

**STATEMENT OF THE  
AMERICAN COLLEGE OF PHYSICIANS  
TO THE HOUSE COMMITTEE ON ENERGY AND COMMERCE  
SUBCOMMITTEE ON HEALTH**

**“Health Information Technology:  
Improving Quality and Value of Patient Care”**

**July 22, 2004**

The American College of Physicians (ACP), representing over 116,000 internal medicine physicians and medical students, is pleased to provide written comments on the Federal role in promoting health information technology (HIT) to improve quality and the value of patient care. These comments are provided for the July 22, 2004 hearing held by the United States (U.S.) Health Subcommittee of the House of Representatives Energy and Commerce Committee.

**Introduction**

The United States healthcare system is highly fragmented in terms of the vast array of disparate, proprietary non-communicating healthcare information systems in use. Perhaps the largest barrier to adoption of health information technology besides cost is that the current Medicare and private sector insurance plans actually incentivize physicians and other healthcare providers not to use health information technology. Most HIT systems not been designed to communicate with other HIT systems, which has resulted in the creation of thousands of health information silos all over the country. Another problem that has contributed to the creation of the information silos is that for virtually every component of care—drugs, lab results, digital imaging, disease classification, procedures performed, and electronic health records (EHRs)—there are multiple terminologies in use within each component. For drugs alone, there are at least 12 separate systems for naming medications, their ingredients, dosage, and route of administration. (1) So, even if the U.S. developed a system that allowed physicians and other health care providers to easily transmit health care data and if these providers implemented the systems into their medical practice, providers would still not be using a single uniform language.

The Institute of Medicine’s (IOM) 2001 report *Crossing the Quality Chasm—A New Health System for the 21st Century*, highlights the U.S. healthcare system’s reticence in taking advantage of the information technology revolution “that has been transforming every other aspect of society.” The IOM report warns: “In the absence of a national commitment and financial support to build a national health information infrastructure... the progress of quality improvement will be painfully slow.” (2) President Bush, in his January 20, 2004 State of the Union speech, agreed that the time to bring advanced information technology to healthcare is now: “By computerizing health records, we can avoid dangerous medical mistakes, reduce costs, and improve care.” (3)

The President has demonstrated his support for expanding HIT use in the healthcare sector by including \$152 million in his proposed Fiscal Year 2005 budget for HIT initiatives. (4)

The American College of Physicians (ACP) agrees with the IOM's and President's call to bring the latest advances in information technology to all sectors of the healthcare marketplace, underwritten with federal support and leadership. Expanding health information technology and creating an interoperable healthcare data system, i.e., one that allows HIT systems throughout the country to communicate with each other, will revolutionize healthcare and will give individual patients greater knowledge and ability to improve their health status. An interoperable healthcare data system will facilitate the delivery of a higher standard of quality to the U.S. healthcare system by increasing the availability of healthcare data, making care safer and less costly. As such, ACP believes creating incentives to improve HIT adoption and creating interoperability are goals well worth the effort. Achieving these goals will not be easy. It will require overcoming steep barriers of resistance to system change, and a willingness to endure what will surely be a long and taxing process of converting old systems to new. Financial incentives for HIT adoption are needed. HIT standards should be developed cooperatively and voluntarily with active provider input, with the federal government sharing in the cost of achieving the interoperability of health care data that is sorely needed. In addition, new interoperable systems must be carefully tested before widespread implementation.

Even if the United States were able to meet the enormous challenges to develop a truly interoperable national healthcare information system, physicians likely would continue to use a paper-based or an unconnected legacy HIT system that is already in place in their medical practice. This is because the current Medicare and private sector insurance plans actually incentivize physicians not to invest in or use medical information technology because they do not recognize its use and benefits in their payment policies. The balance of this testimony will focus on ACP's vision for health information technology in the 21<sup>st</sup> Century and the benefits, barriers, and incentives for adopting health information technology in the physician practice and ACP recommendations for achieving this critical national goal of an interoperable health information infrastructure.

### **ACP's Vision for Health Information Technology in the 21<sup>st</sup> Century**

ACP's vision for HIT in the 21<sup>st</sup> century is to put appropriate health information technology tools into the hands of physicians, other health care providers, and their patients to encourage patient care management that is consistent with clinically-proven and reality-tested best practices that foster high quality health care and improved patient safety.

To achieve dramatically improved quality and patient safety, physicians and other health care providers must have real-time clinically relevant patient information and clinical decision support tools at the point-of-care in all health care settings. An electronic National Health Information Infrastructure (NHII) that enables usable electronic health record systems must be developed because it will also reduce costs by eliminating

redundancy of health care services delivered in the current marketplace stifled by health information silos.

ACP's vision is supported by new research from the Center for Information Technology Leadership (CITL) that shows conclusively that there are strong financial reasons for the nation to invest in standardized healthcare information exchange. Standardized healthcare information exchange among HIT systems would deliver national savings hundreds of billions of dollars over the next ten years. (16)

### **National Coordinator for Health Information Technology Strategic Framework**

ACP is very supportive of President Bush's call for widespread adoption of interoperable EHRs within 10 years; the establishment of the position of National Coordinator for Health Information Technology; and the development and implementation of a strategic plan to guide the nationwide implementation of HIT in both the public and private sectors. In fulfilling the requirements of the Executive Order, the report of the National Coordinator outlines a framework for a strategic plan that will be dynamic, iterative, and implemented in coordination with the private sector.

ACP's vision is consistent with the strategic framework that the National Coordinator for Health Information Technology released on July 21, 2004. ACP agrees that actions embraced by the public and private health sectors need to be taken over many years. The following are the four major goals that will be pursued by the federal government in realizing this vision for improved health care. Each of these goals has a corresponding set of strategies and related specific actions that will advance and focus future efforts. These goals and strategies are summarized below. ACP will not comment on the details of the strategic framework in this testimony, but plans to continue to be an active participant in transforming this general theoretical framework into reality.

Federal Government Goal 1: Inform Clinical Practice. Informing clinical practice is fundamental to improving care and making health care delivery more efficient. Three federal government strategies for realizing this goal are:

- 1. Incentivize EHR adoption.*
- 2. Reduce risk of EHR investment.*
- 3. Promote EHR diffusion in rural and underserved areas.*

Federal Government Goal 2: Interconnect Clinicians. Interconnecting clinicians will allow information to be portable and to move with consumers from one point of care to another. This will require an interoperable infrastructure to help clinicians get access to critical health care information when their clinical and/or treatment decisions are being made. Three federal government strategies for realizing this goal are:

- 1. Foster regional collaborations.*
- 2. Develop a national health information network.*
- 3. Coordinate federal health information systems.*

Federal Government Goal 3: Personalize Care. Consumer-centric information helps individuals manage their own wellness and assists with their personal health care decisions. The ability to personalize care is a critical component of using health care information in a meaningful manner. Three federal government strategies for realizing this goal are:

- 1. Encourage use of Personal Health Records.*
- 2. Enhance informed consumer choice.*
- 3. Promote use of telehealth systems.*

Federal Government Goal 4: Improve Population Health. Population health improvement requires the collection of timely, accurate, and detailed clinical information to allow for the evaluation of health care delivery and the reporting of critical findings to public health officials, clinical trials and other research, and feedback to clinicians. Three federal government strategies for realizing this goal are:

- 1. Unify public health surveillance architectures.*
- 2. Streamline quality and health status monitoring.*
- 3. Accelerate research and dissemination of evidence.*

### **Benefits of Health Information Technology Adoption in the Physician Practice**

Reports (5-7) show that while only 5% to 9% of American physicians use electronic health records (EHRs) on a regular basis, there is a great deal of variability within geographic regions. For example, EHR adoption in Massachusetts is as high as 30.2%. (8) A much smaller number of physicians, about 0.1% nationally according to one expert in the field (9), have taken the next big step to make their practices virtually “paperless.” The core of a paperless office is a system that integrates EHRs with physician practice management, patient scheduling, and clinical decision support software. Such software has the ability to facilitate many critical practice functions, including patient record keeping, scheduling and communications, issuance of bills and tracking of claims, ordering and receipt of diagnostic test information, generation and tracking of physician referrals, measurement of physician and staff productivity and performance, internal administrative workload and budget control, and real-time clinical decision support (CDS). CDS software, such as the Physicians’ Information and Education Resource (PIER), ACP’s highly regarded real-time point-of-care system, delivers current medical research information and best clinical practice information to the physician at the point of care when the physician needs it. PIER aids physicians in the diagnosis and treatment of hundreds of conditions and also offers educational support to patients, with physician-selected print-outs available at the push of a button.

In its fully realized form, a paperless office can enhance the quality of care that a physician practice delivers while also offering an array of other benefits. These can include the following:

1. Instant access to patient health data from any location with a computer and Internet access;
2. Real-time clinical decision support at the point of care;
3. Updating of the EHR while the patient is being seen;
4. Digital transmission and receipt of all patient lab requests and results, physician consult requests and reports, and patient prescriptions;
5. Medication and formulary information and advice, aimed at avoiding errors and untoward drug interactions and keeping drug costs as low as possible;
6. Coding advice to physicians to assure accurate documentation of a visit's level of complexity;
7. Generation of patient bill and patient take-home medical summaries, condition-specific information, and treatment instructions for patients before leaving the office;
8. Scheduling patient appointments and sending reminders to patients about important treatment items and upcoming tests and appointments;
9. Digital transmission and tracking of claims sent to insurers; and
10. Physician performance measurement and health care outcomes research.

Technology and software already exist that would allow physicians to spend more time seeing patients and less time on paperwork; however, physicians in the United States have been slow to embrace this new technology. England has committed \$17 billion to wire every hospital, clinic, and doctor's office. All of England's 50 million citizens are expected to get an electronic medical record by 2005, and, by the end of 2008, the system will handle an estimated 5 billion transactions a year, including electronic appointments, prescriptions, and access of patient records (10).

In paperless offices, all patient information is instantly available to the physician; not only in the exam room but anywhere an Internet-linked computer can be accessed. With the proper safeguards, this connectivity can be achieved over the Internet, thus allowing physicians to obtain the necessary patient information to render an appropriate clinical decision. Quality of care should be improved by eliminating the risk of having to rely only on the physician's and/or patient's memory or the patient's description of symptoms left in a telephone message.

The quality of patient care may also be enhanced by automated system reminders, which alert both physicians and patients to the need for necessary treatments and tests, such as periodic physicals, flu shots, hemoglobin A1c tests for diabetics, colonoscopies, and mammograms.

A study of small physician practices in California documented how using EHRs had had a visible impact on quality: "Quality benefits were common... almost all users reported increased quality of patient care due to better data legibility, accessibility, and organization, as well as prescription ordering, and prevention and disease management decision support" (11).

Most EHR software includes physician prompts for key clinical questions that should be asked based on past history and diagnosis, avoiding critical oversights. Prescription errors caused by illegible handwriting are avoided when physicians can simply place a check mark next to correct medication(s). Such software also provides medication conflict warnings, thereby averting potentially dangerous drug–drug interactions.

The benefits for patients and the health care system at large can be enormous. According to the Leapfrog Group for Patient Safety, computerized physician order entry for prescriptions alone can substantially reduce serious medication errors. One major Boston, Massachusetts hospital had a 55% decrease in medication errors after its computerized physician order entry was installed, while a hospital in Salt Lake City, Utah, experienced a 70% decrease in antibiotic-related adverse drug events (12).

### **Barriers to Health Information Technology Adoption in the Physician Practice**

Three recent major studies that examined barriers to EHR adoption found that the largest barrier to HIT adoption cited in the studies is lack of adequate funding and resources. This finding held true in the physician and hospital sector and across the spectrum of physician practice size (13, 14, 15).

Adopting major HIT components and converting to a paperless physician office has many costs and obstacles physicians must fully weigh before making such a major change in how they do business. The time, cost, and practice disruption involved in purchasing and learning how to use a new system has to be balanced against its potential benefits and ability to recover the initial investment. Important start-up costs and obstacles that the physician must carefully consider include the following:

1. The cost of purchasing and/or upgrading hardware and new software.
2. The time and cost of system testing and customization before implementing new EHR, practice management, clinical decision support, and other software.
3. The cost of designing and building or redesigning and renovating the office's physical layout to accommodate a paperless operation.
4. The cost and time of training staff to use new health IT software and related updated office protocols.
5. The time and cost for existing practices to upload paper medical records into an electronic health record format.
6. Short-term loss of productivity and practice revenue while the new system is being installed and debugged and staff is learning new software and office protocols.
7. Lack of interoperability of healthcare data among health IT systems.
8. Ongoing costs of system maintenance, upgrading, technical support, and staff training.
9. Temporary loss of system access due to computer crashes or power failures.
10. Use of digital data entry devices, such as an electronic stylus, electronic dictation, or a keyboard.

11. Patient resistance to the new system's outputs, such as computer-generated bills, referrals, and prescriptions.

Software/hardware start-up costs for adopting HIT solutions and creating a paperless office depend on a wide array of factors. These factors include the number of physicians comprising the practice and deciding whether to purchase EHR/practice management/clinical decisions support software and install new servers and workstations, or to lease software and/or servers from an application service provider. Cost is also driven by the number of links to the servers, e.g., links to reference labs and to area hospitals, which allow direct electronic transmission of patient medical data. Besides initial hardware and software costs, practices need to consider ongoing costs, such as Internet access and ongoing system maintenance costs. An October 2003 report entitled "Electronic Medical Records—Lessons from Small Physician Practices," which studied 20 small practices in California, showed that "initial costs ranged from \$15,000 to \$50,000 per physician, with a median cost of \$30,000 per physician" (11); this report focuses on EHRs, so creating a true paperless office would require an even greater capital investment.

### **Incentives to Health Information Technology Adoption in the Physician Practice**

The vast majority of small physician groups and hospitals, as well as many large organizations, are not implementing EHRs and other HIT solutions despite the potential gains to patient safety and improved quality. The primary reason for not implementing these HIT solutions is that EHRs have an adverse financial effect on most physicians' practices and those of other healthcare providers, even if they believe the technology to be useful and efficacious. This lack of HIT adoption allows avoidable medical errors and deaths to occur while these beneficial technologies remain underused.

Despite the long term benefits realized by patients, payers, purchasers and society as a whole, physician groups and hospitals are making rational economic decisions when they choose not to invest in EHRs and other HIT solutions. Hospital and physician investments in EHRs are costly, pose substantial economic risks and have few economic benefits to the purchasers. Despite being on the market for over a decade, demand for a robust EHR HIT solution is low because total cost of ownership (purchase price, implementation, maintenance, and impact on operations costs) is too high. EHRs are costly because of the large upfront investment needed for technology and infrastructure, but also because of the high costs of managing concomitant clinical and administrative changes. They are risky because the implementations may not succeed, and also because of the EHR-driven changes in the workflow, communication and decision-making processes for those who implement these systems.

The current federal approach to reimbursement of health care services did not contemplate health information technology. HIT presents a new and unique category of clinical technology financing. The current Medicare reimbursement system for physicians—the Medicare Resource-Based Relative Value Scale (RBRVS)—does not recognize use of EHRs and other health information technologies. The reason is that the

use of these health care solutions are considered “atypical” and therefore not a reimbursable service under Medicare. There are no allowable billing codes for critical new health information technology solutions such as e-visits/e-consults. E-visits/e-consults are structured e-mail communication between the patient and physician which allow for a cost-effective medical service to be delivered to patients beyond the face-to-face clinical setting. Thus, the Medicare payment system is a disincentive for physicians to invest in HIT solutions such as EHRs.

At the same time that physicians are considering implementing health information technology solutions into their medical practices, physician payment cuts are expected in 2006 due to the fundamentally flawed Medicare Sustainable Growth Rate (SGR) formula. The SGR formula is simply unworkable; it requires Medicare actuaries to predict the unpredictable, leads to constantly-changing government cost estimates and creates volatile payment swings that undermine medical practices’ ability to make rational business decisions such as HIT investment and remain financially viable. The Congressionally-created Medicare Payment Advisory Committee (MedPAC), recommends replacing the SGR. Medicare reduces payments to physicians and other practitioners whenever program expenditures for their services exceed a set target, the SGR. At the same time, however, the government induces greater use of physician services through new coverage decisions, quality improvement initiatives and a host of other regulatory decisions that are good for patients but are not recognized in the SGR. Of particular note, the SGR does not properly account for investment in health information technology. As a result, from 1991-2004, payment rates for physicians and health professionals fell 15% behind practice cost inflation as measured by Medicare’s own conservative estimates. As such, ACP supports MedPAC’s recommendation to replace the SGR with an annual update system which, like those of other Medicare providers, reflects actual increases in physicians' costs.

The solution to properly incentivize healthcare providers to invest in health information technology is multilayered. Physicians and other health care providers need access to capital to make the investment in HIT. One way to do this is to create a government-backed loan program. The interest in EHRs among hospitals and physicians and the frequently cited financial barriers suggest that strong latent demand for these systems would be stimulated by capital availability. Cost offsets may be particularly beneficial to physician practices, independent hospitals, and other small organizations such as public sector clinics and agencies, for which capital is particularly scarce and where cash flow inhibits investment in HIT and specifically EHRs. Loan funds should be made available for more than just the purchase of an EHR system, it must cover the cost of EHR purchase, implementation, training and concomitant workflow changes that are necessary to lower implementation risk and deliver results from EHR implementation. The program also should be structured so that HIT purchases support systems that promote national goals such as interoperability of healthcare data, not proprietary, unconnected health information technology systems.

Once the investment capital is made available, the purchasers of these HIT systems must have a means to pay off these purchases. Therefore, Medicare and private sector

payment policy must be changed to encourage, rather than discourage the use of health information technology. The Medicare SGR formula must be replaced with a more coherent payment update formula and the Medicare RBRVS must explicitly pay for the use of HIT.

The Center for Information Technology Leadership (CITL), research shows conclusively that there are strong financial reasons for the nation to invest in standardized healthcare information exchange. Standardized healthcare information exchange among HIT systems would deliver national savings of \$78 billion annually after full implementation. CITL developed a 10-year, national implementation scenario and found that even during the period when participants incur implementation costs, standardized healthcare information exchange among HIT systems is financially positive, with a total of \$395.3 billion in net returns and the nation reaching breakeven in year five. Another important implication of the research is that employers and other healthcare insurance purchasers would realize significant savings. CITL calculated that savings would come from fewer tests and improved efficiency. CITL projected less redundancy and decreased labor costs from reduced administrative tasks. The results should be viewed as conservative estimates of the value of standardized healthcare information exchange, since CITL considered only transactions that involve providers. Overall, CITL believes that actual financial benefits would be even higher than its projections (16).

### **Legislative Recommendations**

Clearly, as discussed in this testimony, there are significant quality, safety, and financial benefits from investment in health information technology that make this investment imperative for the future health and well-being of Americans. In order to stimulate investment in HIT, ACP recommends that Congress consider enacting legislation that will incentivize physicians to acquire HIT, including consideration of the following options:

- 1. Create a revolving health information technology (HIT) loan program—modeled on the current student loan program—for physicians and other health care providers interested in investing in HIT with clinical decision support tools designed to be interoperable and to enhance medical practice to improve the quality of care delivered.**
- 2. Create a grant program to provide direct dollar subsidies for physicians to acquire health information technology linked to clinical decision support tools and who agree to voluntarily participate in performance measurement/quality improvement programs and/or in studies to assess the impact of such HIT systems on improving health care quality while achieving system-wide savings.**
- 3. Authorize the creation of tax credits, specifically targeted to physicians in small and solo practices, for the purchase of HIT with clinical decision support for recipients who agree to participate in performance**

**measurement/quality improvement programs and/or in studies to assess the costs and benefits of HIT linked to quality improvement.**

- 4. Build into the Medicare RBRVS system an add-on code for evaluation and management (E/M) services to identify that the service was assisted by an EHR with clinical decision support tools designed to be interoperable. The add-on code would increase payment for the identified service by an amount that both recognizes the investment of dollars and practice resources required to acquire and maintain such technologies and the ongoing system-wide value to Medicare associated with use of such technologies**
- 5. Recognize and separately reimburse telephone and e-consults (structured email communication between patient and physician or other health care provider) that result in a distinctly identifiable medical service.**
- 6. Authorize Medicare payment of a “case management fee” that would provide additional reimbursement per patient per month for physicians who agree to acquire and utilize HIT with clinical decision support to manage and improve care of patients with chronic illness.**
- 7. Exempt such additional reimbursement incentives from Medicare budget neutrality requirements. Because Medicare is likely to experience system-wide savings associated with an investment in HIT, financial incentives to support the acquisition of such cost-saving technologies should not be subject to budget neutrality cuts.**
- 8. Congress must also replace the flawed Medicare Sustainable Growth Rate (SGR) formula for physician payment with a new formula that better reflects the actual costs associated with medical practice including the acquisition of HIT.**

ACP has developed a draft legislative proposal to authorize several of the incentives described above and to require development and testing of HIT standards. We would be pleased to share the draft proposal with the Energy and Commerce Committee.

## **Conclusion**

Physicians other health care providers who invest in health information technology generate benefits for their patients and for health care purchasers, but often realize lower revenue (e.g., prevented hospitalizations and reduction of redundant medical services) and increased costs from supporting the HIT. Even if EHRs and other health information technology products were free to purchase and use, and could be implemented in a risk-free manner, the financial consequences of the changes they induce in health care organizations slows adoption substantially because the current payment system in cents providers not to adopt HIT solutions. The financial penalties for use of health information technology including EHRs are a direct consequence of the obsolete

reimbursement methods used by Medicare and private insurers. These methods of reimbursement are misaligned with society's needs and health care's mission, and require fundamental reform.

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