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Radiology: Liability Trends

Radiology continues to be one of the most distressed specialties with regard to Medical Professional Liability insurance. Radiologists have persistently encountered problems over the last five years with the availability and affordability of coverage.¹ A 2004 survey by the American College of Radiology (ACR) indicated that many of its members (73 percent of which were general radiologists) could no longer obtain coverage; 99 percent reported premium increases in the previous three years, and 65 percent of those indicated that the increases were by 25 percent or more.²

It is no surprise that errors in diagnosis are the most significant cause of litigation against radiologists. Within that category, failure to diagnose breast cancer generates the most malpractice claims.³ It is probably also no surprise that radiologists are highly likely to be sued at some point in their careers; 58 percent of ACR members surveyed in 2004 indicated that they had been defendants in litigation.⁴ This pervasive litigation against radiologists has profound and adverse consequences for the whole healthcare delivery system. Radiologists have responded in multiple ways, such as curtailing services, especially mammography and interventional radiology, ordering more studies (such as breast biopsies) as a form of defensive medicine, and taking early retirement. Fewer radiology residents are entering mammography fellowship programs. The ACR reports that more than 700 mammography facilities have closed in recent years.⁵

This article reviews recent malpractice claim trends in radiology and discusses recent developments in the practice of radiology that have medical-legal and risk management implications. The best source for data on national trends in physician malpractice claims is the Physician Insurers Association of America (PIAA).⁶



- 1 YS Cypel, et al. "The Current Medical Liability Crisis: Detailed Findings from Two ACR Surveys in 2003 and 2004," JACR, Vol. 2, No. 7, pp. 595-601
- 2 Ibid., p. 598
- 3 PIAA, Risk Management Review, Radiology, 2005 Edition (published 2006), p.v.
- 4 Cypel, p. 598
- 5 "American College of Radiology, Task Force on Medical Liability Reform Report," May 2004, pp. 6 and 9
- 6 Each year the PIAA publishes its Data Sharing Report (cumulative study) compiled from closed claims data reported by roughly half of its 60 member companies. The 2005 cumulative study included 20 years (inception in 1985) of reported claims with a total database of over 200,000 claims closed involving all medical specialties. The PIAA also annually publishes risk management monographs on each of the major specialties, analyzing claim trends unique to that area of practice, and analyzes these using cumulative data and most recent reporting-year data. There is much gold to be mined from these excellent PIAA publications.

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Radiology Practice Today

Radiology is a medical specialty based on the use of technology to create medical images that historically employed some form of radiant energy. The field grew out of the discovery of x-rays by William Roentgen at the end of the 19th century.⁷ Radiology is more technology driven today than any other medical specialty. This specialty, more than any other, utilizes “highly complex technologies that are increasingly driven by the sophisticated computer and image-processing systems that are used for the acquisition and display of imaging data for interpretation.”⁸ The rapid expansion of imaging technologies, together with the demands of an aging population, has created a radiology services market worth approximately \$100 billion in 2005.⁹ Demand is expected to keep rising for the foreseeable future; imaging volumes may double over the next ten years.¹⁰ Even with this rapid expansion of imaging technologies, general radiologic studies account for 65 to 70 percent of all imaging studies performed.¹¹ However, it is expected that there will be increasing utilization of high-technology imaging modalities while the growth of general radiographic studies will remain stagnant.¹²

Over the past ten years, there has been a significant movement of radiology services to freestanding imaging centers and away from inpatient hospital settings.¹³ Radiology services performed in a center or office exceeded those performed in an inpatient setting in 2003, according to Medicare.¹⁴ The number of diagnostic imaging centers has increased.¹⁵

Radiology has been a specialty that has seen personnel shortages in recent years. The proliferation of technology and the increasing demands of an aging population will continue to create pressures for more trained radiologists and the allied medical specialty of radiologic technologist.¹⁶



The intersecting of heightened demand and proliferating imaging technology has profound implications for Medical Professional Liability. The knowledge base in this specialty has grown dramatically, challenging radiologists to keep current with developing technologies. Subspecialties are emerging, defined by clinical area (interventional, nuclear, musculoskeletal, neuroradiology) as well as modality (CT, MRI, PET).¹⁷ About 25 percent of radiologists are subspecialists.¹⁸

While referring physicians expect radiologists to be current on the latest developments in their field, certain imaging facilities may not generate enough volume to develop or maintain such expertise. As technology consumes more practice time than ever before, the radiologist’s critical human interaction – communication with peers, referring physicians and patients – can suffer.¹⁹

7 William Hendee, “An Opportunity for Radiology,” *Radiology*, Vol. 238: No. 2, p. 389, February 2006

8 *Ibid.*, p. 390

9 Cherrill Farnsworth, “Imaging Trends: A Forecast for 2005-2007,” *Imaging Economics*, www.imagingeconomics.com/issues/articles/2004-2007_02.asp

10 Danielle Cohen, “Radiology 2005: State of the Industry,” *Imaging Economics*, June 2005, p. 34

11 Bruce Reiner, et al., “Quality Assurance: The Missing Link,” *Radiology*, Vol. 238: No. 2, p. 14, January 2006

12 M. Bhargavan, et al., “Utilization of Radiology Services in the US,” *Radiology*, Vol. 234, No. 3, p. 824, March 2005

13 *Ibid.*, p. 25

14 *Ibid.*, p. 26

15 *Ibid.*, p. 28

16 *Ibid.*, p. 24

17 “Subspecialty Radiology Trends,” Franklin & Seidelman Subspecialty Radiology, www.radreports.com/subspecialtyedu/trends.php, 2006

18 *Ibid.*, p. 2

19 Peggy Fritzsche, “Communication: The Key to Improved Patient Care,” *Radiology*, Vol. 234., No.10, October 2005, p.13



Radiology - PIAA Cumulative Study Results

Radiology: Insured Demographics

Each specialty-specific PIAA Risk Management Review begins by discussing certain demographic characteristics of the cumulative study. According to the PIAA 2005 Risk Management Review on Radiology (published in 2006), physicians with claims reported to the PIAA were older in comparison to other specialists. 39.6 percent of radiologists with claims were under 45 years of age in comparison to the average of 43.4 percent for all other specialties. Female radiologists had more claims than female physicians in all other physician specialties (8.4 percent versus 7.7 percent). Over 87 percent of radiologists with claims reported were board certified versus 78.4 percent for all other specialties, while 77 percent of radiologists with claims were graduates of US medical schools versus 74 percent for all other specialties. Radiologists were only slightly less likely to have had previous claims experience than all other specialists (73.4 percent versus 75 percent).²⁰

Radiology: Comparative Payment Analysis 1985-2005

Included in the PIAA Data Sharing Report (cumulative study) database compiled from 1985 to 2005 are 28 physician specialty groups. Significantly, radiology ranked sixth in the number of claims reported as well as in the indemnity paid (\$630 million). The average radiology indemnity payment made in this period was 8.5 percent less than the overall average for all specialties (\$180,148 versus \$195,596).²¹ (Graph 1) Although radiology's average indemnity payment rank is outside the top ten, like certain other troubled specialties (OB/GYN, Pediatrics), radiology's experience has worsened considerably over the last ten years. PIAA data show average paid claims against radiologists increasing by one-third in a five-year time frame, from \$257,984 in 2000 to \$313,412 in 2005.

Errors in diagnosis comprised over half the alleged medical misadventures.²² (Graph 2) Breast cancer topped the list of diagnostic errors, followed by cancer of the bronchus/lung,



Graph 1

PIAA Comparative Claim Payment Analysis

Physician Claims Closed Between 1985 and 2005
Top Ten Specialties: Claims

Specialty Group	Closed Claims	Total Indemnity	Average Indemnity
Obstetric and Gynecologic Surgery	29,432	\$2,798,113,140	\$267,711
Internal Medicine	28,755	1,452,466,763	197,588
General and Family Practice	25,042	1,234,490,443	152,425
General Surgery	22,560	1,357,839,331	172,951
Orthopedic Surgery	20,488	950,643,205	158,467
Radiology	11,927	630,156,030	180,148
Anesthesiology	8,247	580,992,608	213,365
Plastic Surgery	8,201	239,004,621	109,484
Cardiovascular and Thoracic Surgery	6,374	313,327,208	207,501
Pediatrics	6,361	467,503,190	261,321
Totals for all 28 Specialties:	232,493	\$12,483,057,223	\$195,596

Source: PIAA, 2006

Graph 2

Claims by 10 Most Prevalent Medical Misadventures: Radiology

Cumulative Analysis: January 1, 1985 – December 31, 2005

Medical Misadventure	Total Claims	% Paid to Closed	Total Indemnity	Average Indemnity
Errors in diagnosis	6,448	38.75	\$440,402,148	\$191,980
No medical misadventure	2,974	5.37	33,697,222	227,684
Improper performance	1,713	33.15	77,264,587	143,348
Failure to recognize a complication of treatment	407	33.68	14,232,441	109,480
Failure to supervise or monitor case	329	36.27	28,274,105	264,244
Performed when not indicated or contraindicated	195	32.80	8,747,836	143,407
Failure to instruct or communicate with patient	163	19.59	4,490,759	154,854
Failure/delay in referral or consultation	114	35.29	7,097,635	197,157
Surgical foreign body left in patient after proc	106	44.12	1,391,373	30,919
Delay in performance	89	22.78	3,023,916	167,995
Totals:	12,538	29.37	\$618,622,022	\$181,574

Source: PIAA, 2006

20 PIAA, *Radiology Risk Management Review 2005*, (published 2006) Executive Summary, pp. ii-iv.

21 Ibid., p. iv.

22 PIAA, *Radiology RMR 2006*, p.v.

neoplasm of the breast (unknown if malignant or benign), fracture of the vertebral columns, and injury to multiple parts of the body. (Graph 3) Errors in the diagnosis of breast cancer resulted in the highest percentage of claims paid on behalf of this specialty. Female breast cancer was the condition most often incorrectly diagnosed by radiologists. (Graph 4) Claims that involved female breast cancer were closed with an indemnity payment 40 percent of the time in the cumulative study (Graph 4), and breast cancer claims resulted in more than 40 percent of the aggregate payment amount for all radiology claims.²³

Graph 3

Claims by Medical Misadventure and Procedure/Condition: Radiology				
Cumulative Analysis: January 1, 1985 – December 31, 2005				
Errors in Diagnosis				
Condition	Total Claims	% Paid to Closed	Total Indemnity	Average Indemnity
Malignant neoplasms of the female breast	810	46.02	\$80,238,284	\$239,517
Malignant neoplasms of the bronchus and lung	393	41.58	26,983,810	\$176,365
Neoplasm of the breast, unknown if malignant or benign	213	40.96	21,666,828	281,387
Fracture of vertebral column	204	37.11	10,228,153	142,058
Injury to multiple parts of body	162	45.39	6,619,469	95,934
Totals:	1,782	43.31	\$145,736,544	\$206,426

Source: PIAA, 2006

Graph 4

Claims by 10 Most Prevalent Patient Conditions: Radiology				
Cumulative Analysis: January 1, 1985 – December 31, 2005				
Patient Condition	Total Claims	% Paid to Closed	Total Indemnity	Average Indemnity
Malignant neoplasms of the female breast	1,159	40.00	\$99,106,736	\$233,742
Malignant neoplasms of the bronchus and lung	623	36.29	37,272,411	174,988
Neoplasm of the breast, unknown if malignant or benign	380	32.15	26,624,233	244,259
Fracture of vertebral column	303	30.34	11,848,218	134,639
Injury to multiple parts of body	277	30.59	7,434,969	95,320
Symptoms involving abdomen and pelvis	265	23.77	12,354,030	213,001
Foot, fracture of	208	29.70	3,251,190	54,187
Screening for malignant neoplasms	205	53.41	35,198,391	374,451
Aortic aneurysm	166	21.39	9,369,517	253,230
Wrist bones, fracture of	176	36.99	3,313,064	51,767
Totals:	3,782	35.01	\$245,772,759	\$200,631

Source: PIAA, 2006

Radiology: Claims Closed in 2005

A total of 666 closed radiology claims were reported to the PIAA in 2005, of which 172 resulted in indemnity payments. This ratio was slightly above the ratio of paid to closed claims for all specialties in 2005. (Graph 5) Radiology claims have increased in number over the last ten years. In 2005, radiology claims comprised 6.1 percent of all claims against all specialties and 6.5 percent of all indemnity payments versus 5.1 percent and 3.9 percent respectively in 1995.²⁴ As in the cumulative study, errors in diagnosis led the list of medical misadventures resulting in claims against radiologists in 2005. (Graph 6) The most common condition resulting in claims against

Graph 5

PIAA Comparative Claim Payment Analysis				
Physician Claims Closed in 2005				
Top Ten Specialties: Claims				
Specialty Group	Closed Claims	% Paid to Closed	Total Indemnity	Average Indemnity
Internal Medicine	1,647	19.67	\$110,482,748	\$340,996
Obstetric and Gynecologic Surgery	1,376	32.05	173,557,309	393,554
General and Family Practice	1,188	18.86	61,432,452	274,252
General Surgery	949	28.03	75,116,006	282,391
Orthopedic Surgery	862	25.75	57,723,050	313,412
260,014 Radiology	666	25.83	53,906,811	377,879
Anesthesiology	434	30.65	50,257,893	248,449
Cardiovascular and Thoracic Surgery	409	23.23	23,602,663	256,002
Cardiovascular Diseases – nonsurgical	334	13.77	11,776,098	398,764
Pediatrics	298	28.86	34,293,734	317,239
Totals for all 28 Specialties:	10,821	23.85	\$818,794,752	\$317,239

Source: PIAA, 2006

Graph 6

Claims by 10 Most Prevalent Medical Misadventures: Radiology				
Claims Closed in 2005 Only				
Medical Misadventure	Closed Claims	% Paid to Closed	Total Indemnity	Average Indemnity
Errors in diagnosis	302	37.75	\$39,277,690	\$344,541
No medical misadventure	229	9.17	4,629,635	220,459
Improper performance	60	25.00	5,097,828	339,855
Performed when not indicated or contraindicated	15	20.00	1,177,500	392,500
Failure/delay in referral or consultation	9	33.33	455,000	151,667
Failure to instruct or communicate with patient	9	33.33	870,625	290,208
Failure to recognize a complication of treatment	8	25.00	520,000	260,000
Failure to supervise or monitor case	7	28.57	287,500	143,750
Failure to properly respond	5	80.00	761,000	190,250
Delay in performance	5	40.00	55,000	27,500
Totals:	649	26.04	\$53,131,778	\$314,389

Source: PIAA, 2006

23 Ibid.

24 Ibid., p. iv.



radiologists in 2005 was lung cancer, a trend that will be interesting to observe over the next few years as breast cancer has been the leading condition resulting in claims against radiologists for a long time.²⁵ (Graph 7)

Graph 7

Claims by 10 Most Prevalent Patient Conditions: Radiology				
Claims Closed in 2005 Only				
Patient Condition	Closed Claims	% Paid to Closed	Total Indemnity	Average Indemnity
Malignant neoplasms of the bronchus and lung	38	34.21	\$4,475,566	\$344,274
Malignant neoplasms of the female breast	35	25.71	3,811,501	423,500
Symptoms involving abdomen and pelvis	30	20.00	3,290,000	548,333
Neoplasm of the breast, unknown if malignant or benign	29	27.59	2,750,000	343,750
Fracture of vertebral column	22	31.82	2,237,499	319,643
Radiological examination	16	81.25	6,317,250	485,942
Screening for malignant neoplasms	16	43.75	2,725,000	389,286
Chest pain, not further defined	11	9.09	625,000	625,000
Headache	9	22.22	2,050,000	1,025,000
Injury to multiple parts of body	9	77.78	1,291,250	184,464
Totals:	215	33.95	\$29,573,066	\$405,110

Source: PIAA, 2006

Medical-Legal Issues in Radiology

Breast Cancer Cases

Breast cancer (malignant neoplasm of the female breast) is the second leading medical condition involved in claims against all physician specialties, according to the PIAA cumulative study.²⁶ (Graph 8) In recent years it has been the leading condition resulting in physician claims but was surpassed by claims involving brain-damaged infants in the 2006 PIAA cumulative study. Until this year, breast cancer was the leading condition causing claims against radiologists every year since 1985.²⁷

Dr. Leonard Berlin, who has written widely on medical-legal issues in radiology, says that prior to 1985, most litigation against radiologists involved bone abnormalities that were not

properly diagnosed.²⁸ Since 1985, breast and lung cancers have become “the most commonly missed radiographic diseases.”²⁹

The prevalence of breast cancer in American society is widely known; estimates indicate that as many as one in eight to nine women will develop breast cancer.³⁰ Approximately 200,000 new breast cancer cases are diagnosed in the US every year, and 40,000 women die annually from this disease. More than 30 million mammograms are performed annually owing in great part to the American Cancer Society’s recommendations that women age 40 and over receive routine screening mammography.³¹

The increase in malpractice cases in the US since the 1970s has been caused in part by unrealistic patient expectations, according to many observers. Many in the medical community think that screening mammography’s benefits have been oversold. Mammograms are promoted as preventive care and marketed as both a means of early detection and essential to surviving breast cancer.³² Yet Berlin says that mammography screening “probably misses about 25 percent of small tumors and thus is not unfailingly accurate.” Berlin calls for more public acknowledgement of the limitations of mammography.³³

Graph 8

PIAA Physician Closed Claims: Most Prevalent Conditions, All Specialties, 1985-2005			
Top Five Most Prevalent Conditions	Total Claims	% Paid to Closed	Average Indemnity
Brain Damaged Infant	4,512	44.97	\$516,350
Malignant neoplasms of the female breast	4,318	39.11	229,714
Pregnancy	4,087	28.05	218,851
Symptoms involving abdomen and pelvis	3,384	27.61	218,182
Myocardial infarction, acute	3,040	33.39	213,312
Totals for all Specialties:	76,888	30.64	\$214,073

Source: PIAA, 2006

25 Ibid., p. v.

26 PIAA, *Data Sharing Report 2006*, Executive Summary, p.1

27 PIAA, *Radiology Risk Management Review 2006*, p. v.

28 Leonard Berlin, “Radiologic Malpractice Litigation: A View of the Past, A Gaze at the Present, A Glimpse of the Future,” *AJR* 2003, www.ajronline.org. p.8

29 Ibid.

30 Judith Randal, “High Expectations for Mammography at Heart of Many Breast Cancer Cases,” *Journal of the National Cancer Institute*, Vol. 96, No. 6, March 17, 2004, p. 429

31 Kathie-Ann Joseph, “The Crisis in Mammography,” *In Vivo*, Vol. 3, No.12, November/December 2004, p.1

32 Randal, p. 430

33 Ibid., quoting Leonard Berlin



Acknowledging the prevalence of breast cancer cases in physician malpractice claims, the PIAA published its 2002 *Breast Cancer Study* following two similar studies in 1990 and 1995. Here are some of the major findings of the 2002 study:

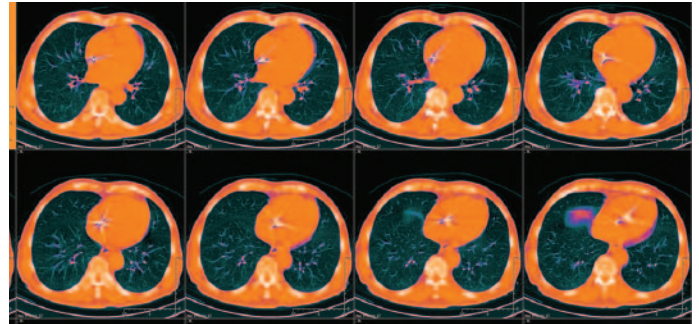
- Radiology was the specialty most often involved in breast cancer malpractice claims. Women in the study were reported to have had a mammogram in 88 percent of the cases.
- A significant number of the claimants were pre-menopausal and peri-menopausal women, often considered less likely candidates for breast cancer. 68% of the women were under age 50. Just under one-third of the women were under age 40.
- Breast cancer is usually more difficult to detect in younger patients due to their denser breast tissue. More than 68 percent of women in the study were under the age of 50, accounting for 78 percent of the indemnity paid. Slightly less than one-third of the claimants were under age 40.
- In just under 80 percent of the cases in the 2002 study, the first reading was reported as either negative or equivocal. Claimants receiving a second mammogram received a negative or equivocal reading in 61 percent of the cases.³⁴

Malpractice litigation involving breast cancer, coupled with inadequate reimbursement for mammography, has had a dramatic negative effect on the healthcare delivery system.³⁵ There has been a decrease in the number of mammography facilities nationally and fewer radiologists sub-specializing in the field of breast-imaging.³⁶ Women are waiting longer for first-time mammograms in certain parts of the US, especially where there are shortages of facilities and trained personnel.³⁷ Rising premiums for radiologists who perform mammography has made it difficult to recruit young physicians to the field.³⁸

Teleradiology Liability

More than any other specialty, radiology has been in the forefront of the practice of telemedicine. The use of digital

telecommunications in the practice of radiology across great distances – especially state and international borders – has become widespread and controversial over the last few decades. The technology has evolved rapidly, and costs have decreased thereby providing significant benefits to physicians and patients, especially in underserved geographic locales.



Care is improved when treating physicians can access a radiologist's contemporaneous image interpretation. Nearly one of every five hospitals in the US is being served by international teleradiology coverage.³⁹

However, many medical-legal issues remain unresolved, including:

- Licensure of the physician in the state transmitting images
- The proper venue for litigation where multiple states are involved
- The definition of the physician-patient relationship under the circumstances

Other potential medical-legal issues include:

- Quality of image transmission
- Equipment and phone line reliability
- Evidence preservation of the transmitted images
- Compliance with any applicable state laws
- Availability of the reading radiologist for verbal consultation
- Consent issues
- Privacy issues (under HIPAA)
- Development of risk management and practice protocols⁴⁰

34 PIAA, *Breast Cancer Study*, 2002, Third Edition, pp. 5-6

35 Amy Kirby, "Necessity of the Legislative Process in the Realm of Women's Health," American Association for Women Radiologists, www.aawr.org, 9/1/2006, p. 1

36 Institute of Medicine and the National Research Council, "The Crisis in Mammography: Supply and Demand," Fact Sheet, www.iom.edu, June 2004, p. 1

37 Ibid.

38 Ibid., p. 2

39 Harry Wessel, "Hospitals Send Images Overseas," *The Orlando Sentinel*, reprinted in the *Fort Wayne News Sentinel*, August 28, 2006, Business Monday, p. 12

40 PIAA, "Telemedicine: An Overview of Applications and Barriers," pp. 1-15

One of the main reasons for the uncertainty here is the lack, to date, of appellate case law.

There are very few reported lawsuits involving teleradiology and none at the appellate court level. In 2005, the PIAA surveyed 19 members about telemedicine and found that five member companies had at least one lawsuit, but all of them involved radiology.⁴¹ Virtually all of the cases involved allegations of failure to diagnose and such fact patterns as: misreading a film from a nursing home in a distant state; misreading of an image on a home computer; improper interpretation of an image and lack of licensure in the patient's state; failure of the physician to notify the carrier that teleradiology was being practiced.⁴²

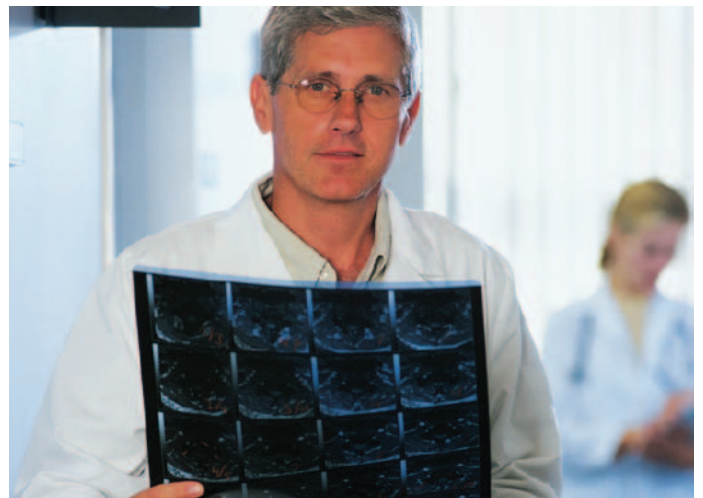
The medical-legal issues in teleradiology become even more complicated when the use of international teleradiology is introduced, and this is becoming increasingly common. Often referred to as "nighthawk radiology services," overseas teleradiology providers are commonly used during the late evening and early morning hours. The term is also applied to domestic companies that offer similar teleradiology services. One of the largest providers is, in fact, named NightHawk Radiology Services.⁴³

The American College of Radiology Task Force on International Teleradiology issued a formal report in April 2004. The group acknowledged that this technology "is solving some problems and creating others."⁴⁴ Issues of quality assurance and accountability were cited as reasons for their report. They cited the ACR's Standard on Teleradiology, adopted in 2003, requiring physicians located at both the transmitting and receiving sites be appropriately licensed in their respective domestic jurisdictions.⁴⁵ This approach in requiring state licensure was carried over into the International Teleradiology's Task Force's Findings. The Task Force Findings, however, went beyond licensure to assert that the physician providing imaging interpretation outside the US should have not only the appropriate state licensure but also Medical Professional Liability insurance coverage and be credentialed appropriately for the location (e.g., hospital), participate in on-site quality assurance activities, and be

"immediately available for consultations" in emergent cases,⁴⁶ among other issues also contained in the Findings report.

Contrary to beliefs widely held in the insurance industry, telemedicine (and thus teleradiology, including international teleradiology) is an insurable risk; however, companies do selectively deny coverage. Reasons might include:

- A high volume of telemedicine treatment/consultation
- Treatment venue is not in a desirable territory
- Treatment venue is not located in a state where the insurance carrier is licensed
- The physician or exposure represents an above-average risk
- Treatment moves beyond consultation into direct patient care⁴⁷



Communication: Essential

Many malpractice cases against radiologists are caused by poor communication, especially the failure to communicate results to the referring physician.⁴⁸ One cause of communications problem is the nature of radiology. In most instances, radiologists review studies and then dictate a report without any direct interaction or communication with the referring physician or patient. Berlin states that while failure to diagnose causes the majority of claims against radiologists, 25 percent of

41 PIAA, Unpublished Report, "Malpractice Insurance and Telehealth", Lori Smarr, 2005

42 Ibid.

43 Wessel, p.12

44 Arl Van Moore, et.al., "Report of the Task Force on International Teleradiology," *JACR 2005*, Vol.2, 121-125, p. 121

45 Ibid., p. 122

46 Ibid., p. 124

47 Ibid.

48 C.P. Kaiser, "ACR Splits Hairs Revising Communication Guidelines," *Diagnostic Imaging Online*, www.diagnosticimaging.com, June 4, 2004, p.1



lawsuits also allege a failure on the part of the radiologist to communicate their findings to either the referring physician or to the patient. Many courts have concurred.^{49 50} Lori Smarr of the PIAA suggests that communication problems may cause as much as half of all lawsuits against radiologists. She cites such factors as film read backward, misfiled communications, and documentation issues.⁵¹



The American College of Radiology first promulgated its *Standard for Communication-Diagnostic Radiology* in 1991. Since then, that document has undergone four revisions, the most recent occurring in October 2005. It is now titled *ACR Practice Guideline for Communication of Diagnostic Imaging Findings*. This decade has seen much debate about the use of the words “standards” and “guidelines” and the medical-legal implications of each, especially with regard to establishing the legal standard of care for a radiologist. It was

felt that the use of the word “guidelines” carried “a less mandatory connotation” and would provide plaintiffs’ attorneys with “less ammunition.”⁵³

The October 2005 version of the *Guideline* titled “Non-routine Communications” sets forth the most critical circumstances requiring communication by the radiologist and describes them as:

- “Findings that suggest a need for immediate or urgent intervention...”
- “Findings that are discrepant with a preceding interpretation of the same examination and where failure to act may adversely affect patient health...”
- “Findings that the diagnostic imager reasonably believes may be seriously adverse to the patient’s health and are unexpected by the treating or referring physician...”⁵⁴

The *Guideline* does not mandate the method of delivery of an imaging report, but in an emergency or for other non-routine communications, states that they should be delivered in a manner that “ensures timely receipt of the findings.”⁵⁵ The *Guideline* goes on to discuss various methods of communication and their possible limitations as well as circumstances where the radiologist may want to request confirmation of the receipt of the communication.⁵⁶ The preamble to the *Guidelines* is careful to state “. . . they are not inflexible rules or requirements of practice and are not intended, nor should they be used, to establish a legal standard of care.”⁵⁷

Despite this admonition in the preamble, the *Guideline* is very detailed and will likely be used in the future by plaintiffs’ attorneys as evidence of the standard of care. This risk must be weighed against the *Guideline’s* efficacy for patient safety and risk management.

49 George Wiley, “Medicine’s Malediction”. www.imagingeconomics.com, April, 2004, p.1

50 Kaiser, p. 1

51 Wiley, p. 3

52 Leonard Berlin, “Standards, Guidelines, and Roses,” *AJR* 2003, Vol. 181, No.4, pp. 945-950, www.ajronline.org, p. 10

53 Kaiser, p.1

54 *ACR Practice Guideline For Communication Of Diagnostic Imaging Findings*, 10/1/05, pp.6-7

55 *Ibid.*, p.7

56 *Ibid.*, p.8

57 *Ibid.*, p.5



Conclusion

Today, the specialty of radiology is poised at the crossroads of explosive technological growth and medical-legal risk. Radiologists must master the burgeoning and complex technology that provides vastly improved imaging capabilities. Modern imaging's benefits to the overall healthcare delivery system would be difficult to overstate. The hope is that the technology will also reduce malpractice risk by making such diagnostic improvements as computer-aided detection (CAD) that will improve interpretation of such tests as screening mammograms.⁵⁸

However, while the wondrous, rapidly evolving technology in this specialty may prevent misdiagnoses, it cannot substitute for effective communication by radiologists with their peers and with their patients.

As one leading radiologist said simply, "Push buttons less, talk more."⁵⁹



58 Marilyn Morton, et al., "Screening Mammograms: Interpretation with CAD – A Prospective Evaluation," *Radiology*, Vol. 239, No. 2, May 2006, p. 375

59 Fritzsche, p.14

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