Legal Nurse Consulting

Volume 16 ▲ Number 3 ▲ Summer 2005

- ▲ Information Literacy, Part I: The Legal Nurse Consultant and the Internet
- ▲ Neuropsychological Testing in Forensic Settings: Its Relevance to the Real World
- **▲ Polyps and Colon Cancer: Investigating Prevention**
- ▲ Pathways to Nursing: A Guide to Library and Online Research in Nursing and Allied Health
- **▲ Discovery in Civil Cases**
- ▲ Why is Medical Malpractice/Tort Reform Such a Hot Topic?



AMERICAN ASSOCIATION OF LEGAL NURSE CONSULTANTS

American Association of Legal Nurse Consultants

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The Journal of Legal Nurse Consulting

Purpose

The purpose of the journal is to promote legal nurse consulting within the medical-legal community; to provide both novice and experienced legal nurse consultants (LNCs) with a quality professional publication; and to teach and inform LNCs about clinical practice, current legal issues, and professional development.

Manuscript Submission

The journal accepts original articles, case studies, letters, and research. Query letters are welcomed but not required. Material must be original and never published before. A manuscript should be submitted with the understanding that it is not being sent to any other journal simultaneously. Manuscripts should be addressed to JLNC@aalnc.org.

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Submissions are peer-reviewed by eminent professional LNCs with diverse professional backgrounds. Manuscript assistance can be provided upon request to the editor. Acceptance is based on the quality of the material and its importance to the audience.

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Author! Author!



Although I have been an Editorial Board member for several years, I am honored that Barbara Levin and the national Board of Directors had the confidence in me for the appointment as the next Editor for *The Journal of Legal Nurse Consulting*. My thanks to Lynda Kopishke and Marguerite Barbacci, the two previous Editors, for their encouragement and support. Finally, if it weren't for Erin Larson, the Managing Editor, and all of the other wonderful, efficient staff at SmithBucklin Corporation, we wouldn't have the excellent products and services available to our organization.

One of my first tasks was being thrust into presenting the *Writing for Publication* workshop at our most recent National Educational Conference in Anaheim. With limited preparation time, I relied on Lynda Kopishke's presentation, which I attended at the two previous conferences. In keeping with Lynda's tradition, I did an interactive exercise of having attendees write introductory paragraphs for a future article and then read them aloud. I thank my colleague and fellow Editorial Board member Dr. Eileen Croke for assisting with this workshop. I was impressed by the variety of interesting subjects and enticing writing styles. Please finish those fantastic articles and submit them, even if it was from the earlier years!

There are yet other ways to become authors. We would like to begin publishing Letters to the Editor. Let's make this a competition to see who will be the first! We hope that this will generate topics for future columns or articles. We also need authors for topics on Life Care Planning across the lifespan, a PALS/NALS series, cardiopulmonary bypass surgery complications, fibromyalgia, expert witness intimidation, and product liability (medications, lead poisoning, or latex sensitivity).

Speaking of authors, we have exceptional articles in this issue. One of our new Editorial Board members, Kara DiCecco, wrote the first of a two-part series on using the Internet for research. Writing and computer skills are two essential competencies for LNCs. Gone are the days of just going to the library, using the medical indexes, and searching the stacks. This article will guide both the novice and the experienced net surfer through the plethora of information in finding credible sources. Kara follows up with a correlating book review about library and Internet research.

Robert Sbordone's article examines the relevance and validity of neuropsychological testing, of interest to LNCs with forensic and catastrophic brain injury cases. The case example alerts those who attend independent medical examinations of the variables affecting this type of assessment.

While intestinal polyps and colorectal cancer are unpleasant topics, they may affect us, our family members, and our friends. Although colorectal cancer is a leading cause of adult deaths in the United States, the good news is that it may be prevented or at least detected early. Mary O'Connor's article provides this valuable information.

The Greater Baltimore Chapter has assumed the Questions and Answers column, thus relieving the Greater Detroit Chapter of their long-standing responsibility. Bravo to both chapters for their past and future contributions. The Greater Baltimore Chapter's debut article addresses the on-going debate about medical malpractice and tort reform.

Lastly, the Point of Law column is shared by two RN/JDs, Mary Ann Shea and Arlene Klepatsky. This time it is Arlene's turn, and she has written about the discovery phase of a lawsuit from her perspective as a California attorney.

Happy reading, and keep writing!

Holly Hillman, MSN RN

Holly Hillman

Editor, The Journal of Legal Nurse Consulting

Information Literacy, Part I: The Legal Nurse Consultant and the Internet

Kara L. DiCecco, MSN RN

KEY WORDS

Information Literacy, Internet Research

The first of a two-part series on information literacy, this article will examine the scope of Internet research via the World Wide Web. Undeniably, the effective legal nurse consultant (LNC) must confidently navigate an immense sea of scientific studies, medical resources, legal standards, and demonstrative evidence while evaluating and authenticating its origins. If autonomy and critical thinking skills are native traits of the exceptional bedside nurse, so too can they be found in the successful LNC. The focus of this article is to provide a primer of skills and resources to efficiently locate medical-legal information on the Web. A second but equally important goal is to provide the reader with an outline of steps for the critical analysis of the retrieved information.

The nursing profession has never been more accountable for competence in accessing the wealth of electronic information and demonstrating familiarity with the explosion of evidence-based medicine (Schloman, 2001). The nursing profession's commitment to remain knowledgeable about the acceptable standards of care in a dynamic atmosphere of medical-legal issues will ultimately dictate the friendliness with the Internet as a research medium.

Terminology Clarified

Information literacy is defined as being "able to recognize when information is needed and having the ability to locate, evaluate, and use effectively the needed information" (American Library Association, 1989). As an agent of information, the Internet is now inescapably linked to this definition. Although frequently used interchangeably, a subtle distinction exists between the designations "Internet" and "World Wide Web." The Internet ("Net") refers to the physical network of computers that allow communication between users. The World Wide Web ("Web") refers to the billions of documents stored on these computers. (See Table 1 on page 4 for a glossary of common terminology.) To align the profession with global communication and be able to access the vast reserves of online resources, the nursing community must first offer an honest appraisal of its stance.

Statement of the Problem

There currently exists a paucity of studies regarding how frequently and in what context legal nurse consultants (LNCs) use the Internet to investigate and locate medicallegal information. The reason for this may very well lie in the demographics of the nursing profession. Despite the veteran LNC's vast experience of numerous years in nursing, many LNCs are the product of traditional nursing curriculum that historically placed little emphasis on the value of Internet

literacy. Not surprisingly, experienced nurses with mastery in information seeking skills via the Internet have largely been self-taught (Dumas, Dietz, & O'Connelly, 2001). Studies, however, have repeatedly shown that the nursing profession is reluctant to embrace the Internet, preferring instead to rely on fellow nurses and collegial exchange as a primary source of information (Richards, 2001; Estabrooks, O'Leary, Ricker, & Humphrey, 2003). According to Tapscott (1998), the "Net Generation" is defined as those individuals who were between the ages of 2 and 22 in 1999. This generation will undoubtedly be well equipped to enter the medical-legal environment with competitive and fluent on-line skills, but this age parameter escapes the seasoned nurse consultant.

Medical knowledge is no longer the inner sanctum of the privileged few. In either the legal or medical environment, the nurse may be confronted by a client with the latest download on the medical issue in question. One representative study revealed that 60% of Americans access the Internet and, of these, 67% use the Internet to find health-related information (Pew Internet & American Life Project, 2003). It falls then to the LNC to independently take the initiative in acquiring the essential competency in Internet research.

Internet Tutorials

While a select few researchers may automatically intuit their way to the desired results, most researchers will need to make an initial investment of time and practice. The lack of a systematic approach will predictably leave the novice user frustrated at spending countless hours in fruitless searching. While the frustration can be understood, it need not be endured: instructional sites abound, willing to take the navigator from infancy to adulthood. While certainly not all-inclusive, Table 2 on page 5 provides a listing of exceptional Internet tutorials that are free for exploration at the courtesy and generosity of various individuals and institutions.

Table 1: Internet Terminology.

Advanced Search: Using Boolean operators and field searching to obtain exact results.

Basic Search: Using keyword or phrase searching to retrieve what you are looking for.

Blog: Short for "web log". This is a type of web serves as a publicly accessible personal journal (or log) for an individual. In the legal field, these journals are called "blawqs".

Download: When its headed for your computer, it is a "download". Moving the document into your system. Also used to refer to the ability to printout what you find, as in downloadable document.

Domain Name: The domain name gives you who "published" a page, made it public by putting it on the Web.

Field Searching: The command to retrieve a document based on a certain part of the record. For example, title, author, journal or date. Both MEDLINE and CINAHL use field searching to retrieve documents due to the volume of material indexed on these sites. Fields are also called "limits" or "filters".

Gateway: A system that allows two incompatible networks to communicate with each other.

Graphic File Format (GIF), JPG/JPEG, BitMap: All terms associated with the saving of graphic (picture) images.

"Invisible Web": Specialized databases found through good subject directories or special guides to searchable databases.

Keyword Search: Looking for single words or "phrases" in the text of a document.

Limiting to a Field Search: Requiring that a keyword or phrase appear in a specific field (part of the record) of documents retrieved. Limit searches by date, URL, format (pdf, graphics, etc.)

Link Rot: The term used to refer to the high turnover of Web pages. Addresses often become "unavailable" because the page has moved or is no longer posted. In Google, clicking on "cache" may allow you to view archived pages for old websites.

Portal: A site that serves as a "gateway" or "starting point" for a collection of Web resources.

Search Engine: Database of web page extracts. "Snapshots" of documents that are available.

Stemming: Similar to truncation. Looking for variations of the "root word".

Subject Directory: Usually arranged in hierarchical subject categories. Uses broad, general search terms. You are looking for categories, not words in text of pages.

Truncation: * is usually used to indicate truncation command. Will look for variations of the "root word". For example, book* = books, bookbinder, bookworm, bookie. In Google * is a "wildcard" and looks for missing word in phrase.

Uniform Resource Locator (URL): The unique address of any Web document.

Upload: When it is headed for someone else's computer, its an "upload". Posting on the Internet or other electronic source, an instructor can upload the class syllabus on the college website so you can download it.

Webmaster: The web site contact for the web page. Usually in charge of the maintenance of the web site. You should not assume the webmaster and the author of the posted information are the same.

Locate, Capture, Digest

A systematic strategy is the cornerstone to any successful search. By drafting the approach before turning to the computer, the researcher heightens the likelihood of maximizing the desired results. The step-by-step process listed in Table 3 on page 6 can be used in any search engine, directory, or electronic reference that provides for both basic and advanced search strategy. The key to maximizing results is consistently laying the necessary groundwork. Once the LNC has a blueprint of the research strategy, the next step is to determine what search instrument will best fit the research needs. While there are arguably many avenues to optimal Internet research, three notable paths are search engines, subject directories, and the "Invisible Web."

Search engines, like automobiles, are designed to get researchers where they want to go—but they must know how

to operate them. Although almost no human input is involved in what is selected for inclusion in their database, search engines are more responsive to specific inquiries (keyword searches) than subject directories. Databases are updated by robots known as "web crawlers," "spiders," or "knowledge/know-bots." These robots continually scan billions of documents to meet the search engine's inclusion criteria. By using keywords to search, the researcher matches words or phrases in the text of the documents that have met the inclusion criteria; the information is returned as a "hit," or result. By using at least one additional search engine, the researcher stands to increase results by 20% - 30 % (Hock, 2004).

The admonition here is to use a variety of search engines to maximize results. Additionally, all search engines have multiple added features on their toolbars and results pages that are underutilized by even the most experienced researcher. The "Images" option in Google best illustrates this point. By entering a keyword or search term in the search box and clicking on "Images" tab at the top toolbar, the researcher will retrieve related images that can be saved. Google alone has a database of approximately 400 million images. Amazingly, these images then allow the researcher to link back to the original article in which they were published.

Understanding where to look largely depends on what information needs to be obtained. **Subject directories** operate by searching for broad terms rather than keywords. Subjects are hand-selected by humans, instead of robots, for inclusion in the subject directory's database. Behind the scenes, a multi-level arrangement (classification) of subjects becomes more specific as one clicks deeper into the database. Subject directories are an ideal starting place when the researcher has only a general idea regarding the subject matter to be researched—for example, searching the topic of "books" versus the more specific title of a specific book.

The "Invisible Web" is simply a collection of specialized subject directories. The nomenclature "invisible web" has arisen due to the fact that these databases are not usually detected or "seen" by search engine robots looking for documents to include. This is due to the fact that their publishers do not necessarily strive to meet the criteria to be included in the search engine's database or, just as likely, do not wish to be included and use coding languages, formats, or graphics that escape detection. These unique databases are

an excellent source of data, statistics, and information specific to the subject of the database.

Conjunction-Junction

In the 1970s, the American Broadcasting System (ABC) ran a series of television spots between Saturday morning cartoons, introducing a whole new generation to concepts such as multiplication, grammar, and the electoral process. Schoolhouse Rock® simplified the otherwise confusing concepts into straightforward logical concepts. Boolean operators are no more mystical than that, despite the proliferation of Venn diagrams attempting to explain them.

The terms AND, OR, NOT are simply connectors (conjunctions) that instruct the search engine what to do with the keywords (search terms) entered. They allow the researcher to expand, reduce, or focus their search. The operator AND narrows the focus by searching for only those terms that are connected. The operator OR widens the search by accepting either term (stand-alone or connected). The operator NOT will eliminate a term and refine the search. (See Table 4 on page 6 for a quick example of how Boolean operators are used.) Most search engines require the operators be capitalized; otherwise, they are treated as "stop words" (words to be ignored).

A choice of Boolean syntax may also be found in the search engine's drop-down menu at the top or side toolbar. Die-hard researchers should visit **www.searchenginewatch.com** for a

Table 2: Internet Tutorials.

University of Berkeley, California

http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/FindInfo.html

This educational institution generously provides one of the best internet tutorials on the Web. There is instruction on just about every aspect of searching you can imagine. Written with the beginner in mind, the explanations are reader friendly and easy to understand. There is a separate section for maximizing search results on Google, Yahoo and Teoma. (*permission is granted on site for downloadable materials)

New York University

http://library.nyu.edu/research/health/tutorial

An excellent resource for nurses. A tutorial designed for us by New York University. The self-paced instruction does assume some familiarity with the ability to search for literature, but still does a superior job of breaking down the steps to searching and offers a special focus on evidence-based practice.

Ohio State University

http://www.gateway.lib.ohio-state.edu/tutor

Easy-to-read, comprehensive reference for search strategies in research. Complete with algorithms to illustrate key points. Good for the visual learner.

Bright Planet

http://www.brightplanet.com/deepcontent/tutorials/search/

This site provides one of the most thorough internet tutorials on the Web. Be advised this can easily be categorized as advanced the further you go into the tutorial.

University of Albany, New York

http://www.albany.edu/library/internet/www.html

This site is maintained by Laura Cohen, Network Services Librarian, at the University of Albany in New York. She provides a complete set of internet tutorials.

Ithaca College Library, New York State

http://www.ithaca.edu/Library/Training/ICYousee.html

A definite must for the visual learner. John R. Henderson, Instruction and Reference Librarian at Ithaca College, uses a sense of humor to provide an effective tutorial on searching on the Net.

Table 3: Search Strategy.		
Prepare Your Search	Pick your topic: Learning to search the Internet	Subject: Internet Keywords: Internet, search, learn
Write down your topic in question format.	"How do I learn the steps to effectively searching the Internet?"	When deciding on a topic, choose between keywords or a subject search. Subjects are broader and work best with directories. Keywords are more specific and work best on search engines.
Identify the keywords (search terms) of the research topic.	Use a thesaurus to find related keywords for your search. Internet (Net, World Wide Web) Learn (Guide, Instruct, Tutor) Search (Explore, Investigate)	http://www.surfwax.com (choose Focus) http://www.teoma.com http://www.google.com (type "medical thesaurus")
Look in a variety of search engines and directories to find your topic	Search Engines: http://www.google.com http://www.yahoo.com http://www.teoma.com http://www.altavista.com http://www.altavista.com http://www.altheweb.com http://www.askjeeves.com http://www.hotbot.com Meta-Search Engines: http://www.dogpile.com http://www.MetaCrawler.com There are numerous Meta-Search engines, but all work in a similar way. On the average, they return the top ten results from ten different search engines = 100 results.	Directories: Librarian's Index http://li.org Infomine http://infomine.ucr.edu Academic Info http://www.academicinfo.net Yahoo Directory http://dir.yahoo.com About.com http://www.about.com The Invisible Web http://www.invisible-web.net
Combine keywords to make phrases or use Boolean operators.	AND/+, OR, NOT/-, NEAR, WITH, () are the most common Boolean operators. http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/SearchEngines.html http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/SubjDirectories.html	Expand, narrow or refine your search as needed with Boolean terms. Provides tables outlining what Boolean logic you can use in specific search engines and subject directories
Save your desired research sites	Save your research. In Internet Explorer (IE) use "favorites" in Netscape use "bookmark"	After you add the site, click organize to create a folder for your research results

Table 4: Setting the Search Command.		
Initial search	Phrase is enclosed in quotes	"registered nurse" AND hospital
Too many results?	Narrow by adding a new concept	"registered nurse" AND hospital AND Delaware
Too few results?	Expand by adding more search words. "Nesting" terms in parentheses will read the instruction left to right while maintaining the AND instruction as a distinct command	("registered nurse" OR "professional nurse" OR "licensed nurse") AND (hospital OR "ambulatory care")
Refine the search	Changing the order of words or phrases can yield different results	hospital AND "registered nurse"

Table 5: The Logic of the U	RL.		
Type of file	Domain name (location on the Internet)	Path or directory on the computer to the file	Name of file & its extension
http://	www.aalnc.org	/Incc/about/	mission.cfm

Table 6: Domain Names.			
	n Domain nsions	Two Code Characters Indicate a Country of Origin	Domain name registries around the world can be found at:
.gov = government site .mil = military site .com = commercial site .org = non-profit organization (there are exceptions)	.info = resource site/commercial .edu = educational institutions .biz = small business .net = network	For example: .jp = Japan .uk = United Kingdom .ca = Canada .au = Australia	http://www.norid.no/domreg.html

Table 7: Critical Anaylsis.				
For a web page	Look for choices such as "about us", "philosophy", "background" or "biography" to learn about the author or organization.	Usually found at the top, bottom or left hand menu.		
	Who created the site or wrote the article? What is their authority, credentials, institutional affiliation? Is there bias or a particular viewpoint? Who is the intended audience? Is there sponsorship or underwriting disclosed? A privacy statement? Is the information accurate? Facts documented and comparable with other sources? Able to find or connect (links working) to supporting documentation?			
	Does the address line (URL) contain a ~ (tilde) before the author's name? Also look for %, "users", "members" or "people". "Hack down the URL". To do this, simply backspace in the web address line to the /(forward slash) right before the domain designation. The server is usually found between the http:// and the domain name to the first /. For instance, http://www.aalnc.org is the source of the web page.	These indicate personal pages and not necessarily endorsed by the institution despite the posting.		
For information about the author	In Google you can type the author's name in the search box or type "jabberwocky * author's name"	Provides information regarding the author and/or their publications.		
Set up border patrol	Look around the edges of the web page. What was the last update? Check each page. Do not rely on the Internet Explorer File/Properties or Netscape Navigator View/Page Info as this may automatically update and is unreliable for critical analysis.	Look for copyright or reprint information.		
Find the missing link	To see who links to the web page: In Google type link:www.aalnc.org in the search box or go to alltheweb's URL investigator and paste www.aalnc.org in the search box.	Provides a list of who links to the site. Explore those links.		
Check out the publisher	Is the publisher listed in a reputable directory, either online or in print? In the Google search box, link:www.ipl.org or link:www.goaskalice.columbia.edu			
	Alexa is an internet researcher that provides information on site ownership, number of sites and related sites. Tools to assist in your evaluation: In Internet Explorer: go to Tools and click on Show Related Links	In Netscape Navigator: click on the "What's Related" option.		

comprehensive listing of exactly what Boolean logic can be used in what search engine and what variations the engine will accept. This site also provides an invaluable resource of ongoing evaluations and rates the top search engines to keep researchers abreast of the ever-changing landscape.

Room for Creativity

Novice researchers are often hesitant to venture far outside their comfort zone. Ironically, this reluctance does a profound disservice to the researcher. The process of locating information via the Internet is anything but linear, and ingenuity is encouraged. For example, when looking for subject directories, simply putting the "search terms" in the query (search) box followed by "web directories" or "databases" may return amazingly helpful results. By investigating the "links" or "resources" option on the home page, the researcher may locate better resources than the primary retrieval. By exploring the toolbar of the Web browser, the researcher will uncover the ability to "jump" to the research term in the document (find dialog box) or recall the history of Web pages

opened (history tab) in the last two months. Scanning the URLs of the results page is a fast way to avoid opening needless or repetitive web pages. (See Table 5 on page 6 for an explanation on "reading" the URL.) The domain suffix will tell you a little something about the site's sponsor. (See Table 6 on page 7 for some of the more common domain names.)

A Word on Copyright

A common misconception about materials posted on the World Wide Web is they are automatically in the public domain, and, therefore, free access to reproduction is a given (Templeton, 2003). In actuality, the author is entitled to an "implied copyright." The Web site does not have to specifically post a copyright notice (Templeton, 2003). While it is beyond the scope of this article to provide a complete explanation of the legalities of copyright law, readers are invited to educate themselves on the topic.

Barbara F. Schloman, Associate Editor Information Resources for the *Online Journal of Issues in Nursing*, has made several phenomenal contributions as an author in the field of Internet research and information literacy. She warns that, given the wealth of materials posted on the Internet that can be freely accessed, copyright law becomes especially troublesome in the realm of electronic material (Schloman, 2002).

Critical Analysis

The LNC must fill the role of empirical investigator, resource locator, educator, and sentry of questionable medical literature. Core to the LNC's heightened responsibility is the incumbency to critically evaluate retrieved sources. Librarians and nursing faculty have long proposed that not all published material is even in quality and credibility (Schloman, 1999). Misleading, inaccurate, and incomplete information from seemingly reliable sources is a realistic threat to the researcher and consumer alike.

In 1996, Health on the Net Foundation Code of Conduct was formed to standardize requirements of health information to ensure reliability and credibility; however, to date, it remains a voluntary participation and is monitored only through random checks (Cader, Campbell, & Watson, 2003). Several other systems of rating the quality of health care information on the Internet have been studied, but no unified operational definition has been established with regard to quality criteria (Fallis & Frické, 2002; Schloman, 1999).

Critical analysis is of prime importance in the research process. In the absence of control and regulation, the burden of accountability, reliability, validity, and authenticity rests with the researcher. Intrinsic to this burden is the need to investigate the origins of the information and identify any

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 Rose Clifford Internships (800) 350-4046 or see us at www.RoseCliffordInternships.com. bias by the author or publisher of the Web page. Table 7 on page 7 provides a checklist of steps for sound appraisal of the genesis and objectivity of information recovered online.

Summary

At all levels of legal nurse consulting, the expected breadth of nursing knowledge is rapidly widened by communication and information technologies that provide access to vast stores of information that respond to the client's demand. Proficiency in Internet literacy dramatically enhances the LNC's credibility and marketability—but more importantly it raises the bar of professionalism. The need to remain knowledgeable about an impressive amount of information and savvy about its location is more than an ordinary expectation of clients; it is the essence of their trust in the nursing profession.

References

- American Library Association Presidential Committee on Information Literacy (1989). Final Report. Chicago: American Library Association.
- Cader, R., Campbell, S. & Watson, D. (2003). Criteria used by nurses to evaluate practice-related information on the World Wide Web, CIN: Computers, Informatics, Nursing, 21(2), 97-102.
- Dumas, J. A., Dietz, E. O. & Connolly, P. M. (2001). Nurse practitioner use of computer technologies in practice. Computers in Nursing, 19, 34-40.
- Estabrooks, C. A., O'Leary, K. A., Ricker, K. L. & Humphrey, C. K. (2003). The Internet and access to evidence: How are nurses positioned? Journal of Advanced Nursing, 42(1) 73-79.
- Fallis, D. & Frické, M. (2002). Indicators of accuracy of consumer health information on the Internet: A study of indicators relating to information for managing fever in children in the home. Journal of American Medical Informatics Association, 9, 73-79.
- Hock, R. (2004). The extreme searcher's Internet handbook: A guide for the serious searcher. Medford, N.J.: Cyber-Age Books
- Pew Internet & American Life Project. Daily Internet activities. Retrieved May 24, 2004, from www.pewinternet.org/reports/chart.asp?=Daily_A8.htm.

- Richards, J. (2001). Nursing in a digital Age. Dermatology Nursing. 13(5), 365-370.
- Schloman, B. F. (1999). Whom do you trust? Evaluating Internet health resources. Online Journal of Issues in Nursing, March. Retrieved June 2, 2004, from http://nursingworld.org/ojin/infocol/info_1.htm
- Schloman, B. F. (2001). Information literacy: The benefits of partnership. Online Journal of Issues in Nursing, March. Retrieved May 25, 2004, from http://nursingworld.org/ojin/infocol/info_5.htm
- Schloman, B. F. (2002). Images on the web: Findable, usable, but what's legit? Online Journal of Issues in Nursing, August. Retrieved June 2, 2004, from http://nursingworld.org/ojin/infocol/info 9.htm
- Tapscott, D. (1998). Growing up digital. New York: McGraw-Hill. Templeton, B. (2004). A brief introduction to copyright. Retrieved November 1, 2004, from www.templetons.com/brad/copyright.html

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Neuropsychological Testing in Forensic Settings: Its Relevance to the Real World

Robert J. Shordone, PhD ABPP

KEY WORDS

Neuropsychological Testing, Ecological Validity, Executive Functions of the Brain

This article will critically examine the relevance of neuropsychological testing in forensic settings, particularly whether neuropsychologists can make accurate predictions as to whether an individual who has sustained a closed head injury can return to work, attend school, maintain competitive employment, or live independently solely based on their neuropsychological test data. It will also discuss some of the problems that neuropsychologists face when evaluating individuals who had sustained damage to the prefrontal cortex of the brain, and the importance of the ecological validity of the neuropsychological tests that are routinely administered by neuropsychologists.

Neuropsychology has been defined as the study of brain-behavior relationships (Groth-Marnat, 2000). It has also been defined as an applied science that is concerned with the behavioral expression of brain dysfunction (Lezak, 1995). It utilizes specialized psychological tests to evaluate a wide variety of cognitive functions that are dependent on the structural and functional integrity of the brain. Neuropsychologists utilize such tests to evaluate a patient's intellectual functioning, abstract thinking, academic skills, attention, cognitive flexibility, concentration, executive functions, language, judgment, learning, memory, motor functions, organization, planning, problem solving, speed of cognitive processing, and visuospatial and visuoconstructional skills.

Many neuropsychologists administer tests to evaluate a patient's emotional and psychological functioning and personality traits. In medico-legal cases, specialized tests are frequently administered to plaintiffs to determine whether they are performing to the best of their ability on the neuropsychological tests they are administered, trying to feign brain damage, or exaggerating their cognitive or emotional complaints.

Neuropsychologists have stressed the importance of adequate test validity (e.g., whether a person's score on a particular test measures a specific trait or ability, or whether a score on one particular test can predict the score on another test) and reliability (e.g., the consistency with which a particular test or battery achieves the same score or scores when used on more than one occasion).

The Test Environment

Individuals suspected or known to have sustained brain damage are usually tested in quiet environments that are relatively free of extraneous or distracting stimuli to optimize their test performance. This type of environment is typically utilized to reduce extraneous negative influences during testing, as well as to allow different neuropsychologists to compare the patient's test data.

Interpretation of Neuropsychological Test Data

Many neuropsychologists assume that a brain-damaged patient's cognitive and behavioral impairments can best be determined by comparing the patient's neuropsychological test scores to normative scores, with relatively little regard to the patient's background and medical history. Unfortunately, an individual's performance on neuropsychological tests can be significantly affected by a variety of different factors.

For example, Sbordone and Purisch (1996) identified a number of potential confounding factors that can result in poor performance on neuropsychological tests regardless of whether or not the patient has an acquired brain injury. (See Table 1 on page 12.) If present, these factors may significantly impair an individual's performance on the neuropsychological test and the measures that he or she is administered. Failure to consider such factors will often result in the neuropsychologist arriving at opinions which are often inaccurate, particularly with respect to the patient's functioning in real world settings.

Case Example

A 38-year-old right-handed white male was referred by his attorney for neuropsychological testing. He arrived for his scheduled appointment at the designated time. He stated that he had been rendered unconscious for several days as a result of a motor vehicle accident that had occurred 2 years prior. He complained of numerous cognitive and somatic problems. He denied a prior history of similar symptoms or head trauma. When questioned, he indicated that he had graduated from high school with excellent grades and had been earning in excess of \$80,000 a year at the time of the accident.

Neuropsychological testing revealed widespread cognitive impairments ranging from severe to profound. Based on the obtained test data and the information provided by the patient, the neuropsychologist concluded that these impairments were most likely the result of the

Table 1: Confounding Factors on Test Performance.

- Prior brain injury
- · Congenital or pre-existing neurological conditions
- Seizures
- Acute pain
- · Symptoms and impairment secondary to physical injuries
- · Peripheral sensory or motor impairment;
- · Chronic medical illnesses
- Sleep deprivation
- Excessive fatigue
- · Emotional stability (e.g., crying during the testing)

- Alcohol/drug abuse
- Medications
- Psychiatric illness
- Recent psychosocial stressors
- · Suboptimal motivation or malingering
- · Negative patient/examiner interactions
- Cultural/linguistic discrepancies
- · The patient's vocational and avocational background
- Test sophistication
- · Practice effects (having previously been given this test before)

severe brain injury that this patient had sustained during his motor vehicle accident and that the severity of this patient's cognitive impairments precluded any hope of his ever living independently or being competitively employed in the foreseeable future.

This patient was later seen by another neuropsychologist who carefully reviewed this patient's medical records. This review revealed that the patient had never been rendered unconscious and was noted to be alert and oriented, both at the scene of the accident and in the emergency room. These records also reveal that the patient had a pre-existing history of severe cluster headaches, low back pain, orthopedic problems, head trauma, psychiatric problems, and a history of excessive alcohol and drug abuse. Review of the patient's academic records revealed that he had only completed 9 years of formal education, had been diagnosed with an attention deficit-hyperactivity disorder in elementary school, and had been placed in special education classes for his severe learning problems. These records also revealed that he was frequently absent or tardy in school and was described by his teachers as irresponsible, manipulative, impulsive, and aggressive. Legal records revealed that he had been incarcerated in the past for insurance fraud, burglary, selling drugs, driving under the influence, and using heroin and cocaine.

During the interview, the neuropsychologist learned that, 2 days prior to testing, the patient had fallen down a flight of stairs while heavily intoxicated and injured his lower back, which resulted in severe pain and discomfort. The patient admitted that he had consumed a quart of gin the night prior to testing and taken several pain medications that morning to cope with his pain and discomfort, which made him feel confused. The patient also admitted that he had developed an intense dislike of the prior examiner, had felt very "stressed" when he had been previously tested, and had entertained serious thoughts of assaulting the prior examiner.

This example illustrates some of the numerous confounding factors that, alone or in combination, could have negatively impacted this patient's neuropsychological test performance regardless of whether or not he had sustained a brain injury. The first neuropsychologist's opinion was based entirely on the patient's self-report and test data. This type of

clinical decision-making process fails to consider the factors that can render an interpretation of the etiology of the patient's subjective complaints as well as predictions of the patient's functioning in real world settings invalid.

Problematic Issues with Testing

Neuropsychologists are frequently asked, particularly in forensic settings, to provide opinions or testimony of not only whether an individual has sustained a brain injury, but also whether this injury has affected this individual's ability to live independently, return to work or school, or maintain competitive employment. Unfortunately, the neuropsychological tests utilized to identify cognitive impairment or brain damage were never specifically designed to predict how these individuals are likely to function in real world settings, live independently, return to work, and/or maintain competitive employment (Sbordone, 1996; Sbordone & Guilmette, 1999).

The vast majority of neuropsychologists use standardized tests, particularly when evaluating individuals involved in forensic cases. Unfortunately, these tests frequently give us very little information about patients' behavioral problems (e.g., irritability, rapid mood swings, poor safety judgment, inappropriate social behavior, etc.) because they were designed to identify cognitive impairment, not behavioral problems. Furthermore, these standardized tests are typically unable to identify patients' behavioral, cognitive, or emotional deficits if they have sustained damages to the prefrontal lobes of the brain, chiefly the orbital frontal cortex.

The orbital frontal cortex of the brain is highly vulnerable to trauma to any region of the skull. Damage to the orbital frontal cortex is the rule rather than the exception, particularly when an individual sustains a mechanical blow to the head, or strikes his or her head on the ground. For example, Damasio (1985) found that patients who had most of their orbital frontal cortex surgically removed often tested normally on IQ tests and other standardized neuropsychological tests, which assessed their attention, language, perception, and memory.

These patients, however, exhibited the following cognitive and behavioral symptoms:

- dramatic personality change;
- a loss of initiative, curiosity, exploratory behavior, motivation, creativity, sex drive;
- the inability to regulate their behavior and emotions, organize their thoughts, plan, remain on task, monitor their actions, problem solve;
- recognize their mistakes; or
- rectify them when they were made aware of them by others.

These individuals also exhibited impaired social behavior, inflexible thinking, poor judgment, impulsivity, egocentricity, an inability to show affection or feel compassion toward others, and frequently used coarse language in inappropriate settings (eg., academic, home, and work). They had no plans or concern for future events, were unable to profit from experience, and confabulated when they were asked to recall recent events.

Unfortunately, these symptoms are often not detected because many neuropsychologists lack an understanding of the behavioral manifestations of prefrontal lobe damage, in particular damage to the orbital frontal cortex. The vast majority of these individuals were only trained in the administration, scoring, and interpretation of standardized neuropsychological tests and/or batteries, which utilize statistical norms based on the patient's age and educational background. Their understanding of a patient's behavioral and cognitive deficits is therefore based on the particular neuropsychological tests they administer to the patient, rather than on their understanding of the neurobehavioral consequences resulting from damage to the complex interactive neurocircuits and feedback loops that connect the orbital frontal cortex with subcortical and other cortical structures.

This situation is similar to the story of a man coming home at 2:00 a.m., noticing a stranger crawling in the middle of the street. Curious about the stranger's behavior, the man walks up and asks, "Did you lose something?" The stranger replies, "Yes my car keys." The man then asks, "Where did you lose them?" The stranger replies, "About a block away." Puzzled by the stranger's reply, the man then asks, "Why are you looking here for your car keys when they are a block away?" The stranger replies, "Because the light is better here."

The behavioral impairments of an individual with a brain injury may not be apparent if this individual is tested in a quiet and highly structured setting with a kind, gentle, and calm examiner. The individual may not manifest any behavioral impairment in this setting, even though such behaviors are commonly exhibited in the individual's home and workplace. As a result, the neuropsychologist may be unaware of this individual's difficulty regulating their emotions and behavior in relatively nonstructured or stressful environments and is therefore likely to erroneously conclude that this individual is relatively normal and able to return to work.

Neuropsychologists frequently equate poor neuropsychological test performance with disability, without making any effort to determine whether the tested individual exhibits impairments or disabilities in real-world settings. For example, many neuropsychologists fail to obtain a careful educational, medical, and vocational history; interview significant others (e.g., spouse, parents, siblings, friends, coworkers), or observe the individual's behavior in real world settings (e.g., home, community, work) (Sbordone, 1996; Sbordone & Guilmette, 1999).

Using Neuropsychological Tests to Predict Everyday Functioning

Sbordone and Guilmette (1999) reviewed the literature on the use of neuropsychological tests to predict everyday functioning and found that there was no one specific neuropsychological test or measure that could accurately predict the everyday functioning of an individual with a brain injury. Furthermore, they found that, in general, the contribution of neuropsychological test data is only modest for scores that fell in the average to low-average range. As a consequence, they stressed that neuropsychologists should not rely solely on an individual's neuropsychological test scores to predict everyday functioning. They found that, since the assessment of the behavioral demands in real-world settings was too complex and our understanding of everyday skills was too elementary, it was necessary for the neuropsychologist to seek out other sources of information to increase their understanding of an individual's everyday functioning. They recommended:

- interviewing the individual's significant others;
- observing his/her functioning in a variety of real-world settings; and
- reviewing the individual's job description, performance evaluations, and prior work history.

They also suggested that the research literature had shown that neuropsychological assessment tends to be more predictive and accurate if the tasks used during testing closely matched or simulated an individual's everyday and vocational activities. Unfortunately, there are few neuropsychological measures currently available that can provide such information.

Predicting Vocational Functioning from Neuropsychological Tests

Sbordone and Guilmette (1999) also found that no single neuropsychological test could reliably predict an individual's ability to work. They pointed out that many neurologists make predictive relationships between their test data and the work potential of the individual with brain injury in court, in ways that have never been empirically demonstrated. They recommended that neuropsychologists become familiar with how well and under what conditions their test data were able to provide meaningful information about an individual's work potential.

They stressed that neuropsychologists need to consider the type of work and the work environment that this individual was expected to return to—and particularly the specific job skills necessary for success, effective routine versus unpredictability of the individual's work day, availability of supervision, interaction with coworkers or the public, degree of match between the individual's job and his/her cognitive and behavioral strengths and limitations, level of distraction in the work environment, availability of part time work, and the likelihood of integrating the individual slowly back into the work environment.

They recommended interviewing family members to assess the individual's organizational skills, initiation, motivation, behavioral controls, emotional ability, social skills, and fatigability in unstructured settings such as their home or community. They stressed that predicting an individual's vocational potential—in particular for forensic purposes—was quite-labor intensive because it requires careful assessment of the individual's work and medical history, injury characteristics, current cognitive status, emotional/behavioral functioning, motivation to return to work, and family circumstances.

Summary

Neuropsychologists frequently evaluate individuals who are suspected or known to have sustained a traumatic brain injury, traditionally relying on the patient's performance on standardized tests and often without considering the potential influence of confounding factors. They tend to equate poor neuropsychological test performance with disability, making no effort to determine whether the patient is impaired or disabled in a variety of real-world settings. Their failure to consider such factors often results in inaccurate opinions about the effect of a particular closed-head injury on the patient's ability to function in real-world settings.

The vast majority of these standardized tests are generally insensitive to the patient's behavioral, cognitive, and emotional deficits, especially if the patient has sustained damage to the prefrontal lobes of the brain, which are highly vulnerable to skull trauma. Since many neuropsychologists lack an adequate understanding of the role of the prefrontal lobes in behavior and the effects of damage to this region of the brain, they frequently base their opinion of the patient's deficits on the patient's performance on these tests.

Neuropsychologists need to consider a variety of important factors such as the generalizability of the test environment, history of symptom development, the patient's academic and medical records, interviews with reliable significant others, vocational history, and observations of the patient's behavior in both highly structured and unstructured settings before a forensic report can be generated. Since many neuropsychologists may not have had the training or experience to evaluate or predict a patient's vocational functioning, a vocational evaluation by a qualified specialist may be necessary to supplement the neuropsychologist's opinions.

References

- Demasio, A.R. (1985). The frontal lobes. In K. M. Heilman and E. Valenstein (Eds.). *Clinical Neuropsychology* (2nd ed.). New York: Oxford University Press, 339-375.
- Groth-Marnat, G. (2000). Introduction to neuropsychological assessment. In: G. Groth-Marnat (Ed.) Neuropsychological Assessment in Clinical Practice: A Guide to Test Interpretation and Integration. New York: Wiley & Sons, 437-456.
- Sbordone R, J. (1996). Ecological validity: Some critical issues for the neuropsychologists. In. R. J. Sbordone & C. J. Long (Eds.) *The Ecological Validity of Neuropsychological Testing*. Orlando, FL: GR/St. Lucie Press, 15-41.
- Sbordone, R. J. (2000). The executive functions of the brain. In. G. Groth-Marnat (Ed.) Neuropsychological Assessment in Clinical Practice: A Guide to Test Interpretation and Integration. N.Y. Wiley & Sons, 437-456.
- Sbordone, R. J. & Guilmette, T. J. (1999). Ecological validity: Prediction of everyday and vocational functioning from neuropsychological test data. In: J. Sweet (Ed.) *Forensic Neuropsychology: Fundamentals in Practice.* New York: Swets, 223-250.

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Polyps and Colon Cancer: Investigating Prevention

Mary A. O'Connor, PhD RN

KEY WORDS

Cancer, Diagnosis, Polyps

Can polyps lead to colorectal cancer? Since colon cancer is one of the illnesses that can be either prevented or caught in its early stages, legal nurse consultants (LNCs) may be asked to review whether or not enough was done by the physician in cases where cancer is diagnosed at later stages. Two important factors contribute to early detection and prevention of colorectal cancer: 1) the patient's compliance with recommended testing guidelines for colonoscopies; and 2) the physician's thorough examination, complete removal or thorough biopsy of polyps, and accurate follow-up requirements for the patients.

Colorectal cancer caused approximately 57,000 deaths in 2004 in the United States and resulted in an estimated 150,000 new cases (Centers for Disease Control [CDC], 2003; National Cancer Institute [NCI], 2004). After lung cancer, colorectal cancer is the fourth most common type of cancer and the second most frequent cause of cancer death in adults each year (NCI, 2004; Surveillance, Epidemiology, and End Results (SEER) Colon and Rectum Cancer Registries [SEER], 2004). It also comprises over 90% of intestinal cancer (NCI, 2004). The lifetime risk of developing colorectal cancer among the general population is 6%. This risk increases 2 to 3 times, however, with one first-degree relative diagnosed with colon cancer, and 3 to 4 times with two first-degree relatives (Burt, Winawer, Bond, Levin, & Sandler, 2004). Approximately 90% of colorectal cancer is found in men and women over 50, with Caucasians diagnosed approximately 10 years earlier (at age 52) than African Americans (at age 62) in the U.S. (Colon and Rectum Cancer Registries database for 1998-2002 [SEER], 2004).

Experts recognize an adenoma-adenocarcinoma sequence: "The great majority of cancers of the colon and rectum have evolved through the polyp-cancer sequence" (Levin, 1996). Colorectal cancer develops through a continuous process from normal mucosa to adenoma to carcinoma. In contrast, however, Burt et al. (2004) document that a small percentage of adenomas become cancerous, estimating only 2.5 adenomas out of 1,000/year, and this occurs in most cases slowly over years.

Polyp Classification, Treatment

Polyps are divided into the major groups:

- · adenomatous;
- hyperplastic; and
- submucosal lesions.

Only the adenomatous polyps have significant clinical implications, and these constitute over 70% of polyps that are removed by colonoscopy. Hyperplastic polyps are generally small and not likely to develop malignancy (Scholefield, 2000). Characteristics of adenomas associated with higher

frequency of adenocarcinomas are larger sized adenomas, more extensive villous architecture, more severe epithelial dysplasia, and a larger number of adenomas (Levin, 1996).

Complete removal of large adenomatous polyps or adequate biopsy from multiple sites from a large polyp is important for accurate determination of the nature of the cells. Incorrect or incomplete removal of colon polyps may lead to the development of adenocarcinoma, or colorectal cancer. Levin. (1996) note that small adenocarcinoma tissues grow within large adenomas.

There are two different types of polyps: **sessile** and **pedunculated**. Sessile polyps are flatter, and pedunculated polyps have a "stalk." Sessile villous adenomas have a higher risk of becoming cancerous than the pedunculated tubular adenomas.

Removing pedunculated polyps is easier than removing sessile polyps, as the risk of perforation is higher with large sessile polyps. A useful technique to remove large sessile polyps is to inject it with 1 ml. or more of saline into the submucosa directly under the polyps. This lifts flat polyps away from the muscular layer, creating a stalklike effect. If polyps cannot be removed during the colonoscopy, the gastroenterologist must remove them surgically, especially if they are larger than 2-3 cm. and are sessile (Ramji & Yoshida, 2005). Surgery should also be considered if the polyps surround two colonic folds.

Other variables of polyps—for instance, shape or texture—must be taken into consideration when determining future follow-up evaluation. Atypical polyps are more likely to progress to colon cancer if left untreated (Ramji & Yoshida, 2005).

Size is another variable that needs to be considered, since the potential for malignancy correlates with the polyp's size. Small adenomas of < 1 cm. have only a 1% chance of containing adenocarcinoma. About 15-35% of adenomas are 1-3 cm. in size and have a higher risk of harboring malignancy or of becoming malignant (1-2 cm: 10% risk; > 2 cm: 46% risk). The risk of adenocarcinoma approaches

AJCC/TNM	EXTENT OF INVASION	LYMPH NODE INVOLVEMENT	SPREAD TO DISTANT SITES	PROGNOSIS
CLASSIFICATION	EXTENT OF INVASION		or near to blothair one	5 year survival
Stage 0: Tis, N0, M0	not beyond the inner layer (mucosa) of the colon or rectum	None	No	
Stage I: T1, N0, M0, or T2, N0, M0	through the mucosa into the submucosa or it may also have grown into the muscularis propria	No lymph node involvement	No	Stage I = 96%
Stage IIA: T3, N0, M0;	through muscularis propria through the wall of the colon or rectum into the outermost layers	No lymph node involvement	No	Stage II = 87%
Stage IIB: T4, N0, M0	through the wall of the colon or rectum into other nearby tissues or organs			
Stage IIIA: T1-2, N1, M0	through the mucosa into the submucosa or it may also have grown into the muscularis propria	Lymph node involvement in 1-3 nodes is present	No	
Stage IIIB: T3-4, N1, M0	through the wall of the colon or rectum or into other nearby tissues or organs	Lymph node involvement in 1-3 nodes is present	No	Stage III = 55%
Stage IIIC: Any T, N2, M0	Any growth type	spread to 4 or more nearby lymph nodes	No	
Stage IV: Any T, Any N, M1	Any growth type	Any spread to lymph nodes	spread to distant sites such as the liver, lung, peritoneum (the membrane lining the abdominal cavity), or ovary	Stage IV = 5%

Source: ACS (2004). How Is Colorectal Cancer Staged?

40% in villous adenomas larger than 4 cm. in diameter (Ramji & Yoshida, 2005).

Screening and Surveillance

It takes approximately 5 years for a medium-sized 1 cm. (1/2 inch in diameter) adenoma (polyp) to develop from normal-appearing mucosa, and about 5-10 years more for a 1 cm. polyp to turn into cancer, according to longitudinal studies (National Polyp Study, 1993; Mansell, n.d.; Winawer, Zauber, O'Brien, Ho, Gottlieb, Sternberg, Waye, Bond, Schapiro, Stewart, Panish, Ackroyd, Kurtz, Shike, 1993a; Winawer, Zauber, Ho, O'Brien, Gottlieb, Sternberg, Waye, Schapiro, Bond, Panish, Ackroyd, Shike, Kurtz, Hornsby-Lewis, Gerdes, Stewart, 1993b; & Levin, 1996).

Screening is recommended because colon cancer symptoms are easily confused with many digestive disorders.

In fact, colon cancer often presents with no symptoms, even at later stages. Classic presentations include a change in bowel habits such as diarrhea, constipation, and/or small-caliber stool that last longer than a few days; a feeling of rectal fullness (the need to have a bowel movement) that doesn't pass; rectal bleeding or blood in the stool; cramping or steady abdominal pain in the stomach area; unexplained weight loss; and weakness and fatigue (ACS, 2004b).

The American Cancer Society (2004) recommends that men and women with an average risk for developing colorectal cancer should begin cancer screening at age 50. Earlier screening is recommended if the person has risk factors:

- Cancer or polyps in a first-degree relative (parent, sibling, or child) younger than age 60, or in two firstdegree relatives of any age;
- Family history of hereditary colorectal cancer;

Table 2: Duke's Classification and Prognosis.			
DUKE'S CLASSIFICATION	EXTENT OF INVASION	LYMPH NODE INVOLVEMENT	PROGNOSIS 5 year survival
Duke's A	Mucosa only	None	>90%
Duke's B1	into the muscularis propria	None	70-85%
Duke's B2	through the muscularis propria	None	55-65%
Duke's C1	into the muscularis propria	Lymph node involvement is present	45-55%
Duke's C2	through the muscularis propria	Lymph node involvement is present	20-30%
Duke's D	distant metastases	not applicable	<1%

Source: Mansell, D. E. (nd)

- Personal history of colorectal cancer or adenomatous polyps; and/or
- Personal history of chronic inflammatory bowel disease (ACS, 2004; Burt, Winawer, Bond, Levin, & Sandler, 2004)

Colonoscopy is used for either screening or surveillance of polyps because it is the most accurate and only method for viewing the entire lining of the large intestine. It is also considered by many as the first-line procedure of choice. Detection of polyps by colonoscopy as compared to double-contrast barium enema is 94% vs. 67%, respectively (Ramji & Yoshida, 2005).

The American Cancer Society (2004) and the American Gastroenterology Association (AGA) (Burt et al., 2004) recommend the following screening guidelines:

- Fecal occult blood test (FOBT) or fecal immunochemical test (FIT) every year
- Flexible sigmoidoscopy every 5 years
- An FOBT or FIT every year, plus flexible sigmoidoscopy every 5 years
- Double-contrast barium enema every 5 years; or
- Colonoscopy every 10 years

Surveillance, on the other hand, differs from routine screening. The American Cancer Society's Guidelines on Screening and Surveillance for the Early Detection of Colorectal Adenomas and Cancer (ACS, 2004) indicates a 3-6 year follow-up for removal of a single adenoma that is < 1 cm. Physicians' prescriptions for follow-up colonoscopies, however, must take into account their professional associations' guidelines, the patients' unique differences, and the individual characteristics of the polyps. Colonoscopies are expensive, averaging \$2,000 (Virtual Colonoscopy, 2003), and have a higher risk of perforation than other methods. Mysliwiec, Brown, Klabunde, and Ransohoff (2004), however, found that more than 50% of all the doctors in their study recommended follow-up colonoscopies every 3 years or sooner for small adenomas. Ramji and Yoshida (2005) note that patients with multiple or villous adenomas may require follow-up colonoscopies

earlier than 3 years. The AGA's latest guidelines call for no treatment for hyperplastic polyps and a follow-up colonoscopy 5 years after finding a small adenoma in otherwise low-risk patients (Burt et al., 2004).

Staging Colon Cancer

Two systems are used to stage colon cancer: the American Joint Committee on Cancer Staging System (also called the AJCC/TNM System) and the Duke's Staging System. (See Table 1 on the preceeding page and Table 2 above.) An example of later-staged colorectal cancer with the AJCC/TNM system, Stage III A, is described as cancer that has grown through the mucosa into the submucosa or into the muscularis propria (T1-2), and has spread to 1-3 nearby lymph nodes (N 1) but not to distant sites (M 0). A tumor at Stage III A using the AJCC/TNM system would be classified at C2 using the Duke's staging. In Duke's C2, this tumor is described as penetrating into and through the muscularis propria of the bowel wall, and there is pathologic evidence of colon cancer in the lymph nodes (American Cancer Society, 2004c). The 5-year relative survival for Stage III is 55% (American Cancer Society, 2004; Levin, 1996).

Summary

The physician and patient must work together to determine the patient's risk factors and level of risk. Taking into account the patient's unique differences and clinical picture, the physician can determine the best method for screening and/or surveillance of colorectal cancer development. The ultimate goal is to prevent colorectal cancer or find it in its early stages. Using the literature as a backdrop, the LNC needs to consider the patient's presentation, history, and the physician's actions to determine whether the acceptable standard of care—including best course of screening, surveillance, and/or treatment—was followed.

References

Electronic reference formats recommended by the American Cancer Society. (May 2004). American Cancer Society's guidelines on screening and surveillance for the early detection of colorectal adenomas and cancer: Women and men at increased risk or at high risk. Cancer Reference Information Detailed Guide: Colon and Rectum Cancer, Can Colorectal Polyps and Cancer be Found Early? Retrieved May 5, 2005, from

http://www.cancer.org/docroot/CRI/content

Cancer Reference Information Detailed Guide: Colon and Rectum Cancer, How is Colorectal Cancer Diagnosed? Retrieved May 5, 2005, from http://www.cancer.org/docroot/CRI/content

Cancer Reference Information Detailed Guide: Colon and Rectum Cancer, How is Colorectal Cancer Staged? Retrieved May 5, 2005, from http://www.cancer.org/docroot/CRI/content

Cancer Reference Information Detailed Guide: Colon and Rectum Cancer, What are the Risk Factors for Colorectal Cancer? Retrieved May 5, 2005, from http://www.cancer.org/docroot/CRI/content

Burt, R.W., Winawer, S.J., Bond, J.H., Levin, B., & Sandler, R.S. (2004). Preventing colorectal cancer: A clinician's guide. *American Gastroenterological Association Press.* Retrieved May 10, 2005, from http://www.gastro.org/edu/CRCpreventionMonograph.pdf

Centers for Disease Control (2003) Fact Sheet Colorectal Cancer Screening. Retrieved May 10, 2005, from http://www.cdc.gov/od/oc/media/pressrel/fs030314.htm

Levin, B. (1996). Colorectal cancer: Prevention and early detection. Prevention and Early Detection of Colorectal Cancer. Retrieved May 10, 2005, from http://www.aaoc.org.ar/revista/vol3/levin.htm

Mansell, D. E. (n.d.). *Colon polyps and colon cancer*. Retrieved May 10, 2005, from http://personalweb.sunset.net/~mansell/polyp.htm

Mysliwiec, P.A., Brown, M.L., Klabunde, C.N., & Ransohoff, D.F. (2004). Are physicians doing too much colonoscopy? A national survey of colorectal surveillance after polypectomy. *Annals of Internal Medicine*. 141(4), pp.264-71.

National Cancer Institute. (2004). Study Suggests Physicians Overperform Surveillance Colonoscopies. Retrieved May 10, 2005, from http://cancer.gov/newscenter/pressreleases/ OverperformanceColonoscopy

Ramji, A. & Yoshida, E.M. (2005). Villous Adenoma. Retrieved May 5, 2005, from http://www.emedicine.com/med/topic54.htm Scholefield, J. (2000). ABC of colorectal cancer screening. British Medical Journal, 321, pp.1004-1006.

Surveillance, Epidemiology, and End Results (SEER) Colon and Rectum Cancer Registries database for 1998-2002. Retrieved May 10, 2005, from http://seer.cancer.gov/faststats/sites

Winawer, S.J., Zauber, A.G., O'Brien, M.J., Ho, M.N., Gottlieb, L.S. & Sternberg, S.S. et al. (1993a). Randomized comparison of surveillance intervals after colonoscopic removal of newly diagnosed adenomatous polyps. New England Journal of Medicine, 328 (13), pp. 901-906.

Winawer, S. J., Zauber, A. G., Ho, M. N., O'Brien, M. J., Gottlieb, L. S., Sternberg, S. S. & et al. (1993b). Prevention of colorectal cancer by colonoscopic polypectomy. *New England Journal of Medicine*, 329 (27), pp. 1977-1981. Mary A. O'Connor, PhD RN, is an associate professor of nursing at California University of Pennsylvania, where she teaches many of the courses in the RN-BSN program. She has been a legal nurse consultant and expert witness in independent practice for over 20 years, specializing in medical malpractice and personal injury. She developed the Legal Nurse Consultant course at the University of Pittsburgh School of Nursing and the Legal Aspects of Nursing course at La Roche College. A member of the AALNC Pittsburgh Chapter, O'Connor frequently speaks at seminars on legal nurse consulting and related issues for a variety of professional associations and organizations. She can be contacted at maryaoconnor@comcast.net.

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Pathways to Nursing: A Guide to Library and Online Research in Nursing and Allied Health

Information Today, Inc. (Publisher), www.infotoday.com; 120 pages Reviewed by Kara DiCecco, MSN RN

Screenwriters often portray the architect as someone who simply appears at the proposed building site and effortlessly orchestrates a multitude of contractors into raising a faultless, overnight monolith. In truth, "structural engineers" spend laborious hours researching and investigating regulations and codes, confirming controlling law, analyzing material composition, redrafting design defects, and working out the subtlest detail to ensure the structural resilience of their design before they ever present the plan to the client.

Experience has repeatedly shown that, without laying the proper groundwork, even the most striking design will fail. Legal nurse consultants (LNCs) and architects have this in common: effective research in both professions requires drafting a "blueprint" of the desired end product using all the essential tools.

The Ideal Reference

To facilitate the process, a reference manual is needed. Pathways to Nursing: A Guide to Library and Online Research in Nursing and Allied Health is the extraordinary work of authors Dennis C. Tucker, PhD MAT MLS, and Paula Craig, MLS, providing much-needed "instruction" for LNCs and nurse researchers in accessing health care information and evidence-based research. Given the task before them, it is not altogether surprising that the authors' credentials are impressive; what is surprising is the ease with which they communicate complex subject matter. Aligned with the concept of information literacy, the authors have developed a comprehensive guide to locating premium research results and maximizing research efforts—in concise, clear terms.

The book is divided into seven sections that independently cover the essential research tools. The sections are divided into:

- 1. The physical library;
- 2. The catalog;
- 3. The reference collection;
- 4. Periodical/indexes;
- 5. Electronic resources/the Internet;
- 6. The research paper; and
- 7. A review of the process

The book concludes with an appendix of resources covering everything from document delivery services to style sheets for citing electronic references. This appendix alone is well worth the investment.

I remember learning the about the library, Dewey Decimal System, and card catalog in elementary school... or so I thought. By inviting the reader in Section 1 to the library, the authors remind us of the free assistance and support available to the researcher and what an ally we have in the reference librarian. If I ever truly learned it, my recall had atrophied. Simply realizing the exponential increase in research potential through inter-library loan co-operatives is inspiring. Coupled with straightforward explanations of the various technical and public services, the reader is equipped to avail themselves of all the library has to offer. Clarification of the purpose and role of the library personnel in acquisitions, circulation, and the periodicals department lends itself to even greater appreciation of this staff.

In the following Section 2, the authors simplify the two main classification systems for library holdings. The tables of the Dewey Decimal Classification System and the Library of Congress Classification System illustrate the logic behind the card catalog, allowing the researcher to locate traditional textbooks, periodicals, and scholarly journals with ease. What could be a dull instructional experience is actually interesting and enlightening and full of "gestalt" moments.

In Sections 3 and 4, the authors carefully walk the reader through regions of reference materials, digests, and indexes. They succinctly define and categorize each instrument's specific strength and purpose. In addressing the reference collection, key points regarding the purpose and evaluation of a reliable reference book are covered. Dictionaries, encyclopedias, and government documents receive special focus. Multiple titles and online resources are freely offered.

The section addressing periodicals and indexes anticipate the need for an explanation of the distinction in various periodicals and the function of commercial indexes in locating abstracts and articles. How do you know whether to look in microfilm or bound journals when looking for an archived feature? The reader is left with a greater understanding and appreciation of the wealth of information that can be amassed from a simple abstract.

The listing of digests and indexes in Section 4 is, in itself, an invaluable reference tool. This section includes alphabetical material from the Annual Review of Nursing Research (source for what nursing has accomplished in the field of research) through the Vertical File Index (collection

of pamphlets from government and private sources). In fact, there are 17 distinct indexes in both traditional and online views provided to the reader.

Although limited in its scope, Section 5 offers a solid starting place for learning about electronic resources, including the World Wide Web. In this section, the reader is directed where to look for key online information via libraries, government resources, colleges, and universities. The Web addresses (URLs) of well-established and reliable resources are provided. The section additionally provides a primer of information on search engines, online databases, and directories.

Despite the focus on the research paper in Section 6, the model search strategy is easily transferable to medical-legal research, as are the key points on topic development and a guide to organizing your research. Section 7 summarizes the critical points of the research process.

Pathways to Nursing: A Guide to Library and Online Research in Nursing and Allied Health is not only an indispensable resource, it further provides a competitive edge in information retrieval. Architects have their essential manual, and we LNCs have ours.

For more information and an in-depth investigation of Internet research, see the feature article on page 3, Information Literacy, Part I: The Legal Nurse Consultant and the Internet.

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Discovery in Civil Cases

Arlene Klepatsky, Esq. RN

Black's Law Dictionary defines discovery as, "The pretrial phase of a lawsuit during which depositions, interrogatories and other forms of discovery are conducted" (Black, 2004). Discovery is the process of gathering the evidence that is used to prove or disprove the elements of a case. This article will cover some of the formal discovery devices used in civil litigation and discuss the role of the legal nurse consultant (LNC) in the discovery process.

Discovery Statutes

The states and the federal government have statutes that regulate the process of discovery in their jurisdictions. These statutes, often referred to as discovery acts, may differ among jurisdictions. The LNC may, therefore, need to consult the discovery act of the state in which he/she practices to determine the details of discovery in that state. In cases filed in federal courts, the Federal Rules of Civil Procedure (FRCP) apply. Some states, such as California, model their discovery acts after the FRCP. (Editor's Note: The focus of this article is primarily limited to California statutes, in keeping with the author's region of expertise.) In addition to the discovery act, each of these jurisdictions also has a body of case law that affects discovery.

Scope of Discovery in a Civil Case

According to the Federal Rules of Civil Procedure, the scope of discovery is described as follows: "Parties may obtain discovery regarding any matter, not privileged, that is relevant to the claim or defense of any party, including the existence, description, nature, custody, condition, and location of any books, documents, or other tangible things and the identity and location of persons having knowledge of any discoverable matter. . . .Relevant information need not be admissible at the trial if the discovery appears reasonably calculated to lead to the discovery of admissible evidence" (FRCP, 2004). Since many states model their discovery acts after the Federal Rules of Civil Procedure, the scope of discovery is also similar.

Discovery Prior to Filing a Lawsuit

Formal discovery devices such subpoenas, depositions, interrogatories, and requests for production are not available prior to filing a lawsuit. Mechanisms exist, however, for obtaining medical records to assist the plaintiff's attorney in determining whether a particular case is meritorious. For example, California's Evidence Code states that an attorney may request medical records prior to filing a lawsuit. When an attorney requests medical records with a signed authorization

by the client or appropriate legal representative, the records must be made available for inspection and copying within 5 days. The Evidence Code further states: "Failure to make the records available, during business hours, within five days after the presentation of the written authorization, may subject the person or entity having custody or control of the records to liability for all reasonable expenses, including attorney's fees, incurred in any proceeding to enforce this section" (Ca Ev Code section 1158).

A common role of the LNC is to review the medical records in order to assist the attorney in making the decision whether or not to file a lawsuit; however, other facility documents that would be helpful are usually not available at that time. Because the power to subpoena documents such as facility policies and procedures, staffing documents, or other facility documents is not available until a designated period of time after a lawsuit is filed, the review for merit is most commonly performed using only the facts obtained from medical records, informal client and witness interviews, and medical literature research. It does no good to advise the attorney that the policy and procedures should be obtained in order to aid in the decision-making process of whether or not to file a case. There is no power to compel a facility to provide them until subpoena power begins. Very rarely, a facility will put its policies and procedures on the internet, so it doesn't hurt to search just in case.

Discovery Devices

The power to have a subpoena issued and to use other discovery devices is available only after a case is filed as determined by the applicable discovery act. The discovery act of each jurisdiction lists the specific discovery devices that may be used in obtaining evidence. As previously stated, the rules of discovery may differ from state to state. For clarification of the discovery devices that are allowed in a particular jurisdiction, the LNC should consult the applicable discovery act. Some of the discovery devices allowed by the Federal Rules of Civil Procedure are discussed below:

Deposition: A deposition is the process by which a person's testimony is taken by oral examination. The party deposed (also referred to as the "deponent") may be a party, a witness, or an expert witness in the case. This testimony is given under oath and is recorded stenographically by a court reporter, except for periods when an attorney asks to go "off the record." Depositions in some states and in the federal jurisdiction may also be audiotaped or videotaped. In some circumstances, special arrangements may be made, on

agreement of the parties, to take a deposition by telephone. Depositions usually take place in a conference room or office, not in a courtroom. They may even be taken in a deponent's home or office. Even though a deposition seems less formal than a trial in a courtroom, the testimony given at a deposition has the same effect as testimony given under oath in a courtroom. An LNC or other consultant may attend a deposition on the agreement of all of the parties if not prohibited by the applicable discovery act.

The party taking the deposition compels the person to attend by sending a deposition subpoena. A person may be deposed only once in a case, unless the court permits additional depositions. The deposition subpoena may also include a demand to produce certain documents, records, and/or items at the time of the deposition.

Attorneys may object to questions during the deposition, but the question is usually answered after the objection is made. The objection allows the objecting attorney to argue about the matter at a later time in an attempt to keep the objectionable material out of the trial. An attorney may instruct a deponent not to answer a question only when the objectionable matter involves a privilege, such as the attorney-client privilege.

After the deposition, the court reporter prepares a transcript of the deposition. The deponent then reviews the transcript for errors and signs it. If the deponent wishes to change any of the responses, this may be commented upon during the trial. Upon payment of a reasonable fee, the deposition transcript is furnished to the parties and to the deponent.

A deposition or parts of deposition may be admitted into evidence at the trial as allowed by the discovery act. For example, a deposition may be used for the purpose of contradicting or impeaching a witness or a party when the testimony, at the time of trial, differs from that given at the deposition. A deposition may also be admitted into evidence when a witness is unavailable at the time of trial.

Interrogatories: Interrogatories are written questions from one party to another party. Nonparties may not be served with interrogatories. All of the questions must be answered fully, in writing, under oath, within a time period specified by the discovery act. The time for responding may be altered by the court or by agreement of the parties. In many jurisdictions, there are "form interrogatories" with the most commonly used interrogatories on a preprinted form. Some attorneys use form interrogatories, while others prefer to create their own. In some cases, more than one set of interrogatories may be sent, including "special interrogatories" and "supplemental interrogatories."

The FRCP and some state discovery acts limit the number of interrogatories that may be asked. In these jurisdictions, additional interrogatories may be propounded, upon approval of the court. These limitations were enacted to prevent one party from harassing or oppressing another party by sending an unreasonable number of interrogatories.

All interrogatories must be answered unless the responding party's attorney makes an objection to a particular question. The attorney must state the grounds for the objection. If the objection is not made in a timely manner, the objection is waived and may no longer be asserted.

Requests for Production of Documents and Tangible Items: This discovery device allows for the inspection and copying of specified documents including drawings, charts, graphs, and photographs in the possession of a party. Using this device, an attorney and/or LNC may inspect original medical records. This device may also be used to "inspect and copy, test, or sample tangible things" that are relevant to the case (FRCP, 2004). This discovery device can also be used to "permit entry upon designated land or other property in the possession, custody or control of the party upon whom the request is served for the purpose of inspection and measuring, surveying, photographing, testing, or sampling the property or any designated object or operation thereon," as long as the property or object is relevant to the case (FRCP, 2004). As with other devices, objections may be made to specific requests.

Examples

In a case in which there is suspicion of medical record alteration, the LNC may suggest that the original records be reviewed. This can take place using a Request for Production. The review of original records usually takes place at the location where the records are kept. In addition, a representative of the health care provider will most likely be present during the review to preserve the integrity of the records. In cases of alleged missed diagnosis of cancer, for example, relevant pathology slides and preserved specimens such a wax blocks may be requested for retesting.

Subpoenas Duces Tecum: The word "subpoena" is Latin for "under penalty." "Duces tecum" means "Bring with you." A subpoena duces tecum commands a party or witness to produce specified documents or things in its possession. A party or witness who has been issued a subpoena duces tecum may make a motion to challenge it (known as "a motion to quash") if the request is for something that is not relevant or is otherwise not discoverable. For this reason, some jurisdictions require that a notice be provided to a person when his medical records have been requested. Production of these records is delayed for a short time to allow the person to make a motion to quash the subpoena.

Some types of medical records are protected from discovery by statute. In general, these include psychiatric treatment records and substance abuse treatment records. In addition, some states have a statute that protects an HIV result from subpoena. The laws of the jurisdiction determine what is and what is not subject to subpoena.

Physical and Mental Examinations: In a case in which a plaintiff is claiming personal injury, discovery may be conducted by compelling the plaintiff to undergo one physical examination. The examination is performed by a

Table 1: The Various Health Care Facility Documents Subject to Subpoena.

- · Medical records
- · Policies and procedures
- Staffing records
- · Medical staff bylaws
- Medical department rules & regulations (e.g., department of anesthesia rules & regulations)
- Job descriptions
- · Incident reports (privileged in some states)
- · Preventive maintenance and repair logs and other documents
- · Fetal monitor strips
- · Radiology films (copies are generally provided)
- Logs from various areas including surgery and the emergency department

licensed physician or other appropriate licensed health care provider as chosen by the defendant. This physical examination may be referred to as an Independent Medical Examination (IME) or a Defense Medical Examination (DME). When the mental condition is relevant to a personal injury claim, a mental examination may be compelled.

Privileges

As stated previously, the scope of discovery includes evidence that is relevant and not privileged. Statutes dictate what type of evidence is privileged in a given jurisdiction. When a matter is privileged, disclosure cannot be compelled unless the privilege is waived by the holder of the privilege. Privileges are usually enacted for reasons of public policy to encourage communication in certain circumstances. For example, the attorney-client privilege encourages full disclosure of matters to a client's own attorney. Other privileges include the attorney work-product privilege, the physician-patient privilege, the psychotherapist-patient privilege, the clergy privilege, and the marital privilege.

In addition, some states have enacted a peer review privilege that prevents disclosure of medical staff documents and medical staff committee discussions. This privilege is enacted to encourage full discussion of situations leading to bad outcomes in health care facilities so that corrections may be made, as found in Ca Ev Code section 1157. In the states in which the incident report is privileged, it may be protected from disclosure as a document of a peer review committee. The attorney-client privilege has also been used to protect incident reports from disclosure; however, in some states, the incident report is discoverable.

As an example, a report to an attorney by an LNC is protected from discovery under the attorney work-product privilege. The privilege can be waived by production of the report to an expert witness in the case.

Discovery Disputes

When a party fails to produce evidence as requested in a formal discovery device, a motion to compel may be filed with the court. Also, a party who does not wish to disclose certain evidence may file a motion for a protective order. After hearing arguments from each side, the judge decides if the evidence is to be produced. According to some states and the Federal Rules of Civil Procedure, the parties and/or attorneys must confer prior to resorting to the court. That is, they must attempt to resolve the matter among themselves prior to resorting to filing a discovery motion. In complex cases, the attorneys may agree to hire a discovery referee to assist in resolving discovery disputes.

The Role of the LNC in Discovery

The LNC has the expertise to assist an attorney in formulating an effective discovery plan. The LNC also brings knowledge of non-documentary evidence that may be retained by medical facilities, such as the items listed in Table 1. The LNC's knowledge of hospital record-keeping procedures is valuable in educating the malpractice attorney about what should be subpoenaed to prove or refute the allegations made in a case. When such documents are received, the LNC analyzes them to determine whether they contain evidence important to the case.

The LNC may assist the attorney in formulating key deposition questions and interrogatories. The LNC also may educate the attorney about the various types of expert witnesses who may be able to review the various aspects of the case, render opinions, and testify. Often, the LNC will attend inspections of original records, important items of evidence, and key locations that have been made available through a request for production.

In some states, LNCs are allowed to attend IMEs with the plaintiff. When the LNC attends an IME, he/she observes and documents what is said and done by the examiner and the plaintiff during the examination. The LNC then reviews the IME report, when available, for any inconsistencies between what he/she observed and what the examiner documented in the report. For example, the LNC may have observed the client grimace during a range-of-motion examination. If the IME report states that the range of motion was performed without evidence of pain, the LNC will inform the attorney of the inconsistency. Ultimately, the LNC may testify about any such inconsistencies when the attorney determines that such testimony would be beneficial to the case.

These are just a few of the functions that the LNC has the expertise to perform, which assist the attorney in the discovery process. The expertise of the LNC is invaluable in providing any and all of these services to assist the attorney in the discovery process.

continued on page 26

Q: Why is Medical Malpractice/Tort Reform Such a Hot Topic?

Meg deFries, RN

A: Across the nation, medical malpractice and tort reform has become a major source of debate among doctors, lawyers, and politicians. It has been maintained that medical malpractice claims do not do anything other than hurt health care providers and cost a lot of money in settlements and litigation fees. The question arises of whether this really has any effect on or benefit to the patient.

The main reason for the debate is the rising cost of medical malpractice insurance premiums paid by the physicians (Gibeaut, 2005). This is a cycle that seems to repeat itself about every 10 years or so. Physicians often contend that many medical malpractice cases are frivolous, and insurance companies argue that amounts of awards/settlements have risen. Some lawyers and politicians blame the poor economy and the insurance companies' need to make up for lost investments.

This particular cycle of medical malpractice crisis is different than the earlier ones. A new issue just coming to surface is patient safety (Sage, 2003). According to Sage (2003), one in four adults experienced a medical error during 2001-2003. The Harvard Medical Practice study concluded that, of all the negligent injuries, only 2% resulted in claims (Joint Commission Accreditation of Healthcare Organizations [JCAHO], 2005).

One of the most important aspects of health care—namely, patient safety—seems to be moving to the forefront of the medical malpractice debate. Medical malpractice is meant to improve the health care of all patients and provide for the injured patient. Studdert, Mello, and Brennan (2004) state that medical litigation does this in three different ways:

- Deterring unsafe practices that will lead to improved patient safety;
- 2. Compensating the persons injured through negligence; and
- 3. Exacting corrective justice.

Medical litigation desires to achieve this "by reminding those who wish to avoid emotional and financial cost of litigation that they must take care" (Studdert et al., 2004).

LNC's Role in Changing Policies & Procedures

As nurses, we pledge to be patient advocates. In taking this pledge, we vow to make sure our patients receive appropriate care; the most important way to do this is to ensure their safety. Policies and procedures, however, do not often change without some degree of motivation within administration. We have all participated in care that we may have felt was substandard and

hoped that nothing would happen to our patients. Then, when something negative did happen to a patient and a lawsuit resulted, it was usually not until that point that we saw the changes that were so badly needed.

A study by Devers, Pham, and Liu (2004) showed that a hospital's main motivation with regard to patient safety was to meet Joint Commission Accreditation of Healthcare Organizations (JCAHO) requirements. If the hospitals were unable to meet JCAHO requirements, they would lose accreditation and, subsequently, their ability to participate in Medicare and Medicaid services.

A Joint Commission report, Health Care at the Crossroads, finds many faults with the medical liability system (JCAHO, 2005). The report stated that the lengthy time of litigation and "gag clauses" were obstacles in advancing patient safety. It further maintained that the medical liability system inhibited admission of errors for fear of being sued. Interestingly, the report also mentioned that several obstacles to moving towards improved patient safety included lack of will, resources, and knowledge on the part of the health care provider.

Where does JCAHO come up with the information to formulate its regulations? Since 1996, it has operated a national voluntary adverse event-reporting database, which was also discussed in the report. The information gathered is used to "develop and incorporate into its accreditation process a series of concrete, setting specific National Patient Safety Goals and Requirements." The Joint Commission also requires disclosure of unexpected outcomes and adverse events to patients by the responsible physician.

A 1999 report by the Health and Human Services Office of the Inspector General evaluated the effectiveness of JCAHO's surveys. The report noted that the surveys were unlikely to either surface substandard care or identify individuals whose judgment or skills to practice medicine are questionable (Devers et al., 2004). This is a source of concern for those interested in protecting and keeping patients safe. It is also one area on which medical malpractice claims are focused: substandard care and questionable actions of individuals.

Hospitals can be stimulated into improving patient safety and quality of care by a system of self-governance, government regulations to which all parties must adhere, and local markets (Devers et al., 2004): "Purchasers and consumers can use market mechanism to stimulate hospitals to improve patient safety by rewarding or punishing them based on their patient safety performance or progress."

Devers (2004) found that, although a reduction in medical errors might reduce costs, most employers were concerned about premium increases. Despite what seems like a basic principal, few employers connected the two issues. To avoid spending money on litigation, it is best to prevent the actions that initiated the litigation and resulted in compensation of the injured person. Hospitals need to alter unsafe and substandard practices in order to maintain a profitable business.

A change in policy usually makes us think of increased paperwork; however, there are changes that do not result in increased paperwork, but rather safer patient care. Nothing could be more helpful to patients then preventing the repetition of past mistakes. This is where legal nurse consultants (LNCs) are most effective in their work by being a catalyst to the changing forces that result in better standards of care.

During our years of clinical experience, we have seen the changes and results from medical malpractice claims. While this is not necessarily documented for public disclosure, it is evident when subsequent potential claims come in to be reviewed. It is clear, after filing a lawsuit, that the hospital or health care providers in question changed their policy and procedure. Below are examples of just two cases that have resulted in change for safer patient care.

Case Studies

The first case involved a young child who had an elevated temperature:

The mother took the child to a hospital. A septic work up was done including a lumbar puncture (LP). During the LP, an insufficient amount of fluid was removed for both a herpes polymerase chain reaction (PCR) and a culture. The health care providers decided to send a herpes culture. They started the appropriate antibiotics and Acyclovir (antiviral). The child improved within a few days. The culture results returned negative, and the Acyclovir was stopped after less than 1 week. The child was discharged home without medications.

The child returned to the same hospital a few days later with a worse picture of sepsis and began seizing. An LP was done including the herpes PCR. Acyclovir was started and continued for a full 14-21 day course. The child was severely damaged due to the delay in complete treatment with Acyclovir: he was left unable to speak, eat regular food, or understand anything that was said to him.

About a year after the above case was filed, another mother contacted a law firm regarding her child's treatment for herpes encephalitis at the same defendant hospital. The mother stated that her child had received a full 14-21 day course of Acyclovir and was developing normally (Grose, 1996; Kohl, 1996; Suaerbrei & Eichhom, 2000). This child received the appropriate treatment for sepsis and received care that was within the standard.

And yet another case involved a patient with a diagnosed pulmonary embolism:

The hospital to which he was admitted did not have a protocol for the administration and monitoring the effects of Heparin (anticoagulant). The man was obese and treated with routine dosing of Heparin. After 48 hours, he was still not appropriately anticoagulated, revealed sporadic blood work, and had substandard adjustments to the Heparin. The nurse got him out of bed. On return to the bed, he became unresponsive and, after unsuccessful resuscitation, was pronounced dead. The cause of death was a saddle pulmonary embolism. Through the discovery process of litigation, it was found that the defendant hospital did not have a protocol for administration or monitoring of Heparin.

Later, a subsequent person contacted a law firm regarding the treatment of his wife's pulmonary embolism at the hospital involved in the above action. Her record contained a Heparin protocol sheet, which included weight-based dosing, frequency of blood work, and the appropriate adjustments to be made to the Heparin. It appeared that this hospital had developed a protocol, which allowed this client to receive treatment that was appropriate with the standard of care (Goldhaber, 1998; Goldhaber & Elliott, 2003; Tapson, 2000). She was discharged home.

It is presumed that this new Heparin flow sheet came after the facility was sued for substandard treatment of a very common problem. The medical malpractice claim pointed out the antiquated method that the hospital had been using. It appeared to have brought them up to date with the medical knowledge that had been gained in recent years.

Ransom, Studdert, Dombrowski, Mello, and Brennan (2003) have studied the use of clinical guidelines. Their study found that "departures from the obstetrical pathway were nearly four times more frequent among claims." This seems easy to enough understand. Attorneys use guidelines and standards of care to support or defend their cases. If the health care provider adhered to the guideline and met the standard of care, litigation can be averted.

It is understandable that departures from guidelines are necessary at times. The clear documentation of the practitioner in these cases should help protect them from litigation. The Ransom et al. (2003) study provides "evidence that departures from accepted, authoritative practice guidelines increase clinicians' risk of being sued, whereas adherence guards against this threat."

Medical malpractice claims are not only important for future patient care. It is equally important for those who are injured and living the rest of their life to best of their abilities after the injury. As with any personal injury claim, medical litigation seeks to compensate the injured person from the person/facility responsible for the injury. Individuals typically involved in a medical malpractice claim are severely injured, and the medical costs and care significantly affect their financial and socioeconomic status. Some are no longer able to work, while others need costly medical equipment or care.

An example involves a woman who started a new job just before she required an emergency surgical procedure.

She did not have health insurance coverage at the time of her procedure. Postoperatively, she developed arterial blood clots that were not diagnosed in a timely manner. She required bilateral below-the-knee amputations; due to her financial situation, she could not afford prostheses. Since she could not walk, she could not return to her job, which put her in jeopardy of losing her home.

As part of the resolution in this case, the defendant hospital provided the patient with a pair of prosthetic legs and the necessary physical therapy to learn to use them. She was then able to ride the bus again and grocery shop independently. Most importantly to her, she was now once again able to look people in the eye when she spoke with them. Her world, which had been closed without legs, was opened again with prostheses.

Some opponents to medical malpractice litigation suggest that plaintiffs are merely out to gain compensation. The Joint Commission Report found that most families were only seeking answers to what happened. The JCAHO report maintained that what most participants in litigation wanted was to prevent wrong-doing to future patients (JCAHO, 2005).

Solutions?

With this thought in mind, when an untoward event occurs, more hospitals are working toward the idea of speaking with families promptly concerning what happened and giving assurance that an evaluation will be done to determine what went wrong (JCAHO, 2005). A growing number of hospitals, doctors, and insurers are coming around to the idea that apologies may save money by reducing error-related payouts and the frequency of litigation.

Some LNCs may side with the doctors and the insurance companies in feeling that medical malpractice claims bring nothing but headaches. As patient advocates, we should try looking at things from the patient's bedside instead. The patient should have the right to return (as close as possible) to their pre-injured life, while helping prevent the same injury from happening to others. Medical malpractice claims can and do motivate change in the delivery of health care.

References

Devers, K. Pham H., & Liu, G. (2004). What is driving hospitals' patient safety efforts? Health Affairs. 23(2): 103-115.

Gibeaut, J. (2005). The med-mal divide. ABA Journal. 91,38-44.
Goldhaber S. (1998). Recognition and management of patients with pulmonary embolism, deep venous thrombosis and cor pulmonale. Primary Cardiology. (pp.468-479).

Goldhaber S. & Elliott, C. (2003). Acute pulmonary embolism: Part II. Risk stratification, treatment and prevention. Circulation. 108:2834-2838.

Grose, C.(1996). Viral infections of the fetus and newborn. In W. Nelson (Ed.) Textbook of Pediatrics (pp. 524-525). Philadelphia: W. B. Saunders Company.

Joint Commission on Accreditation of Healthcare Organizations. (2005). Health Care at the crossroads: Strategies for Improving the Medical Liability System and Preventing Patient Injury.

Kohl, S. (1996). Herpes simplex virus. In W. Nelson (Ed.) Textbook of Pediatrics (pp. 888-889). Philadelphia: W. B. Saunders Company.

Ransom, S., Studdert S., Dombrowski, M., Mello, M., & Brennan, T. (2003). Reduced medicolegal risk by compliance with obstetric clinical pathways: A case-control study. Obstetrics and Gynecology. 101(4):751-755.

Sage, W. (2003). Medical liability and patient safety. Health Affairs. 22(4):26-36.

Studdert, D., Mello, M., & Brennan, B. (2004). Medical malpractice. New England Journal of Medicine. 350(3):283-290.

Suaerbrei, A., Eichhom U. (2000). Virological diagnosis of herpes simplex encephalitis. Journal of Clinical Virology. 17(1): 31-6.

Tapson, V. (2000). Pulmonary embolism. In Cecil (Ed.)Textbook of Medicine. (pp. 441-446). Philadelphia: W. B.Saunders Company.

This topic was authored by Meg deFries, RN, a legal nurse consultant at the Law Office of Cardaro & Peek in Baltimore, MD, with development and editorial assistance from the Executive Board of the Greater Baltimore Area Chapter of the American Association of Legal Nurse Consulting.

Discovery in Civil Cases

continued from page 23

References

Black's Law Dictionary, 8th edition, (2004). West Publishing Company.

California Evidence Code section 1157. Retrieved April, 2005 from http://caselaw.lp.findlaw.com/cacodes/evid/1150-1160.html

California Evidence Code section 1158. Retrieved April, 2005 from http://caselaw.lp.findlaw.com/cacodes/evid/1150-1160.html

Federal Rules of Civil Procedure, Rules 26 to 36, (2004). Retrieved April, 2005 from http://www.law.cornell.edu/rules/frcp/

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