section, and the "User query:" section. On the left side, there is a sidebar with various links including "About Entrez", "Entrez PubMed", "PubMed Services", and "Related Resources".

Search PubMed for "JAMA : the journal of the American Medical Association" Go Clear Save Search

Limits Preview/Index History Clipboard **Details**

Query Translation:

"JAMA : the journal of the American Medical Association"[Jour] AND Weinstein[author]

Search URI

Result:

82

Database:

PubMed

User query:

"JAMA : the journal of the American Medical Association"[Jour] AND Weinstein[author]

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Clinical Queries
Special Queries
LinkOut
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Related Resources
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NATIONAL UNIV OF HEALTH SCIENCES



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[Kids Search](#)

EbscoHost on campus link:

(NUHS home > Student Services > LRC > databases >

Via EbscoHost [login](#)

<http://search.ebscohost.com/Community.aspx?lp=login.asp&ref=http%3a%2f%2fwww.nuhs.edu%2fshow.asp%3fdurki%3d216&authtype=ip&ugt=723731963C8635173776355632353E5220E365D36813659360E329E334133503&return=y>

EbscoHost off campus: <http://search.epnet.com/>

Use NUHS LRC Passwords document

Login Info: User ID: s9817535 Password: password

Select Multiple databases or one per search one database per search: use of controlled vocab & benefits

EBSCOhost - Windows Internet Explorer

http://web.ebscohost.com/ehost/selectdb?vid=18&hid=16&sid=b90a6bc4-c821-48e1-9815-245c6c864f31%40SRCSM1

File Edit View Favorites Tools Help Links CAM News

EBSCOhost

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Sign In to My EBSCOhost

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Choose Databases

To search within a database, click the database name listed below. To select more than one database to search, check the boxes next to the databases and click *Continue*.

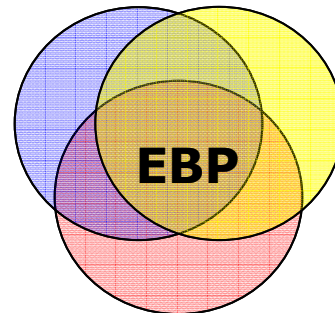
- Academic Search Premier**
The world's largest academic multi-disciplinary database, *Academic Search Premier* provides full text for nearly 4,650 serials, including full text for more than 3,600 peer-reviewed titles. PDF backfiles to 1975 or further are available for well over one hundred searchable cited references are provided for more than 1,000 titles. This database is updated on a daily basis via EBSCOhost.
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This alternative health database provides full text for 180 publications in the collection, including full text for many peer-reviewed journals. *Alt HealthWatch* provides in-depth coverage across the full spectrum of subject areas covered by complementary a medicine dating back to 1990.
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- Pre-CINAHL**
A companion database to *CINAHL*, *Pre-CINAHL* is intended to provide current awareness of new journal articles, and includes a rotating file of limited bibliographic information (no subject searching), which are available to searchers only for the time when being assigned additional indexing.
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- AMED (Alternative Medicine)**
This database, produced by the British Library Health Care Information Service, is a database for physicians, therapists, medical researchers and clinicians looking for information regarding alternative treatments to conventional medicine. With coverage to the present, this database offers citations and abstracts from over 400 important sources.
[More Information](#)
- Health Source: Nursing/Academic Edition**
This database provides nearly 550 scholarly full text journals focusing on many medical disciplines. *Health Source: Nursing/Academic Edition* also features abstracts and indexing for nearly 850 journals. This database is updated on a daily basis.
[Title List](#) [More Information](#)
- Health Source - Consumer Edition**
This database is the richest collection of consumer health information available to libraries worldwide, providing information on many health topics including the medical sciences, food sciences and nutrition, childcare, sports medicine and general health. *Consumer Edition* features searchable full text for nearly 150 journals. This database is updated on a daily basis.
[Title List](#) [More Information](#)
- ERIC**
ERIC, the Educational Resource Information Center, contains more than 2,200 digests along with references for additional information and citations and abstracts from over 1,000 educational and education-related journals.

Practice:

EBP@NUHS Study and Practice Guide:

Ch. 4: Access & Appraise - Evaluating Information and Evidence for Quality, Authority and Relevance (JTASS)

Guided Search (Advanced Features) and
JTASS Evaluation Lab



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Barbara M. Sullivan, Ph.D. Dept. of Research NUHS 2008