



OVERWHELMED BY MEDICAL RECORDS MANAGEMENT?? Consider Outsourcing, But Ask These Questions First!

By: Elizabeth B. Juliano, Jean C. Bourgeois, Carey J. Marousek, and James R. Fell

Whether due to workload volume, cost containment initiatives, knowledge demands, or other factors, corporate legal departments, insurers, and law firms may be confronted by the need to outsource Medical Information Management (MIM) functions to specialized service providers. These MIM activities typically include, but are not limited to: medical record acquisition; medical record review, summarization, and analysis; medical and scientific literature research; location, evaluation, and contracting of experts; and consultation on the medical aspects of discovery, settlement decisions, and trial preparation.

MIM service companies range in scope from part time, solo Legal Nurse Consultants (LNCs) to large MIM providers employing a variety of medical professionals, case managers, record acquisition experts, information systems specialists, and so forth. Some providers are able to offer exceptional MIM services to legal departments/insurers/law firms (collectively referred to as "the decision-maker" for the remainder of this article) predicated on many years of experience in the field

and by their recruitment of highly qualified personnel. However, the capabilities of MIM providers are not equal across the board. For example, an examination of the 2000-2001 annual report of the American Association of Legal Nurse Consultants indicates that 55% of LNCs surveyed have five years or less experience in the field of legal nursing.¹

Is outsourcing MIM functions always indicated? How can the decision-maker ensure that the right work product will be received at the right time at the right cost? How might quality MIM providers be located and evaluated? Asking these and several other questions will enable the attorney, claims manager, and legal administrator to decide if outsourcing MIM functions is appropriate.

1. How does the client maintain control when outsourcing the important elements of medical case management?

This is an often heard and valid concern of a number of decision-makers. Although designated MIM functions may be outsourced by a

decision-maker, executive oversight of the case must continue to reside with the corporate counsel, claims manager, or lead attorney(ies) defending the lawsuit. Accordingly, while an MIM provider may be responsible for the acquisition, review, and analysis of medical records for a particular lawsuit, the decision-maker can retain control over larger procedural matters.

It may be the decision-maker who establishes the form the final work product will assume when contracting the services of an MIM provider. This process involves early consultation with the provider to ensure that the final deliverables are compatible with the decision-maker's internal case management system and that they

IN THIS ISSUE

- ❖ Considerations When Outsourcing MIM Functions
- ❖ Latest Research on Health Effects of Asbestos
- ❖ Noteworthy Upcoming Conferences

will be presented in a familiar format. The decision-maker may wish to collaborate with the MIM service to gain insight into various formats and data collection methodologies based upon the expertise and experience of the provider in the litigation, particularly if the provider has previous experience with other clients in similar types of cases.

Open communication with the MIM provider may be essential for the decision-maker. Attorneys and paralegals overseeing case preparation should expect easy access to the professionals reviewing medical documents. Any agreement for outsourcing MIM activities will define when and how the MIM provider's staff members can be contacted for consultation on case matters. The MIM provider should also keep the decision-maker informed with periodic written and verbal updates on the status of the contracted project.

The decision-maker may wish to prescribe the structure for billing and invoicing. This is an issue that may be reviewed and agreed upon early in the engagement with the provider to avoid any issues at the time of invoicing. The agreement should consider flat fee versus hourly rates, timing and format of invoices, activity codes, and descriptions to facilitate the reimbursement of the medical information services by the decision-maker's client. These statements should contain sufficient descriptive detail to expedite auditing of services rendered.

2. What is the best way to identify potential medical information management service providers for a given case?

When seeking an MIM provider, the initial action might be to survey possible candidates through journal advertisements or legal directory listings. It should be noted that publishers' screening and evaluation of MIM advertisers can be superficial; therefore, responsibility falls upon the decision-maker to make

the ultimate determination of the capabilities of an MIM provider following personal discussions and review of promotional literature.

Consultation with other attorneys for their recommendations has always been the optimum resource to locate quality providers of medical information management services. These "word of mouth" contacts generally have a proven performance track record. Yet, for those cases in which networking yields few leads, decision-makers must resort to other strategies.

Many attorneys report they have successfully identified exemplar MIM providers at legal conferences. In some cases, these providers have been featured as speakers with the degree of their expertise becoming evident during the presentation. In other cases, MIM providers have demonstrated their capabilities via conference exhibitions at which the attorney might begin to establish a relationship, examine marketing materials, evaluate sample work products, etc.

Another way to seek out quality MIM providers is to peruse medical legal publications. Some MIM providers are well published in books and journals directed to an attorney readership specializing in drug and medical device, toxic exposure, professional malpractice, and other medical litigation.

Once a pool of potential MIM providers has been defined, the decision-maker should next obtain marketing materials, work product samples, and fee structures from selected candidates. The MIM provider should make this information readily available, both via the Internet and in traditional hardcopy. The professionalism of these materials is one additional predictor of the potential quality of the provider's work products for litigation support.

3. Is the experience and expertise of the MIM provider compatible with the requirements of the presenting case?

The competency of an MIM provider first should be determined through an examination of educational credentials of the professional staff members within the company. For example, an MIM professional designated by the provider to review a case involving a toxic tort should not only possess some form of medical or nursing degree, but also coursework in toxicology, biology, environmental science, and organic, inorganic, and biochemistry. The MIM professional's completion of some form of relevant graduate study is highly desirable, especially if this coursework includes classes in biostatistics and research methodology.



Elizabeth B. Juliano is the founder and President of Litigation Management, Inc. Jean C. Bourgeois is Chief Operating Officer, Carey J. Marousek is Director of Client Services, and James R. Fell manages research and corporate communications at LMI. The authors can be contacted via e-mail at ContactLMI@litigation-mgmt.com or by telephone to 1-800-778-5424.

Certification can also offer an assessment of expertise. Medical, nursing, and other professional associations issue a wide range of clinical and other certifications, which attempt to validate competency and expertise for a selected practice field. When appraising an MIM professional's certifications, the attorney may investigate the source of the credential. Web sites of most professional organizations now contain pages describing criteria needed to acquire their certification(s). As one illustration, the web site of the American Nurses Credentialing Center, located at www.nursingworld.org, describes requirements to attain certifications in a variety of nursing specialties.

Sample case reviews, chronologies, and other attorney work products are other excellent measures of an MIM provider's experience and expertise. The decision-maker may evaluate these materials to determine the provider's ability to clearly communicate a review of the sample case and to assess skill in the analysis of critical medical parameters. At least one of these sample work products should involve a lawsuit similar to the type currently represented by the decision-maker.

4. **Does the MIM provider have the capacity to consistently meet deadlines imposed by pending depositions, trial, settlement negotiations, etc.?**

Every attorney has been confronted by the challenge of preparing for a short lead-time deposition or court hearing. In these situations it is vital that all documents and reviews be on hand for effective case management. It is important to determine early in the selection process whether or not the MIM provider has the capacity to address the pressures posed by changing court dockets.

For some decision-makers, it may be necessary that an MIM provider be responsive to "surge capacity" issues associated with the multi-claim environment of mass tort and class action litigation. In these situations, the decision-maker may wish to once again consider retaining the services of a large MIM company that employs a variety of talented medical professionals and enjoys the flexibility needed to adapt to changing deadline pressures.

5. **Can the service provider prepare a case review in a format compatible with the decision-maker's case management system?**

Work product format specifications are items that the decision-maker should articulate to potential MIM providers in the early stage of proposal solicitation. The decision-maker should consider its needs, as well as those of its client, in relation to electronic storage of

Learn more about management of records in medical litigation from LMI's MIM experts at these upcoming conferences:

Pennsylvania Defense Institute Annual Meeting

October 5, 2001
Hotel Hershey
Hershey, PA

Topic: "MEDICAL INFORMATION MANAGEMENT FOR LITIGATION"

Speaker: Jean C. Bourgeois

Alabama Defense Lawyers Association Annual Meeting

October 19, 2001
Four Points Sheraton Hotel
Tuscaloosa, AL

Topic: "UNLOCKING KEY SECRETS IN MEDICAL RECORDS THAT HELP ATTORNEYS WIN THEIR CASES"

Speaker: Jean C. Bourgeois

Asbestos Litigation: The Next Generation

American Conference Institute
October 22-23, 2001
The Roosevelt Hotel
New York City

Topic: "CONCEPT FOR A NATIONAL ASBESTOS MEDICAL DATA REPOSITORY (NAMDR)"

Speaker: Elizabeth B. Juliano

Medical Legal & Medical Ethics Section Meeting

Association of Military Surgeons of the U. S.
November 6, 2001
San Antonio, TX

Topic: "EMERGING MEDICAL LEGAL ISSUES OF 2001"

Chairperson/Speaker: James R. Fell

information. For example, end-users may require a format compatible with a particular type of case management software (i.e. Summation®, Concordance®). Accordingly, the capability of the MIM provider to interface with such programs should be evaluated.

The MIM provider's ability to conduct searches within its case management database should be determined during the proposal solicitation phase of the relationship. The decision-maker may identify case-specific keywords that will need to be queried to extract certain relevant information contained in a medical record summary or analysis. The MIM provider also should possess the expertise to format these queries into chronologically organized keyword charts, which will then serve as useful adjuncts to the medical record summary and analysis.

6. Does the service provider have sufficient office technology to address the medical information management demands of this case?

The decision-maker should consider the technology requirements in current medical information management and the degree of complexity that will be demanded of the MIM provider. Beyond basic office equipment and services, a full service MIM provider should offer the decision-maker options for electronic delivery of work products, virtual private networks, advanced and high speed imaging, etc.

The decision-maker should consider its needs as they relate to electronic billing. Electronic invoices not only enable decision-makers to more quickly process payments for services rendered, but also to communicate more efficiently with their clients about the services being outsourced to the MIM experts.

7. Within an MIM company, who will be the responsible parties executing the contracted services?

Some MIM companies outsource the completion of medical information management services to solo, independent medical reviewers. Accordingly, while a decision-maker may believe that a particular MIM provider will be reviewing its case(s), this assignment could possibly be delegated to a subcontractor.

The decision-maker may consider inquiring whether or not the MIM provider utilizes subcontractors in the completion of its work. The decision-maker may then decide if this arrangement is appropriate for the firm and acceptable to its client. Issues of subcontractor clinical expertise, educational credentials, and experience conducting similar medical legal reviews should be contemplated as well as the security and confidentiality of the information being reviewed.

8. Does the MIM provider market its services to both the plaintiff and defense legal communities?

Despite the fact that many MIM providers work for decision-makers from both sides of the bar community, this practice may not be advisable. The decision-maker may consider the importance it places on this aspect of the service and determine if this will be a key factor in its selection of a particular MIM provider.

As one example, a serious conflict of interest may arise if an MIM provider reviews cases for a pharmaceutical defendant in one lawsuit and later seeks to review cases for plaintiff attorneys bringing a different product liability action against the same pharmaceutical company. While consulting with attorneys on either side of a case, an MIM provider may become privy to classified information, trial strategies, etc. In subsequent lawsuits, confidentiality can become strained if opposing counsel retains the MIM company.

Avoidance of any conflict of interest problem is quite simple. The provider's marketing materials should clearly articulate if the company serves the plaintiff, defense, or both sides of the legal community. When an MIM provider submits a bid and proposal to the decision-maker, a general list of past and current clients also should be provided to aid in determination of any conflicts of interest.

9. Will outsourcing MIM functions complement the operations of the decision-maker? What if the decision-maker already has its own legal nurses on staff?

The aforementioned questions must be evaluated according to several variables, such as time investment, total expenditures, and work product requirements. For decision-makers who do not have trained medical professionals on staff, the support services of an MIM provider may offer the most expeditious solution. As one example, an MIM provider can offer support in the analysis of issues including obscure medical terminology; indications, actions, and side effects of voluminous numbers of medications; rationales for various diagnostic procedures; etc., thus saving significant amounts of attorney or paralegal case management time.

However, some decision-makers hire their own legal nurses to perform in-house reviews of medical case documents. Decision-makers who manage a sufficient volume of casework to support the services of nurses on staff generally find this to be an effective practice for medical information management, although on some occasions a surge of casework with pressing deadlines

may overwhelm the efforts of internal staff. Under these conditions, the collaborative services of an outside MIM provider may be indicated for the actual summarization of the medical records, thus freeing the decision-maker's legal nurse to consider the higher analytic and more global issues of case preparation. Retaining an MIM provider in surge situations also frees the decision-maker from the responsibility of recruiting and screening temporary personnel, plus the associated overhead costs.

10. Will the MIM provider deliver the work products at the budgeted rate?

An experienced MIM provider should be seasoned in the process of forecasting time and costs required to successfully undertake a given medical case management project. In the case of a large MIM provider, the company will typically maintain an extensive database for a variety of cases. Retrospective analysis of these cases enables the provider to accurately project costs associated with various phases of the presenting project, as well as an overall budget for the project *in toto*. The experienced and well-staffed MIM provider with broader resources can also integrate the capabilities of personnel from its finance, medical, information systems, research, and case management departments to develop time and cost estimates based on work product deliverables, litigation type, and volume of documents requiring review.

11. How will the MIM provider guarantee the security of medical records and other case documents?

Security of online and hardcopy documents may be of significant importance to the decision-maker. During the engagement process, the decision-maker will wish to assess the provider's capability as it relates to access to sensitive information. This access to confidential documents can be controlled using a layered approach to

security, such as restricted admission to company office space, locked file rooms, computer network firewalls and virus protection, etc. Additionally, the decision-maker may wish to seek an MIM provider who requires employees sign confidentiality agreements and then renews these agreements with employees on an annual basis.

It may be important to the decision-maker that document security be managed by assuring that medical records remain in the office of the MIM provider. However, because some MIM providers subcontract the review of medical documents, these hardcopy records may leave the security of the office environment. If this is the situation, the MIM provider should be asked to describe document security protocols to which its subcontractors must adhere.

In some cases, MIM providers will transmit scanned document images for its subcontractors to review. This poses a different set of security issues, which the MIM provider should be prepared to discuss with the decision-maker. For example, does the MIM provider maintain these images via some type of network, and how does the company protect this system against intruders and hackers?

Security also becomes an issue once it is time to transmit work products to the decision-maker. A decision-maker may wish to have documents delivered in some type of electronic format. Because of the computer hardware and technical expertise required for secure document transmission, only the larger and more experienced MIM provider will be able to offer this capability.

It should be determined whether or not the MIM provider has the flexibility to offer electronic transmission service by both e-mail and extranet routes. E-mail transmission works best if the decision-maker only requires access to a work product in final completed form. The decision-maker will want to ascertain if the MIM

DO YOU REPRESENT CLIENTS IN TOXIC TORT, DRUG & MEDICAL DEVICE, OR OTHER MEDICAL LITIGATION? VISIT LMI'S DISPLAY AND DISCUSS YOUR PARTICULAR MEDICAL INFORMATION MANAGEMENT ISSUES WITH OUR EXPERTS AT THE FOLLOWING EVENTS:

Ohio Civil Trial Attorneys Fall Meeting

September 27-28, 2001

Hilton Hotel, Easton Town Center

Columbus, Ohio

Association of Legal Administrators

Region 3 Conference

November 2, 2001

Cleveland Renaissance Hotel

Cleveland, Ohio

Advanced Issues in Drug and Medical

Device Litigation Conference

American Conference Institute

December 13-14, 2001

The Roosevelt Hotel

New York City

provider offers proper programming services to encrypt material before electronic transfer of this information.

In comparison, extranet transmission basically consists of an Internet site hosted by the MIM provider. An extranet site offers a degree of dynamic interaction not found with e-mail transmission. The extranet can be erected by the MIM provider to allow the decision-maker access to work documents as the medical reviewers are actually developing them. Security of an extranet is maintained through use of SSP (secure sockets protocol) encryption, which requires an end-user password to access work product information.

12. Is the MIM provider able to provide a package of comprehensive medical information management services for the given case?

To maximize gains associated with outsourcing MIM activities, the decision-maker should identify an MIM provider who can offer a “one stop shopping” for medical record acquisition and review, medical and scientific case research, and location and screening of experts. Significant savings can be realized through the use of a total service MIM provider because the decision-maker will invest less administrative time and money in coordination of service providers and document transfer. Fragmentation of services can result in a scenario in which documents and work products pass through a complicated network of multiple companies.

13. Can the MIM provider manage medical documents in the mass tort/class action scenario, as well as the individual action?

The decision-maker who is appraising the possibility of outsourcing work for a larger mass tort or class action will want to screen the MIM provider based upon the company's ability to “ramp up” to address the collective demands of such large-scale litigation. While a small MIM provider may be very adept at reviewing medical records for a single case and composing its analysis of the medical documents using simple word processing software, dictates of multi-plaintiff litigation will require an expanded set of capabilities.

A basic requirement of most decision-makers litigating in the mass tort arena is to gain knowledge about the characteristics of the plaintiff group as a whole. Accordingly, decision-makers may require various types of “compilation reports” for the claimant population, in addition to individual case summaries and analyses.

When investigating potential MIM providers for these types of cases, decision-makers should ensure their technology is robust enough to properly manage complex litigation. Large MIM providers generally have better database capability to execute the aforementioned analytical case management functions and statistical calculations. Knowledge derived from these collective reports describing plaintiff population characteristics can then assist the decision-maker in planning strategy for optimal case resolution of the mass tort or class action.

14. How readily will the MIM provider be available for consultation on case issues?

The decision-maker and MIM provider may not be located in the same city or even same time zone. Consequently, when selecting an MIM service, the decision-maker should determine the requirements regarding the type, quality, and timeliness of communications with the medical case reviewer and the importance that will be placed upon these variables in subsequent case management.

Negotiations between a decision-maker and an MIM provider should establish up front which personnel in the provider's company will be available and during what days and times. Most decision-makers prefer that a single point of contact be identified to facilitate communications with the MIM provider. Typical office hours for this individual should be provided to the decision-maker to decrease time wasting “telephone tag.”

Preferred format of communication (telephone, fax, email, regular mail) for the point of contact should also be solidified during this period. The MIM provider should offer the decision-maker the reassurance that any inquiry will receive a response from the company representative within a specified number of hours.

***Pharmaceutical & Medical Device Law Bulletin* Publishes LMI's ADHD Drug Litigation Article**

Does your insurance company or law firm represent clients in defense of lawsuits targeting medications prescribed for treatment of Attention-Deficit/Hyperactivity Disorder (ADHD)? The April 2001 edition of *Pharmaceutical & Medical Device Law Bulletin*, Law Journal Newsletters, a division of American Lawyer Media, featured LMI's article describing the medical information management aspects of these cases. If you missed this article, please contact James Fell at 440-484-2000, or send LMI a message via contactlmi@litigation-mgmt.com to receive a free copy.

During contract discussions, the decision-maker may wish to specify what type of status reporting will be required for a particular case(s). These reports may be forwarded to the decision-maker as often as once a week, or perhaps on a less frequent, monthly basis. The decision-maker should stipulate the form, length, amount of detail, and other desired features of these status reports.

15. What performance metrics are currently in place within the MIM provider to ensure the quality and consistency of its medical information management services?

In the industrial sector, manufacturers and suppliers have learned that decision-makers expect high quality services and goods, with consistent performance metrics. No less should be required of the MIM provider in the provision of medical case management work products.

The decision-maker will want to determine how the provider assures reliable medical information management through a review of the provider's quality assurance program. In turn, the MIM provider should be prepared to submit documentary evidence to the deci-

sion-maker as to how its medical case management work products will meet or exceed quality expectations of the end-user. For example, the provider should evidence a system of internal checks and balances that will guarantee an error-free final work product.

Conclusion

Ultimately, the decision to outsource Medical Information Management activities will be determined by the capacity and expertise available in the decision-maker's organization to handle complex medical issues of a given case and the interest of its client(s) in utilizing the medical aspects to prepare their case. Although application of the principles discussed in this article will serve to assist the decision-maker in selecting the most qualified MIM provider, nothing can replace the development of an effective, long term working relationship with an experienced MIM provider, coupled with open and ongoing communication throughout case preparation.

¹ American Association of Legal Nurse Consultants. 2000-2001 Annual Report. www.aalnc.org/annualreport/2001.

continued from page 8

Marcel Goldberg, of INSERM, France, reviewed studies pertaining to the health effects of non-occupational exposures to asbestos. Such types of exposures are varied and can include non-occupational building, asbestos-containing soil, industrial pollution, and other environmental exposures. Key determinants of environmental risk were listed as fiber type, exposure intensity, and total accumulated exposure.

The second day of the meeting considered the basic science aspects pertaining to how asbestos fibers interact at the cellular level to elicit adverse effects. The morning panel was chaired by Kevin Driscoll, Proctor & Gamble Pharmaceuticals, who indicated that the critical next step in understanding these cellular interactions was to precisely identify the target (i.e., DNA, phagocytes) of asbestos and then to relate this understanding to an application of exposure dosage principles.

To this end, Gunter Oberdorster, Professor of Toxicology and Environmental Medicine at the University of Rochester, presented an algorithm for various pathogenic sequences for the interaction of asbestos fibers in the respiratory tract. These pathways traced such interactions from the time of airborne asbestos fiber exposure through cellular transformation and ultimate development of bronchogenic carcinoma, pleural mesothelioma, or lung fibrosis. Oberdorster indicated that asbestos fiber dimensions and biopersistence were the most important determinants of toxicity, with long fibers more carcinogenic than short. However, it should be noted that short fibers contribute to risk, especially if respiratory clearance is retarded for some reason.

A number of other noteworthy talks were presented at this conference beyond what can be summarized in this brief review. Synoptic statements offered during the final roundtable discussion noted that the lower biopersistence of chrysotile asbestos fibers is now believed to result in relatively lower risk for mesothelioma, as compared to amphibole fibers. Pre-existing disease conditions and genetic factors may increase ones susceptibility to develop asbestos-related pathology. Different, distinct mechanisms are now believed to lead to the development of either lung cancer or mesothelioma.

Visitors to the EPA's Internet site at www.epa.gov/swerrims/ahec/summary.htm can still attend this conference, as most of the speakers' slide presentations are available for download in PDF format. Because of the size and complexity of some of these presentations, visitors may experience sporadic difficulties printing the actual slides; however, they can still be viewed directly on screen.

Visitors who possess Microsoft Windows Media can access the audio portion of many of these sessions. At times, the quality of these audio presentations has been compromised, seemingly due to technological difficulties during the recording process.

Over twenty abstracts of conference poster displays are also available at this site. Most of these exhibits present findings from recently conducted mineralogic, geologic, toxicologic, and epidemiologic research associated with the health effects and risk exposure of asbestos.

EXCERPTS FROM THE EPA ASBESTOS HEALTH EFFECTS CONFERENCE

Oakland, California

May 24-25, 2001

The recent EPA Asbestos Health Effects Conference offered a state-of-the-art analysis of the medical implications of asbestos exposure, as well as a re-evaluation of asbestos risk assessment. The international panel of chairpersons and speakers was comprised of the "best of the best" among the experts in these fields. The following review summarizes conference highlights of relevance to asbestos litigators.

The EPA Asbestos Health Effects Conference was co-sponsored by the Environmental Protection Agency, National Institute of Occupational Safety and Health, Agency for Toxic Substances and Disease Registry, California Office of Environmental Health Hazard Assessment, and the Mining Safety and Health Administration. The seminar attempted to identify lessons to be learned from today's asbestos medicine and risk assessment "sound science." Key questions and controversies regarding the health effects of asbestos exposure stimulated by research conducted in the 1970's and 80's were revisited to identify present day areas of multidisciplinary agreement. In addition, the conference hoped to generate a re-appraisal of existing EPA health assessment criteria for asbestos exposure to bring these protocols in line with contemporary scientific evidence.

Peter Grevatt, EPA's Senior Science Advisor for the National Hazardous Waste Cleanup Program, opened the meeting with the observation that the current approach by the EPA and other Federal agencies to asbestos exposure management continues to be driven by a health risk assessment policy statement that is fifteen years old. He noted that at the time, this analysis had treated all asbestos fiber types and dimensions equally. Furthermore, this document recommended that asbestos risk assessment be based upon phase contrast microscopic (PCM) fiber counts, because studies utilizing electron microscopy were still in the investigational phase. A number of policy shortcomings resulted from the fact that asbestos science prior to 1986 had not yet advanced to the point where health effects could be distinguished according to asbestos types and fiber dimensions. Non-cancerous asbestos health issues also were not well addressed by this early report.

The first morning of the conference was devoted to mineralogy and exposure assessment. Panel Chairperson, Bruce Case of McGill University, Canada, asserted that the terms "environmental" and "occupational" exposures must be carefully applied, and that investigators should refine their language to talk more about levels versus categories of exposure.

For example, it is entirely possible that a particular occupational exposure might be "trivial," while a given environmental (i.e. non-occupational) exposure might be "massive."

John Addison, a mineralogist with John Addison Consultancy, Scotland, defined crystalloid and other chemical properties that distinguish various asbestos forms from those of other minerals with which these might be confused. Addison clarified the meaning and health implications of the term "asbestiform" by explaining this label is actually an adjective signifying only that a mineral resembles asbestos. In reality, there are a number of minerals that are asbestiform, but which are not toxicologic if inhaled.

Addison also opined that most of the U.S. and European definitions of asbestos as a health problem-causing mineral are currently inadequate. He noted that fiber shape criteria have been mistakenly included as part of the definition and that the use of such terms as "fibrous" tremolite are ambiguous. Furthermore, Addison sees the present definition of "asbestos-containing material" as inappropriate, with the U.S. definition of one percent as far too high to be of any value and the United Kingdom standard of "zero" as impossible to prove.

Other lecturers the first morning included Patrick Sebastien of McGill University, who addressed the matter of exposure assessment in environmental circumstances, and Gunnar Hillerdal of Karolinska Hospital in Sweden, who considered radiological changes as markers of environmental asbestos exposure. Hillerdal discussed several controversial aspects relating to pleural plaque formation and relevance. He indicated that in terms of latency it was unusual to observe plaques on chest x-rays during the first ten to twenty years of asbestos exposure, but that these radiographic findings were typically well seen at the thirty-year point.

The afternoon of the first day considered developments in the field of asbestos epidemiology and was chaired by Julian Peto, Institute of Cancer Research in England. John Deмент of Duke University compared differences in carcinogenicity among differing types of asbestos fibers. He explained that existing data indicates the lung cancer risk for chrysotile exposure is at least as high as that observed for amphiboles, and that while chrysotile can cause mesotheliomas, epidemiological data reveals the proportional yield in terms of percentage of deaths to be less than that for amphiboles.

continued on page 7

Copyright 2001 Litigation Management, Incorporated. All rights reserved. Any copying of material herein, in whole or part, and by any means without written permission is prohibited. Requests for such permission may be sent to: Newsletter Editor, Litigation Management, Inc., 300 Allen-Bradley Drive, Suite 200, Mayfield Heights, Ohio 44124. This publication is designed for educational purposes and to stimulate discussion on topics of general medical-legal interest. Articles contained herein do not constitute either medical or legal advice. Readers should consult competent medical or legal professionals to ascertain how both medical and legal criteria may apply in a given situation.