

Statement on behalf of the Kaiser Permanente Medical Care Program before the Committee on Health, Education, Labor, and Pensions; United States Senate on January 15, 2009

Investing in Health IT: A Stimulus for a Healthier America

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Senator Mikulski (D – MD) and Senator Enzi (R – WY) and other distinguished members of the committee, thank you for the invitation to be here today. I am Dr Jack Cochran, the Executive Director of The Permanente Federation—the national umbrella organization for the regional Permanente Medical Groups. The Permanente Medical Groups employ more than 14,000 physicians, who care for approximately 8.7 million Kaiser Permanente (KP) members. I appear today on behalf of the national KP Medical Care Program, the nation’s largest integrated health care delivery system.

The Promise of Health Information Technology

As Congress considers ways to stimulate the economy, it should explore investing in the nation’s health care delivery system. I am delighted to be here to discuss how promoting the effective use of health information technologies can improve health care quality, efficiency, and literally save lives.

Medicine is far behind other industries in adopting and leveraging information technologies. While other industries have been quick to automate, the health care industry has often been slow to adopt.

Individual medical records, medication lists, along with the latest medical research and up-to-date information on applicable clinical trials must be available for clinicians and patients at the click of a mouse. Under appropriate patient confidentiality safeguards, secure electronic health records (EHRs) should allow various health care providers across vast geographic spans to collaborate and coordinate care for their patients based on current, comprehensive clinical information. The economic stimulus package should promote the development of effective, interoperable clinical information systems and the skills to use them.

But it is important to link these improvements in processes with systemic changes in financial incentives to continually advance the effectiveness and reliability of health care delivery. As you know, our nation’s health care delivery system is fragmented, disorganized, and hampered by ineffective and perverse incentives for quality and efficiency. Health information technology (HIT) is one critical tool that can help move our system toward a highly functioning, organized, patient-centered one. However, it is important that these investments be strategic and worthwhile. As one wise policymaker quipped, “Making the wrong investments in HIT could simply result in doing the wrong things faster.”

Kaiser Permanente

When she invited me to speak today, Senator Mikulski asked me to share some of the lessons we’ve learned in developing what we believe is the world’s largest civilian deployment of an EHR. As Senator Mikulski knows, we are proud to serve members in the state of Maryland. We also provide health care to nearly nine million individuals in eight other states, including California, Oregon, Colorado, Georgia, Hawaii, Ohio, Virginia, Washington, and the District of Columbia.

At KP, we have found strength and opportunity through the fundamental and often unique partnerships within our organization: the physician and patient relationship; the collaboration between labor and management; the linkage of clinical research to improved care delivery; our investments and involvement in the communities we serve; and the shared coordination of care across inpatient, outpatient, ancillary services, and all the settings of care delivery.

In 2003, KP began the KP HealthConnect™ project. KP HealthConnect is a comprehensive health information system that includes one of the most advanced

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electronic health records available. Our success with this endeavor is the result of decades of work developing health records and training physicians and staff to use them. This experience spanned most of our operating regions. For example, the Colorado region, where I practiced, had a complete electronic health record beginning in 1997.

One of our greatest lessons has been how much KP members value the ability to use online tools to manage their health.

Today, KP HealthConnect securely connects 8.7 million people to their physicians, their health care teams, their personal health information, and the latest medical knowledge, leveraging the integrated approaches to health care available at KP. KP has made a huge investment in HIT, both financially and philosophically. We believe it has the power to transform the way we deliver health care and improve patient health.

Physician Adoption and Acceptance of HIT

In April 2008, we completed implementation of KP HealthConnect in every one of our 421 medical office buildings, ensuring that our 14,000 physicians and all other ambulatory caregivers have appropriate electronic access to their patient's clinical information. In addition, we have completed the deployment of inpatient billing; admission, discharge, and transfer; and scheduling and pharmacy applications in each of our 32 hospitals. Now, we are in the midst of an aggressive installation schedule for bedside documentation and computerized physician order entry (CPOE). As of the end of 2008, we had 25 of our 32 hospitals fully deployed. (An interesting anecdote: the new hospitals we are building in California as a response to the seismic upgrade requirements are being built without medical record rooms.)

Now, you may ask, did this all happen easily? Did our physicians and nursing staff immediately embrace our EHR? The simple answer is, no. Any major transition like this requires fundamental change in workflows. We had to build in time for testing, training, and some belly aching too. But if we tried to take KP HealthConnect away from any of our doctors and nurses now, a riot would ensue.

Implementing HIT in a clinical setting is tremendously disruptive. You have to expect about a 20% reduction in productivity in the first three to six months, and you should not expect immediate cost savings. You have to go slow to go fast. Initial stages of implementation must be well planned and tested. Patience is key, and physician leadership is critical.

Change can cause apprehension and concern. If not handled properly, it can also interfere with the quality of care that is delivered. In an outpatient setting, you can build in time for training by scheduling patients differently or making sure you do not implement a new IT system during flu season, for example. In an inpatient setting, you simply do not have the same flexibility, so the challenges are different.

At first, Permanente physicians were reluctant to complete after-visit summaries as a written acknowledgement of everything that was discussed during the visit. These after-visit summaries are stored in each patient's EHR. Because patients can access them later, the summaries can help remind them about what they and their doctors discussed regarding medications, follow-up treatment, etc. Primary care providers who give their patients an after-visit summary typically score an average of 14 points higher on satisfaction surveys.

Since the deployment of our integrated medical record, we have begun to see major advances in using health information systems as a diagnostic tool (for identifying and understanding patients with certain risk factors) as well as for appropriate therapeutic intervention (for encouraging adherence and for intensification or moderation of therapy when needed).

The EHR has allowed our physicians to be more efficient by giving them better practice management and communication tools that help them reduce unnecessary visits and phone calls. Today, our doctors don't ask, "How many patients can I see?" but rather, "How many problems can I solve?" Data gathered in three of our regions (Colorado, Hawaii, and the Northwest) demonstrate how implementing an EHR lowers both primary and specialty care office visit rates by enabling the clinician to resolve certain issues for patients with fewer face-to-face contacts. For example, a simple response to an e-mail may be all that a patient needs from his or her doctor. Because our system allows our physicians to view appropriate medical information online, patients and physicians can interact with each other when it's most convenient for both of them.

Patient Acceptance and Adoption of HIT

One of our greatest lessons has been how much KP members value the ability to use online tools to manage their health. Launched in 2005, our personal health record, *My Health Manager*, now has more than two

million active users. This represents the largest user base of online personal health records (PHRs) in the US. Using direct links to actual clinical and operational systems, we are able to provide our members with access to robust features, including access to lab test results, appointment scheduling, prescription refills, and even the ability to securely e-mail their doctors. To date, our members have viewed over 56 million lab test results online, sent over five million secure e-mail messages, made over two million online visits to book and review future appointments, and logged over one million online visits to view past office visit information.

With secure e-mail messaging, patients can communicate with their doctors at any time, from anywhere. Demonstrating the growing consumer interest in e-visits, our patients send more than 300,000 secure e-mail messages each month to their doctors and care teams. The average doctor's visit takes three hours out of an individual's day, so members value the ability to use *My Health Manager* on kp.org to handle routine health care needs, including refilling their prescriptions, which can be delivered directly to their home or a pharmacy. Results from a study published in the *American Journal of Managed Care*¹ showed an 8% reduction in office visits and a 14% reduction in phone calls among *My Health Manager* users. The study also confirmed that secure messaging is used primarily for nonurgent issues; nearly two-thirds were coded as "brief" or lower.

Transforming Health Care Delivery

While we have documented some specific dollar savings, our greatest benefits are improvements in clinical and service quality. With 24/7 access to comprehensive health information, our care teams are able to coordinate care at every point of service—physician's office, laboratory, pharmacy, hospital, on the phone, and even online. Unlike the paper chart locked in a physician's office, an EHR can be shared among all physicians caring for a patient. For example, when a patient comes into the Emergency Department at 2 am: 1) there will be no duplication of effort to collect data that already exists; 2) the insights of one physician are more easily available to others; and 3) care can be better coordinated. Our early results demonstrate what *Crossing the Quality Chasm*² predicted: HIT helps to make care safer, more effective, patient-centered, timely, efficient, and equitable.

Through our experience with KP HealthConnect, we have found that implementing the technology was just the first step. A far more crucial endeavor is deter-

mining how to translate the data collected within the system into useful information that will deliver value. It's not just about digitizing the visit—it's about using the data from that visit and other sources to inform and ultimately to transform care delivery.

For example, our use of HIT and our comprehensive approach (partnership of primary care providers, cardiologists, nurses, and pharmacists with accountability across the continuum of care—preventive, chronic, and acute) have significantly reduced Emergency Department visits and mortality. In Colorado, we have seen a 76% reduction in cardiac mortality for those who participated in our Collaborative Cardiac Care Service compared with those who received regular treatment.³ Based on NCQA data, as compared to the national HMO average, we prevent more than 280 cardiac events annually in Colorado. This improvement saves \$2 million in annual hospital costs. In Northern California, if you are a member of KP, you have a 30% less chance of dying of heart failure compared to a member of the general population. In Oregon and Washington, by using KP HealthConnect in a new Regional Telephonic Medicine Center staffed with emergency room physicians and advice nurses, we have achieved an 11% reduction in the number of members who need to visit the emergency room between the hours of 12 noon and 10 pm. In Southern California, from 2004 to 2007, combining the power of our IT systems and our integrated delivery model, we were able to increase mammography screening rates for women aged 50-69 from 80% to nearly 90%.

This last example was highlighted for me by a recent letter that puts a human face on these statistics:

Early last year, I came to your facility to have a foreign body removed from my eye. I visited your Ophthalmology Department, and your competent staff dealt with this minor emergency.

What made this visit so meaningful was my interaction with your nurse after my visit with the doctor. In addition to giving me some after-visit instructions, she noticed in the computer that I needed a mammography exam. I had been reminded before, but I tend to be too busy to take care of my own health. This time the nurse was very insistent. She even made me an appointment so I could walk in and get an exam within the hour. Since I did not have to wait too long, I had an exam done that day. Well, they found a mass in my right breast, and it was cancer. I have gone through chemotherapy and radiotherapy, and today I am cancer free.

I am convinced that I am alive today because

of your organization's focus on my total health. My interaction with your entire health care system has been nothing but positive. I am especially appreciative to the young nurse who took the time to convince a stubborn old lady to take responsibility for my health.

Thank you for giving me many more years to thrive.

This letter describes a simple act by one of our nurses that was possible only because the nurse had access to that patient's information, acted on it, and was part of an integrated health care system that encourages this series of events.

KP HealthConnect also allows us to share content across all regional facilities, providing the best technical platform to disseminate drug formulary changes, best-practice alerts, and automated clinical guidelines to the entire enterprise. Our members can move through any facility within a given region, and their clinical and administrative information will follow them.

As an example, during the 2007 wildfires in San Diego, when KP facilities within the fire lines closed, we contacted members and directed them to open facilities. When our members arrived at these new facilities, their new care teams had appropriate access to their records via KP HealthConnect, ensuring continuity of care in a time of crisis.

When we started down this path, KP faced many of the same barriers that other health care organizations and providers face today when they start to utilize HIT to improve care delivery. These barriers involve both process (eg, complexity of health care is increasing, workflows will be disrupted, end-to-end patient-centered view is not well known) and technology (eg, data is "locked away" in various paper files, applications, and databases; data standards, interoperability standards, usability standards must be integrated). I am here to tell you that these issues can be overcome.

KP and other multispecialty groups like Group Health Cooperative, Intermountain Healthcare, and Geisinger can set the gold standard with a sophisticated EHR and integrated care delivery systems. Harder to overcome are the misaligned incentives in systems that are not vertically integrated, because these do not encourage providers to redesign care delivery to incorporate evidence-based care processes for improving quality and effectiveness. As a nation, we can

decide to create payment incentives that reward health professionals who share information, who learn from each other, and who hold themselves and one another accountable to generate the best health outcome at the most reasonable cost for each patient.

An Interoperable HIT System

Congress has the ability to create a system that is truly interoperable. Today, far too often, our systems speak different languages. Even when electronic information exists for patients, critical clinical information can be lost during an emergency or when patients transfer from one system to another because the different systems simply cannot communicate with one another.

After discussing interoperability of medical records for years, KP recently demonstrated successful data exchange of health records involving our shared patient population with the Veterans' Administration. This demonstration project uses test data for fictitious patients, but it also shows that privacy and security requirements will work to protect real patient data. The demonstration uses the national interoperability standards recognized by the Department of Health and Human Services (HHS), proving they work in the real world.

Sound HIT policy should stress the critical importance of standards-based interoperability to achieve coordinated patient-centered health care. The ability of separate HIT systems to interconnect with each other depends on uniform adherence to strictly defined standards. Most of these standards exist today. KP supports the HHS-adopted interoperability standards selected by the Healthcare Information Technology Standards (HITSP) and used in the National Health Information Network (NHIN).

Only when these existing technical standards are used consistently across the delivery system will HIT be able to achieve its promise for both direct care of individual patients and for population-based care.

Connected HIT will not be adopted by most clinicians and institutional providers without mandates or a system of incentives and penalties that are materially more advantageous or costly to providers than those outlined in current and previous proposals. For instance, one approach could use Medicare conditions of participation as a means to promote adoption, with metrics for adoption of HIT, determined by the Secretary and used by HHS as benchmarks. Achieving benchmark measures for HIT could trigger loan forgiveness or incentive payments.

Above all, dollars should be attached to outcomes. For example, organizations that receive HIT incentives

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could be required to adhere to certain clinical care pathways or demonstrate that they have “functional EHRs.” This may mean that their EHR must show it is capable of sending and receiving lab, pharmaceutical, and other clinical information—not just payment claims information.

HIT system functions and interoperability are essential cornerstones for policies such as primary care-centered medical homes, coordination of care for chronic conditions, value-based care, comparative effectiveness research, and pay-for-performance/pay-for-quality initiatives. Some EHR-systems come as “blank slates,” with functionality, but without built-in clinical content or knowledge; these systems demand tremendous amounts of time, skill, and energy to harness the tools to the purpose of actually improving quality. Linking the implementation of HIT to health system reforms is essential. To promote appropriate and clinically effective uses of HIT over the mere acquisition of technology, the Secretary of HHS should develop and implement measures for HIT connectivity and data exchange as well as measures for EHR-based quality reporting.

Privacy

All consumers should be able to rely on appropriate and consistent minimum levels for privacy and security protections among all entities—both public and private—that access or use individual health information. A high level of trust in these protections is crucial for HIT to succeed. It will be important for Congress to strike an appropriate balance between the competing interests of protecting privacy concerns versus advancing HIT, EHRs, and public health initiatives. Both can be achieved. Today, many state laws risk slowing down the rate of progress by allowing consumers to opt out of disease registries and other community health initiatives due to privacy concerns.

We believe that HIPAA should remain the basis of new privacy rules. However, privacy policy also must cover personal health data consistently, regardless of what entity holds the records. Privacy requirements can achieve better protection for consumers without adding to the cost of HIT, changing the practice of medicine, or creating medical liability issues.

There are good models in state law for guarding against security breaches in ways that do not impede access to health information by clinicians; it is important to remember that the lack of appropriate and complete health information for clinicians who are treating a patient can also endanger that patient’s life.

In our experience, California law provides a model for breach notification that is clear and consistent across all types of entities, events, and circumstances. We believe HIPAA disclosure accounting for treatment, payment, or health care operations purposes would add a significant amount to the total cost of HIT implementation and could harm the practice of medicine by disrupting clinical workflows. HIT innovators should not be penalized by regulations that force unnecessary or disproportionate system overhauls to achieve compliance, especially when such modifications will consume resources that could be spent to deliver high-quality care. Efficiency should be a goal of new investments and rules.

Improving Safety, Quality, and Efficiency

The real objective of HIT in the economic stimulus package should not be technology, but rather to improve safety, quality, and efficiency.

At KP, we believe the keys to the solution will be health care led by clinicians, integrated with functional IT systems, and staffed with innovative, enthusiastic, computer-enabled health care professionals.

Having HIT and the means to exchange information will do us little good if we do not foster and support better information about the effectiveness of care, including the relative benefits, risks, and costs of treatments and services. We need a robust federal commitment to comparative effectiveness research so that health professionals can ensure each individual patient gets the care that is right for him or her. Reforms must also ensure that patient information can be used not only to optimize care for one specific patient but also to improve care for all patients through, for example, the development of clinical care guidelines and disease management protocols. These goals require the use of patient information and appropriate access to patient records, with privacy safeguards as currently required under HIPAA rules.

Ultimately, however, to effect real change, provider payment systems should be based on value rather than the number of procedures, drugs, tests one orders—regardless of whether the best evidence calls for such action. To keep coverage affordable and to really fix our broken health care system, we must change the way we deliver and pay for health care. Financial incentives must be changed so that plans compete on quality and efficiency, providers are rewarded for quality and keeping their patients healthy rather than for the volume of services delivered, and individuals are encouraged to

seek high-quality care and to be more actively involved in maintaining their own health.

We believe a computerized care support system that is well designed and implemented appropriately can help restore and enhance the physician's healing mission. Maximizing information available to the clinician means optimizing care for the patient. The right systems will yield more time with patients, better information about care, and less time with traditional paperwork. The right systems also must focus on the patient's need for affordable, well-informed, customized, and compassionate care. We believe a new HIT system will support our nation's health care reform agenda and can help our nation fulfill its ethical responsibility to improve health care access, reduce costs, and ensure quality care for all.

We look forward to working with you to achieve these goals. ❖

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A Quantum Leap

America needs to move much faster to adopt information technology in our health care system Electronic health information will provide a quantum leap in patient power, doctor power, and effective health care. We can't wait any longer Health information technology can improve quality of care and reduce medical errors, even as it lowers administrative costs. It has the potential to produce savings of 10% of our total annual spending on health care, even as it improves care for patients and provides new support for health care professionals This plan sorts out the myriad of issues involved in achieving the benefits of health information technology, and it lays out a coherent direction for reaching our goals.

— *Health and Human Services News Release, July 21, 2004: Thompson launches "Decade of Health Information Technology," Tommy Thompson, b 1941, US Department of Health and Human Services Secretary*