Congress of the United States
U.S. House of Representatives
Committee on Small Business
2361 Rayburn House Office Building
Washington, DC 20515-6315

Memorandum

To: Members, Subcommittee on Healthcare and Technology, House Committee on Small Business
From: Renee Ellmers, Chairwoman
Date: May 31, 2011
Re: Hearing: "Not What the Doctor Ordered: Barriers to Health IT for Small Medical Practices"

On June 2, 2011 at 10:00 a.m. in Room 2360 of the Rayburn House Office Building, the Subcommittee on Healthcare and Technology of the House Committee on Small Business will meet to examine the adoption of health information technology (health IT) by small and solo medical practices and the barriers faced by them in doing so. The Subcommittee will hear testimony from Farzad Mostashari, M.D., Sc.M., National Coordinator for Health Information Technology, U.S. Department of Health and Human Services, Washington, DC; Karen Trudel, Acting Director, Office of E-Health Standards and Services, Centers for Medicare and Medicaid Services, Baltimore, MD; Sasha Kramer, M.D., Olympia, WA. representing the American Academy of Dermatology; Denise Elliott, D.P.M., Marrero, LA, representing the American Podiatric Medical Association; Andrew Slavitt, Chief Executive Officer, OptimumInsight, Eden Prairie, MN; and David Baumer, Ph.D., Professor of Law and Technology, North Carolina State University, Raleigh, NC.

I. Introduction

Health IT is the term used to describe the collective management of electronic information and its exchange among health care providers, patients, insurers and the government. Information technology is used in many fields to speed the management and transfer of information, but historically, health care has lagged behind others in promoting its use. The majority of health care providers still use paper files and patient records. Increasingly, though, electronic health records (EHR) are seen as an important tool to help increase the efficiency, affordability and quality of medical care, and decrease medical errors and paperwork.

For solo or small health care practices, there are particular barriers to adopting health IT. Smaller practices generally have less capital to purchase health IT hardware and software, fewer staff members to operate the system, and less time to train on it. In addition, some individuals and groups have concerns about legal and privacy barriers to health IT. This hearing will give Subcommittee Members the opportunity to learn about the barriers to health IT implementation and some possible solutions.

II. Background

On April 27, 2004, President George W. Bush signed Executive Order 13335,[1] which established the Office of National Coordinator (ONC) for Health Information Technology in the Department of Health and Human Services. The goal of the executive order was to develop a nationwide health information network that coordinated patient care and connected medical providers within ten years.[2] This technology infrastructure was designed to: 1) ensure that appropriate information is available to guide medical decisions at the time and place of care; 2) improve health care quality, reduce medical errors, and advance the delivery of appropriate care; 3) reduce health care costs resulting from inefficiencies, medical errors, inappropriate care, and incomplete information; 4) promote a more effective marketplace, greater competition and increased choice through a wider availability of accurate information; 5) improve the coordination of care and information among hospitals, laboratories, physician offices, and other ambulatory care providers; 6) ensure patients' health information is secure and protected.[3] However, the transition to Electronic Health Records (EHR) has been a slow one, and among small and solo medical practices, it has been particularly difficult.

III. The Growth of Health IT

A 2010 study[4] reported that 24.9% of physicians had fully functional EHRs, and 10% had a basic EHR system. A significant gap existed then between small and large physician practices in adoption of EHRs; a gap that continues to widen today. The study found that cost is a major barrier to purchasing, implementing and maintaining an EHR system for small practices.[5]

The Centers for Disease Control and Prevention's National Center for Health Statistics' 2010 survey[6] found that 24.9% of office-based physicians had a fully functional EHR, and 10.1% had a basic EHR system. The CDC defined a basic system as having features such as patient history and demographics, patient problem lists, physician clinical notes, computerized orders for prescriptions, and the ability to

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[1] Executive Order 13335, available at http://edocket.access.gpo.gov/2004/pdf/04-10024.pdf.:

[2] The Johns Hopkins University, *Towards Nationwide Health Information Network*, Health Information Technology Standards and Systems Interoperability, 2011, available at:
http://distance.jhsph.edu/core/index.cfm/go/course.home/cid/259/.

[3] Executive Order 13335, April 27, 2004, available at: http://edocket.access.gpo.gov/2004/pdf/04-10024.pdf.

[4] Chun-Ju Hsiao, Ph.D., Esther Hing, M.P.H., Thomas C. Socey, and Bill Cai, M.A.Sc., *Electronic Medical Record/Electronic Health Record Systems of Office-based Physicians, 2009 and Preliminary 2010 State Estimates* Centers for Disease Control, 2009, available at:
http://www.cdc.gov/nchs/data/hestat/emr_ehr_09/emr_ehr_09.html. See also George Washington University, Massachusetts General Hospital, Robert Wood Johnson Foundation: *Health Information Technology: Where We Stand 2008,* available at: http://www.rwjf.org/files/research/062508.hit.exsummary.pdf.

[5] Chun-Ju Hsiao, Ph.D., Esther Hing, M.P.H., Thomas C. Socey, and Bill Cai, M.Sc., *Electronic Medical Record/Electronic Health Record Systems of Office-based Physicians, 2009 and Preliminary 2010 State Estimates,* Centers for Disease Control, 2009, available at:
http://www.cdc.gov/nchs/data/hestat/emr_ehr_09/emr_ehr_09.htm.

[6] Chun-Ju Hsiao, Ph.D., Esther Hing, M.P.H., Thomas C. Socey, and Bill Cai, M.Sc., *Electronic Medical Record/Electronic Health Record Systems of Office-based Physicians, 2009 and Preliminary 2010 State Estimates,* Centers for Disease Control, 2009, available at:
http://www.cdc.gov/nchs/data/hestat/emr_ehr_09/emr_ehr_09.htm.

view lab and imaging results. According to the survey, the fully functional system contained everything needed to qualify for "meaningful use" incentives.

There appears to be growing support for health information technology, and President Obama and Congress have continued to urge federal government investment in it. The Health Information Technology for Economic and Clinical Health Act (HITECH), which was included in the American Recovery and Reinvestment Act (Pub. L. 111-5),[7] codified the Office of the National Coordinator (ONC), appropriated $2 billion in discretionary funding to the ONC to assist in HITECH program goals. The ONC develops standards and recommendations and coordinates all federal health IT activities.

The HITECH Act authorized Medicare reimbursement incentives for eligible providers who demonstrate "meaningful use" of EHRs beginning in 2011, and authorized Medicare reimbursement penalties beginning in 2015 for providers who do not. The Act's Medicaid Incentive Program provides payments to eligible providers who adopt, upgrade or demonstrate meaningful use of EHRs in their first year of participation, and demonstrate meaningful use for up to five remaining years. The Act also appropriated $677 million to establish Regional Extension Centers to provide technical assistance to providers adopting health IT. Under the Act, the National Coordinator is required to update the strategic plan[8] for health IT that was first issued in 2008. The plan reflects the ONC's goals of improving the quality, efficiency, safety and patient-centeredness of health care.

As of February 2011, 21,000 providers had registered with HHS for $20 million in incentive payments. Forty five thousand providers had registered with HHS' Regional Extension Centers to obtain technical assistance to become eligible for future payments.

IV. Barriers to Health IT for Small Medical Practices

Most office-based physicians are small and solo practices.[9] There were almost 640,000 office-based physicians in the U.S. in October 2010, supporting $2.2 million in economic output, an average of 6.2 jobs (including the physician), $1.3 million in wages and benefits, and more than $98,000 in state and local tax revenue.[10] In spite of this economic strength, according to the American Academy of Family Physicians (AAFP), the share of solo practices among AAFP members fell to 18 percent from 44 percent in 1986.[11] In 2007, only 28% percent of doctors described themselves as self-employed, compared to 58 percent in 1970.[12] Solo practice physicians are also feeling pressure to adopt health IT systems, while their costs are rising and their reimbursements are falling.

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[7] Title VIII of Pub.L. 111-5, available at: *http://www.gpo.gov/fdsys/pkg/PLAW-111publ5/pdf/PLAW-111publ5.pdf*.

[8] *Coordinated Federal HIT Strategic Plan 2011-2015*, Office of the National Coordinator, Department of Health and Human Services, available at:
http://healthit.hhs.gov/portal/server.pt/community/fed_health_it_strategic_plan/1211/home/15583.

[9] American College of Physicians, *Office-based Doctors are Economic Powerhouses*, ACP Internist Blog citing American Medical Association report data, March 24, 2011, available at: http://blog.acpinternist.org/2011/03/qd-news-every-day-office-based-doctors.html.

[10] Id.

[11] Gardiner Harris, *Family Physician Can't Give Away Solo Practice*, New York Times, April 22, 2011, citing American Academy of Family Physicians data, available at: http://www.nytimes.com/2011/04/23/health/23doctor.html.

[12] Id.

A. Financial Barriers

Many studies have found cost to be a primary impediment to small and solo medical practices adopting health IT.[13] This is important because the majority of physician office visits occur in practices with 10 or fewer doctors.[14] At the Subcommittee's 2007 hearing, a witness representing the American College of Physicians estimated the average initial cost of an EHR system at $44,000 per physician and ongoing maintenance at $8,500 per year.[15] CMS has estimated the five year cost of acquiring EHR technology to be $94,000.[16]

Medicare Incentives

Under the HITECH Act, beginning in 2011, eligible health providers who demonstrate "meaningful use" of certified EHRs can receive up to $44,000 over five years in Medicare incentive payments. There is an additional incentive for professionals practicing in a Health Professional Shortage Area. To receive the maximum incentive payment, providers must begin participation in the incentive program by 2012.[17]

Medicaid Incentives

Also under the HITECH Act, beginning in 2011, eligible health providers who adopt, implement, upgrade or demonstrate "meaningful use" of certified EHRs in the first year of participation, and demonstrate meaningful use for up to five remaining participation years, can receive up to $63,750 over the six years that they choose to participate in the incentive program. There are no payment penalties under the Medicaid program.[18]

Medicare Penalties

Beginning in 2015 and thereafter, Medicare eligible professionals that do not demonstrate meaningful use will receive a penalty of 1% of annual Medicare fee schedules per year, up to 5% over time.[19]

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[13] George Washington University Hospital, Massachusetts General Hospital, Robert Wood Johnson Foundation, *Health Information Technology in the United States: Where We Stand, 2008,* available at: http://www.rwjf.org/files/research/062508.hit.exsummary.pdf.

[14] Kane CK, *The Practice Arrangements of Patient Care Physicians, 2007-2008: An Analysis by Cohort and Gender,* American Medical Association, 2009, available at: http://www.rwjf.org/files/research/57108.pdf.

[15] Testimony of Lynne M. Kirk, M.D. on behalf of the American College of Physicians, House Committee on Small Business, Subcommittee on Regulation, Health Care and Trade, hearing titled, *The Value of Health IT to Solo and Small Medical Practices,* March 28, 2007.

[16] Centers for Medicare and Medicaid Services data cited in Testimony of Richard Gibson, M.D., Ph.D., House Science Committee, September 30, 2010, available at: http://science.house.gov/sites/republicans.science.house.gov/files/documents/hearings/093010_Gibson.pdf..

[17] Centers for Medicare and Medicaid Services, Overview of EHR Incentive Program, The Official Web Site for Medicare and Medicaid Electronic Records (EHR) Incentive Programs, available at: https://www.cms.gov/ehrincentiveprograms/.

[18] Id.

[19] Id.

Physicians can apply for the Medicare or Medicaid incentives, but not both. Hospital-based physicians and those in practices owned by hospitals are not eligible for the incentives. Hospitals may qualify for both Medicare and Medicaid incentives.[20]

On May 19, 2011, CMS announced that the Medicare EHR Incentive Program issued the first round of payments totaling $75 million to providers who signed up in the first two weeks of the program. Medicaid EHR Incentive Programs are being implemented on a state by state basis.[21] Since January 2011, fifteen states have initiated Medicaid HER Incentive Programs, and to date, over $83 million in incentive payments have been made to qualified Medicaid providers.

B. Legal and Technology Barriers

Competing Incentives and Differing Standards

Federal standards to promote the growth of health IT contain deadlines that providers must meet to be eligible for payment incentives over the next two years. These deadlines include: 1) the change to a new version of the HIPAA electronic transactions for billing and the International Classification of Diseases (ICD-10) for use in those transactions; 2) the EHR "meaningful use" criteria that must be met to qualify for the Medicare reimbursement incentives; and 3) the expanded HIPAA privacy and security requirements. In addition, there are three Medicare physician incentive programs which also include penalties: 1) EHR "meaningful use"; 2) e-prescribing; and 3) Physician Quality Reporting System (PQRS). In a February 2011 report, the Government Accountability Office noted that the deadlines and incentives for some of these programs that encourage health IT set forth in the Calendar Year 2011 Medicare Physician Fee Schedule (PFS) Final Rule, which was published in the Federal Register on November 29, 2010, were inconsistent. [22]

Under that rule, the EHR program provides incentives from 2011 to 2016 and begins penalties in 2015. The e-prescribing program provides incentives from 2009 to 2013, and institutes penalties from 2012 to 2014.[23] Both programs require participants to use technology that can perform similar functions, but the EHR program requires users to adopt and use certified systems that meet the criteria established by HHS. The e-prescribing program did not require certified equipment, so purchasers had no assurance that their system will meet the e-prescribing program's requirements. In addition, the programs had separate reporting requirements that could require providers to report to both programs for several years.

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[20] Center for Medicare and Medicaid Services, Calendar Year 2011 Physician Fee Schedule Final Rule with Comment Period, available at: https://www.cms.gov/PhysicianFeeSched/. *See also* Centers for Medicare and Medicaid Services, Overview of EHR Incentive Program, The Official Web Site for Medicare and Medicaid Electronic Records (EHR) Incentive Programs, available at: https://www.cms.gov/ehrincentiveprograms/.

[21] Centers for Medicare and Medicaid Services, Medicare Program: Proposed Changes to the Electronic (eRx) Incentive Program, May 26, 2011, available at: http://www.ofr.gov/OFRUpload/OFRData/2011-13463_PI.pdf.

[22] Government Accountability Office, *CMS Should Address Inconsistencies in its Two Incentive Programs That Encourage the Use of Health Information Technology,* February 2011, available at: http://www.gao.gov/products/GAO-11-159.

[23] Id.

1. Proposed Changes to the E-Prescribing Program

On May 26, 2011, CMS filed a proposed rule for the e-prescribing program that will provide additional flexibility to providers who are adopting e-prescribing systems.[24] The modified rule would allow eligible professionals who are participating in the e-prescribing incentive program to adopt either: 1) a qualified e-prescribing system that performs the four required functionalities of generating an active medication list, selecting medications, transmitting and printing prescriptions, providing information related to lower cost alternatives, and providing information on formulary or tiered medications, patient eligibility and authorizations; or 2) certified EHR technology. If finalized, these changes would help to harmonize the EHR and e-prescribing reporting requirements, as GAO recommended.[25]

2. Additional Hardship Exemptions Proposed for the E-Prescribing Program

In 2010, CMS had proposed two significant hardship exceptions to the e-prescribing program: 1) professionals practicing in areas without sufficient high speed internet access; and 2) professionals in an area without available pharmacies for e-prescribing. In its May 26, 2011 filing, CMS also proposed four additional significant hardship exceptions to the 2012eRx payment adjustment: professionals who: 1) have registered for the Medicare or Medicaid EHR program, and who have adopted certified EHR technology that has been adopted for use no later than October 1, 2011; 2) are unable to e-prescribe due to federal, state or local laws; 3) have very limited prescribing activity; and 4) have insufficient opportunities to report the prescribing measure.

Definition of "Meaningful Use"

To qualify for incentive Medicare and Medicaid payments (and avoid future penalties), providers must attest that they have integrated EHRs into their practices in increasing stages between 2011 through 2016.

In January 2010, HHS issued proposed Stage 1 meaningful use standards.[26] The rule outlined a set of 25 objectives for clinicians, all of which were required to be met. Over 2,000 comments were filed during the comment period, and providers claimed the objectives were too difficult to meet.

In July 2010, HHS issued a Stage 1 final rule[27] defining the minimum requirements that eligible health care providers must meet in using their certified EHRs to qualify for HHS' incentive payments. Under the rule, providers must comply with a "core" set of 15 objectives (such as e-prescribing, noting

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[24] Centers for Medicare and Medicaid Services, Medicare Program: Proposed Changes to the Electronic (eRx) Incentive Program, May 26, 2011, available at: http://www.ofr.gov/OFRUpload/OFRData/2011-13463_PI.pdf.
[25] Government Accountability Office, *CMS Should Address Inconsistencies in its Two Incentive Programs That Encourage the Use of Health Information Technology*, February 2011, available at: http://www.gao.gov/products/GAO-11-159.
[26] Centers for Medicare and Medicaid Services, Department of Health and Human Services, Electronic Health Records Meaningful Use Proposed Rule, January 13, 2010, available at: http://edocket.access.gpo.gov/2010/pdf/E9-31217.pdf.
[27] Centers for Medicare and Medicaid Services, Department of Health and Human Services, Electronic Health Records Meaningful Use Final Rule, July 28, 2010, available at: http://edocket.access.gpo.gov/2010/pdf/2010-17207.pdf.

patient demographics and vital signs), and 5 of 10 options from an additional "menu" set measures. [28] Hospitals must meet 14 core objectives and select 5 from the menu set. All objectives from the menu set must be also achieved to reach ultimate meaningful use; however, the complete timetable for phase-in has not yet been determined. Stages 2 and 3 of meaningful use are being developed by the ONC's Health IT Policy Committee. To qualify for incentive payments, providers must adopt EHR systems that have been certified by one of six independent commissions accredited by the ONC. Providers began attesting to Stage 1 compliance on April 18, 2011.

Broadband

Broadband is necessary for health IT to operate effectively. It is broadband that enables the efficient exchange of patient and treatment information by allowing access to EHRs from on site or hosted locations; removes geography and time barriers to care by enabling video consultation and remote patient monitoring; and provides the foundation for the next generation of health innovation and connected-care solutions. [29]

According to the FCC, about 3,600 small physician offices cannot access sufficient mass market broadband infrastructure. [30] In addition, some rural providers are not purchasing sufficient broadband to support health IT, and the price of broadband varies in both urban and rural areas. [31]

The Federal Communications Commission's (FCC) 2010 National Broadband Plan [32] recommended that Congress develop a strategy for improving broadband access. The plan noted that for rural health care providers and small physician offices, mass market broadband is sometimes economically out of reach. The Plan recommends changes to FCC's Rural Health Care Program to help meet this challenge. [33] HHS is currently considering the Stage 2 criteria.

C. Security and Privacy Concerns

Physicians have expressed concern about the legal ramifications of EHRs, such as whether the Health Insurance Portability and Accountability Act could prevent the disclosure of electronic health information, and whether providers could be liable for the disclosure of electronic health information or disclosure of inaccurate information. [34]

Some surveys have revealed patient concerns about EHRs. In a National Public Radio, Kaiser Family Foundation and Harvard School of Public Health survey, [35] a majority of patient respondents saw health

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[28] Centers for Medicare and Medicaid Services, *Provider Criteria for Meaningful Use of EHR*, April 18, 2011, available at: https:e//www.cms.gov/EHRIncentivePrograms/Downloads/EP-MU-TOC.pdf.

[29] National Broadband Plan, Federal Communications Commission, 2010, available at: http://www.broadband.gov/plan/broadband-action-agenda.html.

[30] Id.

[31] Id.

[32] Id.

[33] Id.

[34] Robert Wood Johnson Foundation, Health Law Information Project Assesses Legal Barriers to Using Health Information to Improve Health Care Quality and Reduce Disparities, May 2009, available at: http://www.rwjf.org/reports/grr/063560.htm.

[35] National Public Radio, Kaiser Family Foundation and Harvard School of Public Health survey, *The Public and the Health Care Delivery System*, March 2009, available at: http://www.kff.org/kaiserpolls/posr042209pkg.cfm.

IT as helping to reduce medical errors and unnecessary treatment, enabling better physician care coordination, and improving overall care. But health IT was also seen as a driver of higher health care costs, and some respondents mentioned concerns about EHR safety and security. [36]

Although studies have estimated that health IT can help reduce costs by $80 to $100 billion annually,[37] researchers have also found that the potential savings may be accompanied by risks. In a recent study, privacy concerns, not system cost, was the key obstacle to health IT adoption.[38] Better privacy protections, the researchers believe, are essential to ensure patient confidence in EHRs.[39]

Anecdotal Evidence

When the Subcommittee held a hearing in March 2007[40]on the implementation of health IT by small and solo providers, the witnesses agreed that Congress should standardize forms, records and certifications so that duplication and administrative burdens for physicians are minimized.[41] After all, physicians presumably adopt health IT to enhance their practice's efficiency and care.

In testimony before the House Science Committee, Richard Gibson, M.D., said adoption of health IT is the most difficult in small medical practices. He said these practitioners already spend 40-60% of their net revenue on overhead.[42] Smaller practices usually do not have extra space to devote to hardware or the staff expertise to install, manage and maintain the EHRs, administrative computer networks, servers, and other equipment. Although the Regional Extension Centers are expected to offer technical assistance, the demands on them will be great. In addition, Gibson said that EHRs do not allow physicians to see more patients per day or spend more time with them, and even the EHR incentives may not be sufficient to offset their expense and office disruption. However, some studies by EHR vendors have found that technology offers the greatest promise for small practices, increasing clinical and administrative efficiency. There appears to be limited data on these points, although a Rand Corporation analysis of a small number of case studies on health IT spending found that the cost savings from health IT accrued to the payers, rather than the purchasers of the technology. [43]

In 2007, Margaret Kelley, M.D., said in testimony before this Committee[44] that the practice she and her father operate spent $100,000 to purchase an Electronic Medical Record system. The initial learning

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[36] Id.

[37] Janine Hiller, Matthew S. McMullen, Wade M. Chumney and David L. Baumer, *Privacy and Security in the Implementation of Health Information Technology (Electronic Health Records): U.S. and EU Compared*, Boston University Journal of Science and Technology Law, 2010, available at: http://www.bu.edu/law/central/jd/organizations/journals/scitech/volume171/documents/Hiller_Web.pdf.

[38] Id.

[39] Id.

[40] House Committee on Small Business, Subcommittee on Regulations, Health Care and Trade hearing titled, *The Value of Health IT to Solo and Small Medical Practices*, March 28, 2007.

[41] Testimony of Mark Leavitt, M.D., PhD., David R. Shober, D.O. and Kevin T. Napier, M.D., House Committee on Small Business, Subcommittee on Regulations, Health Care and Trade, hearing titled, *The Value of Health IT to Solo and Small Medical Practices*, March 28, 2007.

[42] Testimony of Richard Gibson, M.D., Ph.D., House Science Committee, September 30, 2010, available at: http://science.house.gov/sites/republicans.science.house.gov/files/documents/hearings/093010_Gibson.pdf.

[43] Analysis of Health IT, Rand Corporation, 2005, available at: http://www.randcompare.org/analysis-of-options/analysis-of-health-it.

[44] Testimony of Margaret Kelley, M.D., House Committee on Small Business, March 28, 2011.

curve meant each patient visit took longer, reducing the number of patients that could be seen. That, along with the system's upfront cost, resulted in a significant revenue drop.[45]   The irony of health IT, Dr. Kelley said, is that it makes many physician practices much less efficient for months or even years afterward, and it was two years before her practice could handle its previous patient load.[46]

V. Conclusion

Although health IT is finding wider acceptance, its adoption has been slower by smaller medical practices, partly because small practices face greater financial and administrative constraints. Medicare and Medicaid incentives programs will help to offset the cost of EHRs, but resistance among some providers and patients persists.

This hearing offers Members the opportunity to learn more about health IT and its implementation by small and solo medical practices from federal government health IT officials and small providers.

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[45] Id.
[46] Id.