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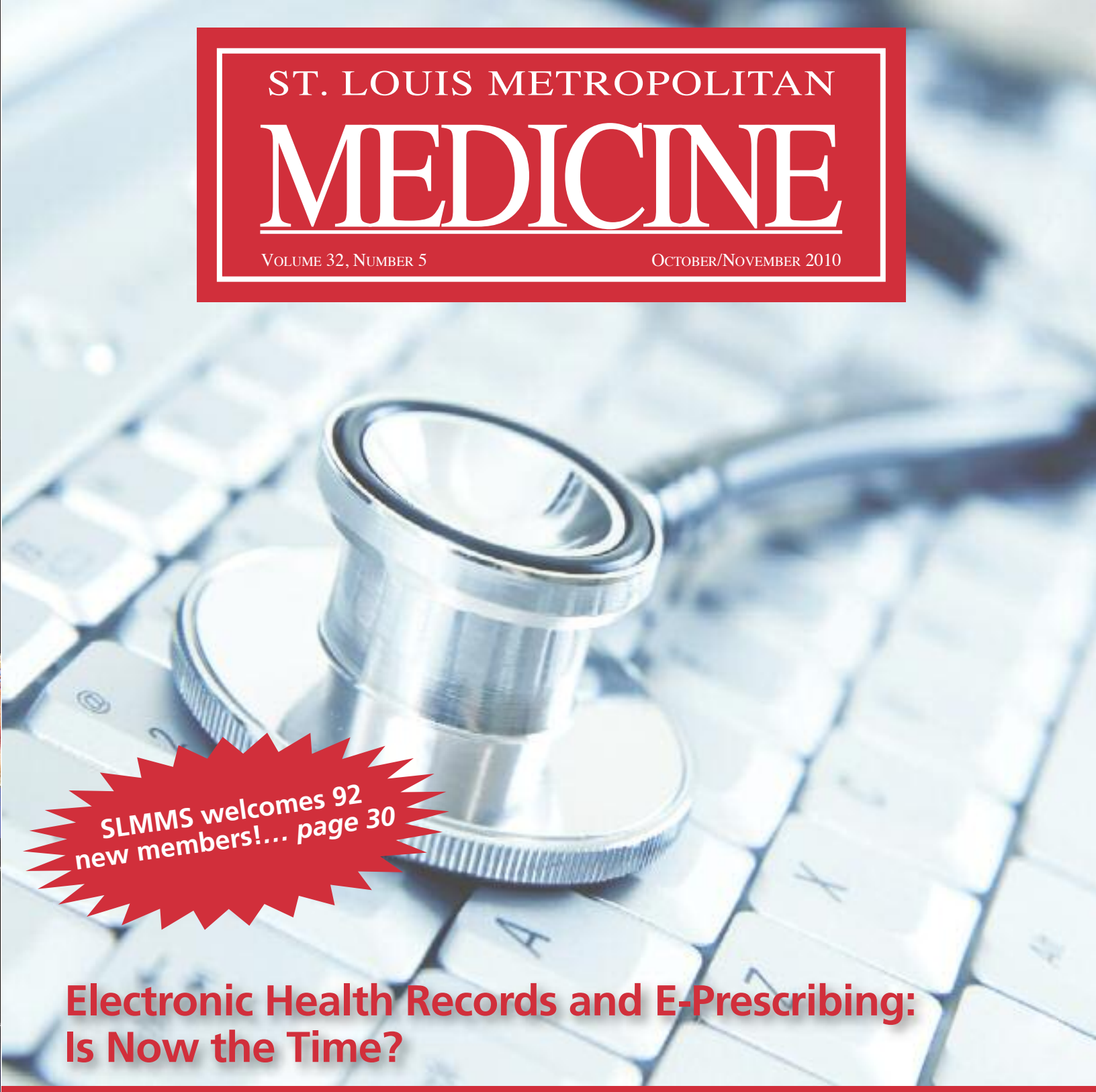

SLMMS welcomes 92 new members!... *page 30*

Electronic Health Records and E-Prescribing: Is Now the Time?

Harry's Homilies©

Harry L.S. Knopf, MD

ON LIFE

The only difference between stormy and sunny is a few dark clouds.

Ah yes. You recognize my perpetual optimism in this homily. I have probably stated this in a dozen different ways, but the meaning is the same: there is almost nothing that you cannot get past, if you keep trying. It is part of being alive, and I love being alive! Not just here, but actively living my life – good and bad. No one enjoys the stormy days. But if you can survive them, and the sun comes out again, you feel so much better at the end of the ordeal. My real hope for myself and my readers is that the storm is not so devastating that the clean-up is overwhelming – even on a sunny day.

■ ■ ■

Dr. Knopf is editor of Harry's Homilies.© He is an ophthalmologist retired from private practice and a part-time clinical professor at Washington University School of Medicine.

SCAM-Q*

** How insurance companies, hospitals, government, etc. Slice Costs And Maintain Quality*

Against Medical Advice

By Richard J. Gimpelson, MD

Richard J. Gimpelson, MD

Most of us physicians have, at some time in our career, experienced a patient who has decided to act "against medical advice," or as we abbreviate, AMA. I feel it is very interesting that the American Medical Association also abbreviated as AMA has recently acted "against medical advice."

In both circumstances of AMA, the consequences can be dire. The patient who decides AMA may experience serious harm or even death. Meanwhile, our AMA that has acted AMA is already experiencing serious harm by physicians leaving the organization in droves. However, our AMA acting AMA also has the potential to cause both physician members and non-members serious harm, whereas the patient who acts AMA is very unlikely to cause their physician serious harm. With the understanding of what AMA/AMA can do to physicians compared with patient/AMA, the rest of the column will only relate to AMA/AMA.

Since the AMA essentially signed on to the Patient Protection and Affordable Care Act (PPACA), physicians can look forward to possible reduction in pay by 23% on Dec. 1, 2010, 6.5% in January 2011, and 2.97% in 2012. Other aspects of this new legislation that the AMA supported include payment bundling, pay for performance, accountable care organizations, electronic medical records, electronic prescribing, among many other burdens on physicians that may or may not be beneficial for patient care and economically beneficial to physicians.

The AMA has been very soft on advocating private contracting between physicians and patients. Although the AMA has paid lip service to tort reform, it endorsed President Obama's Patient Protection and Affordable Care Act, which has nothing but fluff as far as tort reform is concerned.

My criticism is directed mainly at the recent AMA leadership. Maybe they were swept up by hope and change, and were somewhat blind to all the negative aspects of the health care legislation, but following the recent Annual AMA Meeting this past June, there appears to be the beginning of a new direction for the AMA. Hopefully, this new direction will begin to emphasize what is best for the patient-physician relationship and not what is best for the AMA leadership.

The AMA must change its direction from "against medical advice" to "advancing medical achievements."

The continued decrease in AMA membership is either a result of real issues or perceived issues, but the AMA leadership has "miles to go before it sleeps; yes, miles to go before it sleeps."

NOTE: Dr. Gimpelson is a member of the AMA, is a delegate to the AMA House of Delegates, and wants the AMA to once more be the bright shining beacon of excellent medical care that it has been in the past.

■ ■ ■

Dr. Gimpelson, a past SLMMS president, is a gynecologist in private practice.

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ST. LOUIS METROPOLITAN MEDICINE

Volume 32 **Number 5**

OCTOBER/NOVEMBER 2010

COVER FEATURE: Technology

Features

Columns

News

Departments

Editor's Note

SLMM has updated the date designations for our magazine issues. Starting with the August-September issue, we are naming the issue by the month when it is distributed. Instead of September-October, this is the October-November issue. **The publication schedule and number of issues have not changed.**

President's Page

E-Prescribing Expected to Grow Significantly

Physicians face decisions on when to convert and what system to choose

Medical Society President Sam Hawatmeh, MD

What is e-prescribing? E-prescribing is a safe and effective technology that has been around for more than 10 years. E-prescribing gives a physician's practice a way to create and send prescriptions directly to a pharmacy.

Although the vast majority of U.S. physicians still handwrite prescriptions, the adoption of electronic prescribing is slowly growing. Major barriers to e-prescribing remain, including the inability to electronically submit prescriptions for controlled substances, and confusion about standards for data exchange.

Federal and state governments and private insurers are using payment and policy incentives to boost e-prescribing because of its promise for improving the quality and efficiency of health care.

According to Surescripts, which operates the largest United States electronic prescribing network, an estimated 13 percent of U.S. physicians prescribe medications electronically, leaving the majority writing paper prescriptions. The report projected this figure would increase to 75 percent in five years, and 90 percent by 2018. Adopting this change by 2018 will save the U.S. government $22 billion over the next decade. This will more than cover the $19 billion spending in the stimulus bill. Some of this savings would result from increased use of generic drugs, and by also preventing an estimated 3.5 million medication errors and 585,000 hospitalizations.

Some of the benefits to a physician's practice include:

1. Access to information about drug interactions and allergies
2. Reduction in handwriting errors
3. Access to a patient's drug history
4. Warnings about FDA Safety Alerts regarding particular drugs
5. Office staff can work more quickly and efficiently because of a decrease in call-backs from pharmacies with questions, clarifications and refill requests
6. Provider mobility when a wireless network is used to authorize prescriptions any time from anywhere

Some of the benefits to patients include:

1. Prescriptions are filled faster by the receiving pharmacy, decreasing wait time
2. Fewer medication errors are likely to occur
3. Use of a cost-effective and convenient process
4. Increased patient compliance, due to the estimated 20 percent of paper prescriptions that are never filled

The challenge for e-health technology vendors is managing their electronic prescription network. There are many standalone e-prescribing solutions currently available in the U.S., so choosing the best one for your practice may seem like a daunting task. As a physician, be sure to use a proven product, or your practice could be asking for trouble. Be advised there is no "be-all-end-all" method to choosing an e-prescribing solution, but there are guidelines that have been put in place to make this task easier. Surescripts is a good place to begin looking for these guidelines.

There are seven certification components offered by Surescripts:

1. Eligibility and formulary
2. Reporting
3. Medication history
4. Retail new Rx
5. Retail Rx renewal
6. Mail order new Rx
7. Mail order renew Rx

Several of the more advanced systems available provide:

1. Real-time patient eligibility checks
2. Real-time patient specific formularies
3. Patient medication history
4. Drug interactions and allergy information
5. Electronic connectivity to retail and mail order pharmacies

These advanced systems support PC and Mac users, as well as mobile users of iPhone, BlackBerry and iPaq.

As physicians adopt e-prescribing across the practice spectrum, they should see benefit to their practices both clinically and financially. The challenge, particularly for those of us in independent practices, is to know when and how to make the investment.

It is helpful to identify a reliable consultant or vendor to work with. Research and interview several prospective candidates, and talk to other physicians. Also do your homework by reviewing the excellent information on e-prescribing available on the AMA website (www.ama-assn.org), from Surescripts (www.surescripts.com) and from the Center for Improving Medication Management (www.getrxconnected.com). Welcome to the future!

■ ■ ■

The Importance of Participation

Medical Society depends on members to join in and sustain its activities

By Tom Watters, CAE
SLMMS Executive Vice President

Medical Society Executive Vice President Thomas A. Watters, CAE

This year, we have already added 189 new members to the SLMMS membership roster. Are you one of them? If so, welcome. You have helped our ranks swell to over 1,483 current members. We can use them all. The larger that number, the more clout our organization has. When we write a letter to a politician, speak to the media or testify regarding legislation, our voice is louder and receives more attention. We write those letters and make those statements on behalf of EACH of you, but speak with ALL of your voices.

So, numbers are important. But what's more important is the individual impact each of you can have when you participate in the workings of the Society. Whether you're a new member or have been around for a while, we'd like to have more from each of you than your name on our list. Every one of you has skills and aptitudes that we need in order to make this Society bigger and better.

As in most organizations, only a small percentage of our members will become our own leaders. However, we know that most of our members are already leaders – leaders in their practices, hospitals and communities. So we're not asking all of you to exercise your "leadership" option with us. But we would like to have your participation at whatever level you find comfortable.

We need Council members and committee members, but we also need participants in our functions. We need members like you to come to our CME events and support the organization's efforts. We'd like to see you at the annual Hippocrates Lecture scheduled for later this year. We'd enjoy seeing more of you at our annual General Society meeting, where members are nominated for office, and at our annual MSMA delegates' meeting, and at our caucuses at the MSMA annual meeting.

We need your letters and your phone calls. Your opinions are important. We'd even like to see you stop by the office some day, tour the facility, and view some of the historical artifacts of the organization that are housed here. It's your organization – take advantage of it.

Many of our newer members don't know that we own one of the largest rare medical book collections in the world, which is available for perusal in the rare book archives of the Washington University Medical School Library. Our collection of antique medical paraphernalia and "quackery" artifacts was donated to the St. Louis Science Center, and many of them are on display there. These antiquities are part of the Society's heritage, and as a member and "owner," you have already helped to make these part of the St. Louis cultural community.

> **"We need Council members and committee members … We need members like you to come to our CME events … We need your letters and your phone calls."**

One of the principal indicators of success in any large organization is participation. This is something that is often overlooked. Many people gauge an organization's success by how much money it's taking in, or by how many members it has. There's no doubt those are important criteria, but participation may be even more important. If you don't have people *participating*, you not only can't function effectively on a day-to-day basis, you lose your real reason for even existing. We're here for you, and we're only here because of you. And we won't be here long *without* you. Make a commitment today to get involved with YOUR medical society.

■ ■ ■

Make plans to attend

SLMMS CME Event and Hippocrates Lecture

Monday, November 22, 2010

"Health-Care Reform and Its Impact on Physicians"
Alan Goldberg, Attorney at Law
Peter Carmel, MD, President-Elect, American Medical Association

See page 33 for more information

A Strategy for Medical Liability Reform

Four approaches to help protect the future of the medical profession

By Arthur Gale, MD

Over the past 30 years there have been literally thousands of articles written about our broken medical liability system. Although some progress has been made, trial lawyers continue to oppose tort reform legislation and they continue to relentlessly file non-meritorious lawsuits against doctors. This paper briefly outlines a strategy for liability reform, which is necessary for the future survival of the medical profession.

A 2009 letter to the editor of *The Wall Street Journal* from the president of the Physicians Insurers Association of America (PIAA) underscores just how badly broken the liability system is. This report based on more than 235,000 medical liability claims since 1985 states:

- Less than 30 percent of all claims result in a payment to the plaintiff. In absolute numbers this means that over 165,000 of the 235,000 doctors had non-meritorious lawsuits filed against them.
- Of the minority of cases that actually go to a jury verdict only 20 percent result in favor of the plaintiff.
- Claims against each physician cost more than $100,000 to defend.
- It takes 4.5 years on average for a claim to resolve.
- Fully 50 percent of the premium and investment income collected by the insurer is consumed by the system – mostly in legal fees for the plaintiff and defense.

The author concludes: "This is not a system that works for anyone except the system itself." [1]

The Remedy:

1. Caps on Pain and Suffering

The president of PIAA stated in his report that the most effective tort reform is a reasonable cap on pain and suffering. Most experts, including the American Medical Association, agree. Unfortunately in some states judges have objected to caps and ruled them unconstitutional. Their reasoning is based on the separation of powers doctrine. They maintain that caps limit their judicial prerogatives. Judges have undone legislation setting caps on pain and suffering.

In those states where judges are elected, trial attorneys will attempt to elect judges who will declare caps unconstitutional. Or, they will challenge the constitutionality of caps in court as they did recently in Missouri where Supreme Court judges are appointed.[2] The plaintiffs' attorneys lost this challenge, but they will never give up. Physicians can never assume that because a state Supreme Court has ruled that caps on pain and suffering are constitutional that that the battle is over. Trial attorneys will continue to file court challenges until they win. There is simply too much money at stake.

2. Loser Pays

Loser-pays is sometimes referred to as the "English Rule." But it is not restricted to England. Most civilized countries throughout the world have loser-pays laws. These countries recognize that non-meritorious lawsuits harm defendants. Every single one of the 165,000 doctors cited above who were falsely accused of committing malpractice has been harmed both financially and emotionally. Loser-pay laws require that the loser in a lawsuit must pay the winner's legal expenses including legal fees. The purpose of loser-pays laws is to discourage meritless lawsuits.

Loser-pays has been tried in two states – Alaska and Florida. In Alaska it has been moderately successful. Tort suits constitute only 5 percent of all civil legal matters – half the national average. Between 1980 and 1985 Florida adopted a loser-pays rule that applied only to medical malpractice cases. Florida ultimately abandoned loser-pays because victorious defendants were unable to collect legal fees from insolvent plaintiffs while a victorious plaintiff collected multimillion-dollar legal fees from a doctor who lost a case against him.[3]

There is a simple solution to this problem – litigation insurance, which is used in England and other industrial democracies. Defendants are able to recover legal fees from plaintiffs with limited personal assets through the purchase of litigation insurance. States could require plaintiffs to purchase litigation insurance and allow their attorneys to advance the premium as they do other litigation costs.

3. Expert Witness Reform

Plaintiff attorneys can readily find expert witnesses in the medical profession who will testify for the right price. The most egregious example of fraudulent expert witness testimony comes from a Johns Hopkins study. In this study, 95.9 percent of chest films read by plaintiffs' radiologists were read as positive for asbestosis whereas independent radiologists read the same films as positive in only 4.5 percent of cases.[4] An editorial in the journal where these findings were published was titled "Is something rotten in the courtroom?"[5] The answer is categorically yes. "Rotten" aptly describes much expert witness testimony in U.S. courtrooms.

The Johns Hopkins study highlights the main problem in medical malpractice suits – truthful testimony from expert witnesses. Trial attorneys will not go to trial without knowing beforehand that their expert witnesses will testify on behalf the plaintiff. Trial attorneys claim that they seek justice. They even changed the name of their trade association from the Association of Trial Lawyers of

America to the American Association for Justice. But how can you obtain justice without truth? The lack of truthful testimony has caused the public to lose respect for the law. In my opinion it is the main reason why our medical liability system is corrupt.

When the need for tort reform is discussed in public forums, state legislatures or in briefs filed in courts of law, the focus is usually on access to care rather than on truthful testimony from expert witnesses. Tort reform advocates argue that unless something is done there will be shortages of doctors in certain specialties. This argument is valid. But, in my opinion, it misses the main point, which is reforming the rules that set standards for expert witness testimony.

A few years ago the Missouri State Medical Association introduced an expert witness reform bill in the state legislature based upon the recommendations of the American Medical Association.[6] The recommendations rested on the principle that expert witnesses should be independent and give truthful testimony. It never got through the legislature because of trial lawyer opposition. The trial attorneys are not interested in obtaining independent truthful testimony.

I thought that affidavit of merit statutes such as the one enacted in Missouri several years ago would limit non-meritorious lawsuits.[7] Initially they do. But never underestimate the resourcefulness of the trial attorneys. They just revert back to their old tactic of finding experts for hire by trolling the Internet. These so called expert witnesses will sign affidavits of merit and then act as expert witnesses. At the recent MSMA annual convention in November 2009 AMA president-elect Cecil Wilson pointed out that affidavits of merit haven't worked in his home state of Florida.

4. Response of Doctors

One would like to think that most physicians are fighting to change the prevailing unjust tort liability system. But it appears that many if not most doctors are apathetic and passive. A defense attorney told me recently that that I would be surprised at the number of doctors who will testify for a price on behalf of plaintiffs. He attributed this willingness to testify to decreasing reimbursement from managed care. He also said that in the past older doctors would take a malpractice suit personally and would vigorously defend any suit that they thought had no merit. He said that today younger doctors don't seem to care. They have to see so many patients per day that they don't want to take the time off to defend a lawsuit and lose income. They look at malpractice lawsuits simply as part of the cost of doing business.

This apathy and passivity is also reflected in the small percentage of doctors who join organized medicine. Less than 20 percent of doctors are members of the AMA and a minority of doctors belongs to state and local medical societies. Yet these are the very organizations that fight for the rights of physicians under our broken liability system. It is almost as if the medical profession is in the grip of a massive Stockholm syndrome where victims identify with their oppressors.

The present medical malpractice tort liability system is so unjust, corrupt and outrageous in my opinion, that I personally would be reluctant to accept as a patient any trial attorney who supports it and opposes reform. I know that most physicians will disagree with this position. However, the Principles of Medical Ethics of the American Medical Association state: "A physician shall in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve..."[8]

In the final analysis the battle over tort reform is not just a problem for doctors. The excesses of litigation afflict all of society. The profession of medicine is just one of many professions and businesses under siege by the trial attorneys. Polls have shown that the public supports tort reform.[9] They also show that the public's opinion of physicians is far higher than it is for trial attorneys.[10] With the backing of the public and competent and dedicated leadership the battle for tort reform can be won.

Dr. Gale is a past president of SLMMS and frequent contributor to this magazine.

■ ■ ■

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Electronic Health Records and E-Prescribing: Is Now the Time?

Federal incentives, future penalties reward those who convert earlier

Physicians today are evaluating whether now is the time to convert to electronic health records (EHR). Medicare incentive payments of up to $44,000 over a five-year period are available to practices that convert. Starting in 2015, the carrot turns to a stick as practices that don't use qualifying EHR will face penalties against their Medicare fees.

At the same time, large hospital systems in the St. Louis area are converting their physician practices to electronic health records. St. John's Mercy, BJC/Washington University and SSM are putting systems in place.

Electronic health records are becoming a more common part of the patient experience. The St. John's, BJC and SSM systems feature secure websites where patients can look up test results, schedule appointments and contact their physicians.

ARRA Incentives

Last year's American Recovery and Reinvestment Act (ARRA) authorized $19 billion for investment in EHR. A major component of the investment is incentive payments to physician practices for adopting EHR systems. Regulations for obtaining the incentive payments were announced this summer.

Practices can qualify under either Medicare or Medicaid but not both. Those that implement EHR in 2011 or 2012 can receive annual payments starting at up to $18,000 in the first year and scaled down to $2,000 by year five, for a total of up to $44,000. The total incentive drops to $39,000 over a four-year period for converting to EHR in 2013, and $24,000 over three years for those adopting EHR in 2014. The incentive payment should not total more than 75% of the physician's Medicare Part B charges.

Those not using EHR in 2015 face a 1% penalty against their Medicare fees, and 2% in 2016.

In order to qualify for the incentives, physicians must use EHR technology certified by the U.S. Dept. of Health and Human Services, and meet detailed "meaningful use" criteria. Examples from the 20 objectives and measures to demonstrate meaningful use include:

- Record more than 50% of patient demographics
- Record more than 50% of patient vital signs and chart changes
- Maintain up-to-date problem list of current and active diagnoses for more than 80% of patients
- Maintain active medication list for more than 80% of patients
- Generate and transmit more than 40% of permissible prescriptions electronically

The current criteria apply to 2011 and 2012 implementation; the plan is to adjust in subsequent years identified as stages 2 and 3 in the legislation.

In an August editorial, the *American Medical News* expressed concern that despite recent easing of the meaningful-use requirements, the bar may remain too high for many practices.

"The bonus requirements are still going to make adoption a tough sell for many practices, especially the smallest ones … Miss just one of them, and a physician who has spent tens of thousands of dollars on an EMR system might lose out on as much as $18,000 in a Medicare bonus for the year," the editorial said.

E-Prescribing

The use of e-prescribing has grown rapidly in recent years through EHR systems as well as standalone e-prescribing systems. According to the e-prescription network Surescripts, some 156,000 prescribers were routing prescriptions electronically at the end of 2009 compared to 74,000 at the end of 2008 and 36,000 at the end of 2007 – representing over 100% annual growth. Surescripts estimates that 26% of office-based physicians now use e-prescribing.

Medicare Incentives for EHR Adoption

The following table shows the incentives that would be paid to eligible providers who install certified EHR systems and satisfy "meaningful use" criteria under Medicare. Providers may also qualify under separate criteria for Medicaid, but they cannot apply for payment under both programs.

	First Calendar Year in which the Provider Receives an Incentive Payment (Year of EHR implementation)				
Medicare Maximum Incentive Payment by Year	**2011**	**2012**	**2013**	**2014**	**2015 and subsequent years**
2011	**$18,000**				
2012	**$12,000**	**$18,000**			
2013	**$8,000**	**$12,000**	**$15,000**		
2014	**$4,000**	**$8,000**	**$12,000**	**$12,000**	
2015	**$2,000**	**$4,000**	**$8,000**	**$8,000**	**Penalty - 1% of Medicare fee schedule**
2016		**$2,000**	**$4,000**	**$4,000**	**Penalty - 2% of Medicare fee schedule**
Total Paid to Provider	**$44,000**	**$44,000**	**$39,000**	**$24,000**	**(Penalty)**

E-prescribing is defined as the computer-based electronic generation, transmission and filling of a prescription, taking the place of paper and faxed prescriptions.

Starting in 2009, Medicare began offering bonus payments of up to 2% for using e-prescribing. Those physicians who do not adopt e-prescribing for Medicare by 2012 will start seeing their Medicare payments reduced.

E-prescribing can be implemented as part of an EHR system or as a standalone system. According to the AMA, standalone systems can be obtained for $500 to $2,500 per year per prescriber.

E-prescribing offers a variety of benefits to the patient and physician, including fewer medication errors, warnings about the patient's medical and medication history, and improved workflow in the physician's office. A study by the Medical Group Management Association estimates that the time spent managing unnecessary administrative complexity related to prescriptions can be valued at approximately $15,700 a year for each full-time physician.

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Electronic Health Records Resources

American Medical Association brochure, "Health IT Stimulus Funding and You," www.ama-assn.org.

American Medical Association website section on Health IT, includes articles and recent Webinars on EHR, www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/health-information-technology.shtml.

Centers for Medicare and Medicaid Services (CMS), Official Web Site for the Medicare and Medicaid EHR Incentive Programs, www.cms.gov/EHRIncentivePrograms/.

Presentation on "Meaningful Use Criteria," Mark Anderson, CEO, AC Group, Inc. (past speaker to SLMMS Technology conference); www.acgroup.org; (281) 413-5572; mark.anderson@acgroup.org.

E-Prescribing Resources

Centers for Medicare and Medicaid Services (CMS), Section on e-prescribing and incentive programs, www.cms.gov/eprescribing.

American Medical Association website section on e-prescribing www.ama-assn.org/ama/pub/eprescribing/home.shtml.

Booklet, "A Clinician's Guide to Electronic Prescribing," eHealth Initiative Foundation and the Center for Improving Medication Management, 2008.

Center for Improving Medication Management, www.getrxconnected.com.

Surescripts, www.surescripts.com.

Health Care in a Virtual Environment

"Virtualization" runs all computing in the medical office through a central computer with office staff connected from their workstations or mobile devices; benefits include greater security, efficiency and energy savings

By Joshua Andrews, MCSE, NACE, VCP, CNE, Inflexion LLC

Do you get tired of carrying your laptop with you to access patient data from one exam room to another? Want to gain more productivity from your current server hardware? Worry about securing patient information on your mobile devices and laptops? If so, desktop virtualization could be your answer.

"Virtualization" is a technology enabling you to create multiple "virtual" computers on a single physical machine. When you apply this technology to normal desktop PCs the applications and data are unchained from the physical workstation and moved to a secure datacenter server. Once desktops are stored at the datacenter they can be accessed by physicians and office staff through "scaled downed" workstations called thin clients. Once virtualized your desktop will follow you wherever you may go.

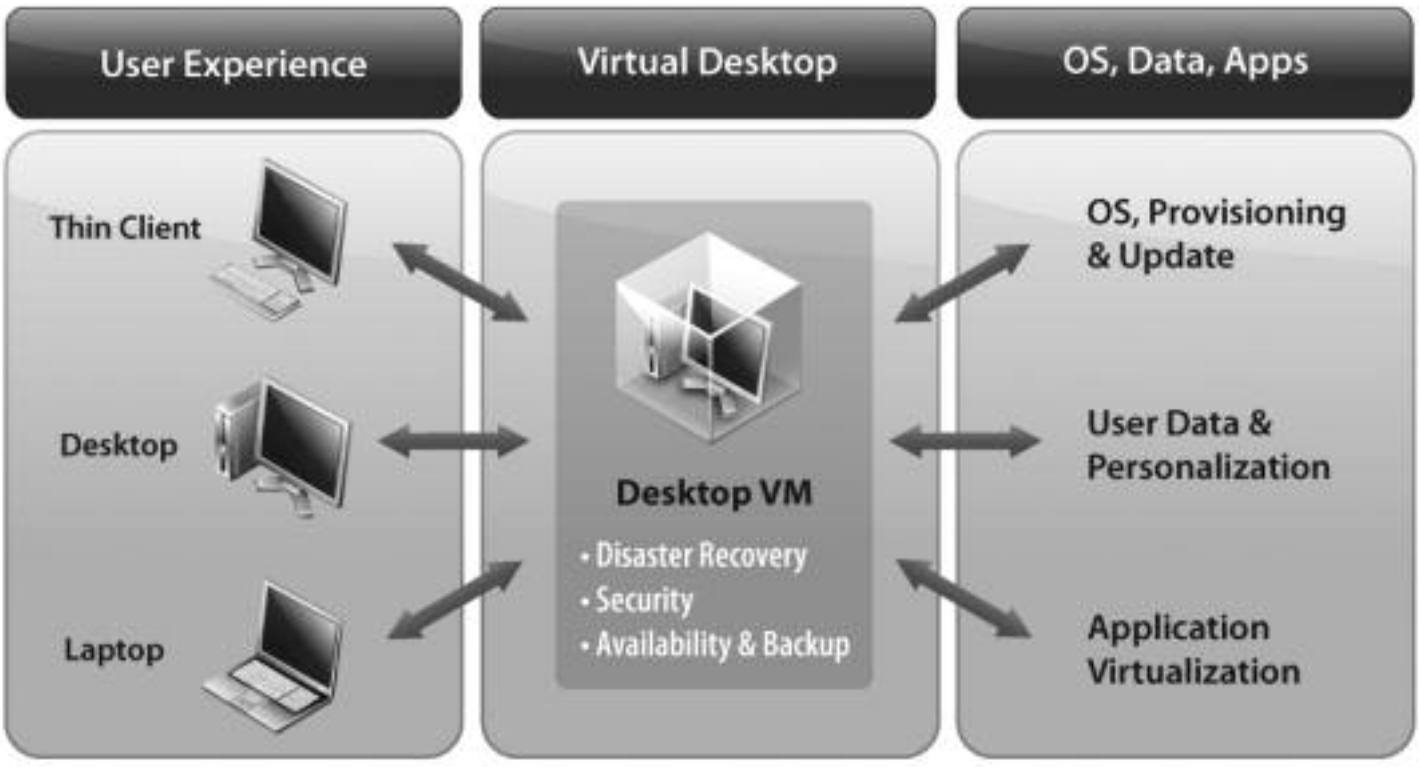
The health-care industry presents a variety of challenges for information technology from securing patient data, to complying with regulations, to ensuring users have reliable access to network resources. With many applications and users often sharing hardware, the IT staff must balance application interactions with maintaining and securing different user environments. Virtualization brings a proven selection of tools to help solve these challenges.

Virtualization takes hardware and turns it into software. By removing the physical requirement, virtualization can provide many benefits not otherwise possible. Virtual machines can be created or destroyed in minutes, copied, backed up and restored with ease. When combined with management techniques used on physical machines, virtual PCs can be very flexible and portable while maintaining security and retaining application compatibility.

Virtual PCs can be accessed by the users in a variety of ways:

- Traditional computers using a specific client
- Thin clients
- Via a Web Page

Thin clients (small diskless workstations) are a very popular choice as they have no moving parts and typically use 10% of the electricity and generate 10% of the heat of a regular PC. Thin clients are available from a variety of vendors and may include options such as wireless networking, built-in monitors and touchscreens.



What About Security?

With a virtual PC environment, data remains on the servers – no documents, spreadsheets or even applications exist outside the data center. The virtual environment can be configured to know where the user is accessing the desktop from, allowing different resources to be available depending on the user's location – a nurse's station, private office or accessing remotely from home.

For additional security the client can be configured to require two-factor authentication – a security card and a password. With a proximity reader, the user simply needs to remain within a few feet of the device to be able to login, and the client logs out when the user steps away. Combined with location awareness, a publicly available terminal may log users out immediately when they step away from the terminal while a private terminal may remain connected for a period of time.

The User Experience

Physicians, nurses and other health-care providers need a consistent environment with reliable, secure access to their applications and data. A concept called "follow-me-desktop" means that anywhere a user logs on they are presented with the same desktop, files and applications. Traditional and virtual-specific tools are combined to separate the user environment from the underlying operating system. By allowing the user desktop to be as portable as the underlying virtual machine, the virtual machine can be changed, updated and upgraded with minimal disruption to the user.

The user experience can also be localized to the accessing device. Low-cost terminals may be placed in publicly available areas while other environments may have touch-sensitive screens or have greater graphics capabilities for video conferencing. A user can move between those systems, maintaining their same desktop and applications while gaining the benefits of the chosen access point.

Administration Benefits of Virtualization

Desktop administration benefits the most from virtualization with features including golden images and non-persistent desktops. One virtual machine (a golden image) can be built with all applications and settings needed and then duplicated a thousand times with one click. Even better, those thousand machines take up slightly more space that the one original machine – not a thousand times more space.

With non-persistent desktops, each time a user logs in they receive a newly-created virtual machine. Each time a user logs out, that virtual machine is deleted and a new one is created. The result is a new PC each time a user logs in which benefits performance and reliability.

Updates and upgrades are also much easier when there is only one location (the golden image) that needs to be changed in order for all virtual machines to be updated. Backups and disaster recovery are made easier when all of the desktops can be recreated from the golden image, leaving just the application servers and data to be protected.

Bottom Line

Virtualization can be advantageous in larger hospital and health care center facilities with many users as well as in smaller physician offices with fewer users. Bottom line in either scenario, virtual desktops can provide a variety of benefits, including time and cost efficiencies.

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